

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

804 Randall St., Lansing, Ingham County, MI

Dear Ms. Case:

The Mannik & Smith Group, Inc. (MSG) is pleased to present Ingham County with the results of the limited prerenovation regulated materials survey (RMS) performed at 804 Randall St., Lansing, Ingham County, Michigan (hereinafter referred to as the "Site") by Kory McKay (Accreditation Number A47903).

SUMMARY

Building Information								
Property Address	804 Randall St., Lansing MI							
Parcel #	33-01-01-03-352-171							
No. Stories	2							
Square Footage (approx.)	1000 SF							
Siding	Vinyl							
Basement	Yes							
Garage	Yes							



	Asbestos Containing Material										
Location	Material Group	Friable/Non Friable	Asbestos	Quantity							
RM-7	Red & White 9x9	Non Friable	2% Chrysotile	20 SF							
Basement	Stack Paper	Non Friable	65% Chrysotile	10 SF							
Basement	Vent Wrap	Non Friable	65% Chrysotile	10 SF							

Universal Waste Inventory										
Location	Quantity									
RM-2, Basement, Garage Fluorescent Bulb		13								
Exterior	Tire	6								
RM-1, Garage	Thermostat	2								
RM-1, Basement	Smoke Detector	2								
Garage	Fire Extinguisher	4								

Other Regulated Materials Inventory								
Location	Location Material Description Quantity							
Basement	Washing Machine	1						
Basement	Dryer	1						

Hazardous Materials							
Location	Material Description	Quantity					
Garage	1 Gallon Used Oil	15					

PURPOSE AND SCOPE OF WORK

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

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

METHODOLOGIES

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

ACM Survey Procedures

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

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

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

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

- Classified as RACM or non-RACM; and
- Sampled, or identified as presumed ACM (PACM).

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

Universal Wastes and Hazardous Material Survey Procedures

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

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

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

Hazardous materials may also include:

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

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

Universal wastes are waste that comes primarily from consumer products containing mercury, lead, cadmium or other substances that are hazardous to human health and the environment. These items

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

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

Other Regulated Materials

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

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

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

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

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

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

SURVEY RESULTS

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

ACM Survey Results

MSG identified nineteen (19) homogenous materials that were suspect as asbestos containing during the ACM survey. Forty five (45) 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 9-1, 12-1 and 13-1) 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. One sample (9-1) was point count confirmed.

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

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

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

CONCLUSIONS AND RECOMMENDATIONS

Asbestos Containing Materials

Of the nineteen (19) homogenous materials collected as part of the ACM survey, three (3) homogenous materials contained asbestos greater than 1% (samples 9-1, 12-1 and 13-1) 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



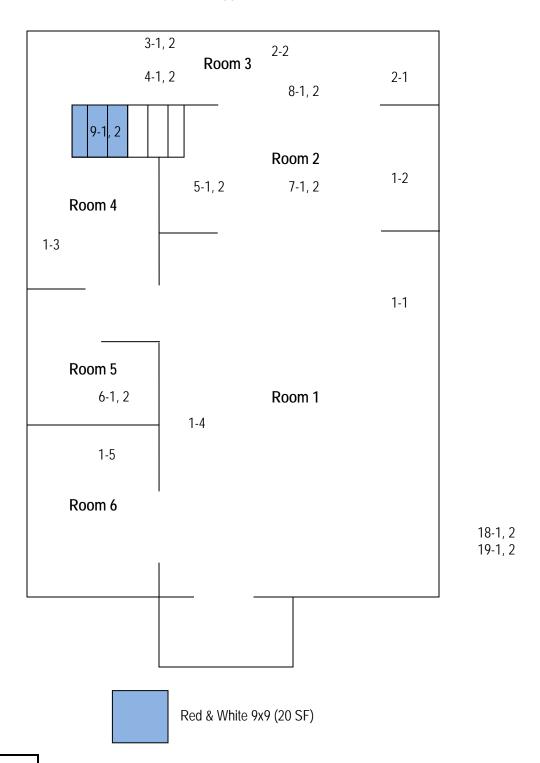
TECHNICAL SKILL. CREATIVE SPIRIT.

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

Address: 804 Randall Street Date: December 10, 2018

Drawing not to scale

1st Floor





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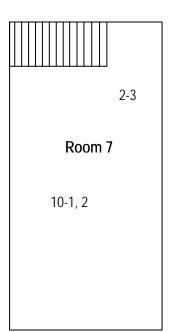
721 N. Capitol Avenue, Suite 2, Lansing, Michigan 48906 Tel: 517.316.9232 Fax: 517.316.9233 www.MannikSmithGroup.com

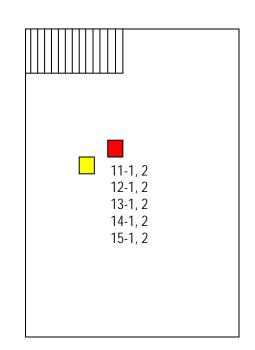
Garage

Address: 804 Randall Street Date: December 10, 2018

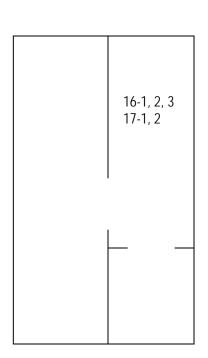
Drawing not to scale

2nd Floor Basement









TABLES

TABLE 1
Asbestos Sampling Results

Client		Ingham Count	v Land Ba	ank Authority						
Survey Loc	ation	804 Randall		and reducinely						
Survey D	ate	December 10,	2018		L F2.LL.ML	1	ED4			Ī
Functional Area	Floor	Sample ID	HM#	Homogeneous Material Group	Friable/Non Friable	Condition	EPA Classification	RACM	Asbestos	Quantity
RM-1	1	AS 1-1	HA-1	Plaster	Non-Friable	Good	Miscellaneous	No	No	2200 SF
RM-2	1	AS 1-2	HA-1	Plaster	Non-Friable	Good	Miscellaneous	No	No	2200 SF
RM-4	1	AS 1-3	HA-1	Plaster	Non-Friable	Good	Miscellaneous	No	No	2200 SF
RM-1	1	AS 1-4	HA-1	Plaster	Non-Friable	Good	Miscellaneous	No	No	2200 SF
RM-6	1	AS 1-5	HA-1	Plaster	Non-Friable	Good	Miscellaneous	No	No	2200 SF
RM-3	1	AS 2-1	HA-2	Drywall	Non-Friable	Good	Miscellaneous	No	No	1200 SF
RM-3	1	AS 2-2	HA-2	Drywall	Non-Friable	Good	Miscellaneous	No	No	1200 SF
RM-7	2	AS 2-3	HA-2	Drywall	Non-Friable	Good	Miscellaneous	No	No	1200 SF
RM-3	1	AS 3-1	HA-3	Window Glaze	Non-Friable	Good	Miscellaneous	No	No	225 SF
RM-3	1	AS 3-2	HA-3	Window Glaze	Non-Friable	Good	Miscellaneous	No	No	225 SF
RM-3	1	AS 4-1	HA-4	Wood paneling underlayment	Non-Friable	Good	Miscellaneous	No	No	450 SF
RM-3	1	AS 4-2	HA-4	Wood paneling underlayment	Non-Friable	Good	Miscellaneous	No	No	450 SF
RM-2	1	AS 5-1	HA-5	Wall mastic	Non-Friable	Good	Miscellaneous	No	No	350 SF
RM-2	1	AS 5-2	HA-5	Wall mastic	Non-Friable	Good	Miscellaneous	No	No	350 SF
RM-5	1	AS 6-1	HA-6	Bathroom Wall mastic	Non-Friable	Good	Miscellaneous	No	No	200 SF
RM-5	1	AS 6-2	HA-6	Bathroom Wall mastic	Non-Friable	Good	Miscellaneous	No	No	200 SF
RM-2	1	AS 7-1	HA-7	Floor Underlayment	Non-Friable	Good	Miscellaneous	No	No	250 SF

TABLE 1
Asbestos Sampling Results

Client		Ingham Count	ty Land Da	ank Authority						
Survey Loc		Ingham County Land Bank Authority 804 Randall								
Survey D		December 10,	2018							
Functional Area	Floor	Sample ID	HM#	Homogeneous Material Group	Friable/Non Friable	Condition	EPA Classification	RACM	Asbestos	Quantity
RM-2	1	AS 7-2	HA-7	Floor Underlayment	Non-Friable	Good	Miscellaneous	No	No	250 SF
RM-3	1	AS 8-1	HA-8	Tan 12x12	Non-Friable	Good	Miscellaneous	No	No	20 SF
RM-3	1	AS 8-2	HA-8	Tan 12x12	Non-Friable	Good	Miscellaneous	No	No	20 SF
RM-7	1	AS 9-1	HA-9	Red and white 9x9	Non-Friable	Good	Miscellaneous	Yes	2% Chrysotile	20 SF
RM-7	1	AS 9-2	HA-9	Red and white 9x9	Non-Friable	Good	Miscellaneous	Yes	NA	20 SF
RM-7	2	AS 10-1	HA-10	Brown 12x12	Non-Friable	Good	Miscellaneous	No	No	150 SF
RM-7	2	AS 10-2	HA-10	Brown 12x12	Non-Friable	Good	Miscellaneous	No	No	150 SF
Basement	В	AS 11-1	HA-11	Basement Window Glaze	Non-Friable	Good	Miscellaneous	No	No	20 SF
Basement	В	AS 11-2	HA-11	Basement Window Glaze	Non-Friable	Good	Miscellaneous	No	No	20 SF
Basement	В	AS 12-1	HA-12	Stack paper	Non-Friable	Good	Miscellaneous	Yes	65% Chrysotile	10 SF
Basement	В	AS 12-2	HA-12	Stack paper	Non-Friable	Good	Miscellaneous	Yes	NA	10 SF
Basement	В	AS 12-3	HA-12	Stack paper	Non-Friable	Good	Miscellaneous	Yes	NA	10 SF
Basement	В	AS 13-1	HA-13	Vent wrap	Non-Friable	Good	Miscellaneous	Yes	65% Chrysotile	10 SF
Basement	В	AS 13-2	HA-13	Vent wrap	Non-Friable	Good	Miscellaneous	Yes	NA	10 SF
Basement	В	AS 13-3	HA-13	Vent wrap	Non-Friable	Good	Miscellaneous	Yes	NA	10 SF
Basement	В	AS 14-1	HA-14	Stack Cement	Non-Friable	Good	Miscellaneous	No	No	5 SF

TABLE 1
Asbestos Sampling Results

Client Survey Loca		Ingham County Land Bank Authority 804 Randall								
Survey Da		December 10,	2018							
Functional Area	Floor	Sample ID	HM#	Homogeneous Material Group	Friable/Non Friable	Condition	EPA Classification	RACM	Asbestos	Quantity
Basement	В	AS 14-2	HA-14	Stack Cement	Non-Friable	Good	Miscellaneous	No	No	5 SF
Basement	В	AS 15-1	HA-15	Basement Concrete floor	Non-Friable	Good	Miscellaneous	No	No	300 SF
Basement	В	AS 15-2	HA-15	Basement Concrete floor	Non-Friable	Good	Miscellaneous	No	No	300 SF
Garage	1	AS 16-1	HA-16	Garage drywall	Non-Friable	Good	Miscellaneous	No	No	1500 SF
Garage	1	AS 16-2	HA-16	Garage drywall	Non-Friable	Good	Miscellaneous	No	No	1500 SF
Garage	1	AS 16-3	HA-16	Garage drywall	Non-Friable	Good	Miscellaneous	No	No	1500 SF
Garage	1	AS 17-1	HA-17	Garage window glaze	Non-Friable	Good	Miscellaneous	No	No	80 SF
Garage	1	AS 17-2	HA-17	Garage window glaze	Non-Friable	Good	Miscellaneous	No	No	80 SF
Roof	E	AS 18-1	HA-18	Roof shingle	Non-Friable	Good	Miscellaneous	No	No	2800 SF
Roof	Е	AS 18-2	HA-18	Roof shingle	Non-Friable	Good	Miscellaneous	No	No	2800 SF
Exterior	E	AS 19-1	HA-19	Exterior Caulk	Non-Friable	Good	Miscellaneous	No	No	200 LF
Exterior	E	AS 19-2	HA-19	Exterior Caulk	Non-Friable	Good	Miscellaneous	No	No	200 LF

Table 2 Universal Waste, Hazardous Materials, and Other Regulated Materials Inventory 804 Randall St.

Lansing, Ingham County, Michigan

Universal Waste Inventory										
Location	Location Type of Waste A									
RM-2, Basement, Garage	Fluorescent Bulb	13								
Exterior	Tire	6								
RM-1, Garage	Thermostat	2								
RM-1, Basement	Smoke Detector	2								
Garage	Fire Extinguisher	4								
	Hazardous Materials Inventory									
Location	Type of Waste	Approximate Quantity								
Garage	1 Gallon Used Oil	15								
Otl	her Regulated Materials Inventory									
Location	Type of Waste	Approximate Quantity								
Basement	Washing Machine	1								
Basement	Dryer	1								

ATTACHMENT A PHOTO LOG

Property Photos



804 Randall, 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 12-1 Location: Basement Notes: Stack Paper



Sample ID: AS 2-1 Location: RM-3 Notes: Drywall



Sample ID: AS 13-1 Location: Basement Notes: Vent Wrap



Sample ID: AS 9-1 Location: RM-7

Notes: Red and White 9x9 Tile



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

Samples



Sample ID: AS 4-1 Location: RM-3

Notes: Wood Paneling Underlayment



Sample ID: AS 7-1 Location: RM-2

Notes: Floor Underlayment



Sample ID: AS 5-1 Location: RM-2 Notes: Wall Mastic



Sample ID: AS 8-1 Location: RM-3 Notes: Tan 12x12 Tile



Sample ID: AS 6-1 Location: RM-5

Notes: Bathroom Wall Mastic



Sample ID: AS 10-1 Location: RM-7 Notes: Brown 12x12 Tile

Samples



Sample ID: AS 11-1 Location: Basement

Notes: Basement Window Glaze



Sample ID: AS 16-1 Location: Garage Notes: Garage Drywall



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



Location: Garage Notes: Garage Window Glaze

Sample ID: AS 17-1



Sample ID: AS 15-1 Location: Basement Notes: Basement Floor



Sample ID: AS 19-1 Location: Exterior Notes: Exterior Caulk

ATTACHMENT B LIMITATIONS



REGULATED MATERIALS SURVEY LIMITATIONS

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

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

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

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

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

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

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

ATTACHMENT C

ANALYTICAL REPORTS AND CHAINS OF CUSTODY



00011

Client	The Mannik & Smith Group	, Inc.	Received	12/11/18	Project	804 Randall						
	2193 Association Dr., Suite	200	Analyzed	12/14/18	Order#	O0011						
	Okemos, MI, 48864		Reported	12/14/18	Project #	11440003						
	BULK SAMPLE ANALYSIS SUMMARY											
	Client ID AS 1-1	Layer 2	Lab ID	00011-1	L	ocation RM-1						
	Plaster	, Skim Coat										
	Non Detect 0.00% homogenous, fibrous. 00% non-asbestos	Type Non Detect White, homogenous, 100% non-asbest										
	Client ID AS 1-2 Layer 1 Plaster	Layer 2 Skim Coat		O0011-2	l	ocation RM-2						
	Non Detect 0.00% homogenous, fibrous. 00% non-asbestos	Type Non Detect White, homogenous, 100% non-asbest										
_	Client ID AS 1-3 Layer 1 Plaster	Layer 2 Skim Coat		O0011-3	l	ocation RM-4						
	Non Detect 0.00% homogenous, fibrous. 00% non-asbestos	Type Non Detect White, homogenous, 100% non-asbest										
	Client ID AS 1-4 Layer 1 Plaster Non Detect 0.00% homogenous, fibrous. 00% non-asbestos	Layer 2 Skim Coat Type Non Detect White, homogenous, 100% non-asbest	0.00% fibrous.	O0011-4	l	ocation RM-1						
	Client ID AS 1-5 Layer 1 Plaster Non Detect 0.00% homogenous, fibrous. 00% non-asbestos	Layer 2 Skim Coat Type Non Detect White, homogenous, 100% non-asbest	0.00% fibrous.	O0011-5	l.	ocation RM-6						
Analytica Analyst: Reviewer	Christophe	0/R-93/116 by Polarized er A Claes Laboratory Di ucchesi Quality Mana	rector	roscopy		Accreditations NIST-NVLAP No. 600212-0						

00011

Client	The Mannik & Smith Group 2193 Association Dr., Suite Okemos, MI, 48864	200 A	nalyzed	12/11/18 12/14/18 12/14/18	Project Order # Project #	804 Randall 00011 I1440003
		BULK SAMI	PLE AN	ALYSIS SUMMAR	Y	
	Client ID AS 2-1 Layer 1 Drywall Non Detect 0.00% homogenous, fibrous. 00% non-asbestos	Layer 2 Joint Compound Type Non Detect White, homogenous, fi 100% non-asbesto	0.00% brous.	O0011-6	l	ocation RM-3
	Client ID AS 2-2 Layer 1 Drywall Non Detect 0.00% , homogenous, fibrous. 00% non-asbestos	Layer 2 Joint Compound Type Non Detect White, homogenous, fi 100% non-asbesto	0.00% brous.	O0011-7	Į.	ocation RM-3
	Client ID AS 2-3 Layer 1 Drywall Non Detect 0.00% homogenous, fibrous. 00% non-asbestos	Layer 2 Joint Compound Type Non Detect White, homogenous, fi 100% non-asbesto	0.00% brous.	O0011-8	l	ocation RM-7
	Client ID AS 3-1 Layer 1 Window Glaze Non Detect 0.00% , homogenous, fibrous. 00% non-asbestos		Lab ID	O0011-9	L	ocation RM-3
	Client ID AS 3-2 Layer 1 Window Glaze Non Detect 0.00% , homogenous, fibrous. 00% non-asbestos		Lab ID	O0011-10	[ocation RM-3
Analytica Analyst: Reviewer	Christophe	0/R-93/116 by Polarized L er A Claes Laboratory Dire ucchesi Quality Manage	ector	roscopy		Accreditations NIST-NVLAP No. 600212-0

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Client	The Mannik & Sm 2193 Association Okemos, MI, 488	Dr., Suite 200	Received Analyzed Reported	12/14/18	Project Order # Project #	804 Randall 00011 I1440003					
	BULK SAMPLE ANALYSIS SUMMARY										
Type Brown,	Client ID A Layer 1 Paneling Underla Non Detect , homogenous, fi 00% non-asbesto	yment 0.00% brous.	Lab ID	O0011-11	L	ocation RM-3					
Type Brown,	Client ID A Layer 1 Paneling Underla Non Detect , homogenous, fi 00% non-asbesto	yment 0.00% brous.	Lab ID	O0011-12	L	ocation RM-3					
	Client ID A Layer 1 Wall Mastic Non Detect , homogenous, fi 00% non-asbesto	0.00% brous.	Lab ID	O0011-13	L	ocation RM-2					
	Client ID A Layer 1 Wall Mastic Non Detect , homogenous, fi 00% non-asbesto	0.00% brous.	Lab ID	O0011-14	L	ocation RM-2					
Type Cream,	Client ID A Layer 1 chroom Wall Mas Non Detect homogenous, fi 00% non-asbesto	tic 0.00% brous.	Lab ID	O0011-15	L	ocation RM-5					
Analytica Analyst: Reviewer	С	S EPA 600/R-93/116 by Polariz hristopher A Claes Laboratory oshua P Lucchesi Quality Ma	Director	roscopy		Accreditations NIST-NVLAP No. 600212-0					

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Client	The Mannik & Smith Group, 2193 Association Dr., Suite 2 Okemos, MI, 48864		12/14/18	Project Order # Project #	804 Randall 00011 I1440003
		BULK SAMPLE AN	ALYSIS SUMMA	ARY	
Type Cream,	Client ID AS 6-2 Layer 1 hroom Wall Mastic Non Detect 0.00% homogenous, fibrous. 00% non-asbestos	Lab ID	O0011-16	L	ocation RM-5.
Type Black,	Client ID AS 7-1 Layer 1 cor Underlayment Non Detect 0.00% homogenous, fibrous. 00% non-asbestos	Lab ID	O0011-17	L	ocation RM-2
Type Black,	Client ID AS 7-2 Layer 1 por Underlayment Non Detect 0.00% homogenous, fibrous. 00% non-asbestos	Lab ID	O0011-18	L	ocation RM-2
	Client ID AS 8-1 Layer 1 Tan 12x12 Non Detect 0.00% nomogenous, fibrous. 20% non-asbestos	Lab ID	O0011-19	L	ocation RM-3
	Client ID AS 8-2 Layer 1 Tan 12x12 Non Detect 0.00% nomogenous, fibrous. 00% non-asbestos	Lab ID	O0011-20	L	ocation RM-3
Analytica Analyst: Reviewer	Christophe	0/R-93/116 by Polarized Light Mic r A Claes Laboratory Director ucchesi Quality Manager	roscopy		Accreditations NIST-NVLAP No. 600212-0

00011

Client The Mannik & S	Smith Group, Inc.		Received	12/11/18	Project	804 Randall
2193 Association	on Dr., Suite 200		Analyzed	12/14/18	Order#	00011
Okemos, MI, 48	8864		Reported	12/14/18	Project #	l1440003
		BULK SAM	IPLE AN	ALYSIS SUMM	//ARY	
Client ID Layer 1	AS 9-1	Layer 2	Lab ID	O0011-21	L	ocation RM-7
Red and White 9	9x9	Mastic				
Type Chrysotile White, homogenous, 98% non-asbest Point count perfor	os 1	Non Detect , homogenous, f 00% non-asbest				
Client ID	AS 9-2		Lab ID	O0011-22	L	ocation RM-7
Layer 1		Layer 2				
Red and White 9		Mastic	0.000/			
Type Not Analyzed Red, homogenous, f	ibrous. Black,	Non Detect , homogenous, f 00% non-asbest				
Client ID Layer 1 Brown 12x12			Lab ID	O0011-23	L	ocation RM-7
Type Non Detect Brown, homogenous, 100% non-asbes						
Client ID Layer 1	AS 10-2		Lab ID	O0011-24	L	ocation RM-7
Brown 12x12						
Type Non Detect	0.00%					
Brown, homogenous, 100% non-asbes	fibrous.					
Client ID Layer 1	AS 11-1		Lab ID	O0011-25	L	ocation Basement
Basement Window	Glaze					
Type Non Detect Cream, homogenous, 100% non-asbes	0.00% fibrous.					
Analytical Method:	US EPA 600/R-93/1	16 by Polarized	Light Mici	roscopy		Accreditations
Analyst:	Christopher A Claes	•	_	1- 7		NIST-NVLAP
Reviewer:	Joshua P Lucchesi	Quality Manag				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.

00011

2	The Mannik & Smith Group 2193 Association Dr., Suite Okemos, MI, 48864		12/14/18 Order	
		BULK SAMPLE AN	ALYSIS SUMMARY	
Type Cream, h	Client ID AS 11-2 Layer 1 lent Window Glaze Non Detect 0.00% lomogenous, fibrous. 1% non-asbestos	Lab ID	O0011-26	Location Basement
Type Gray, ho	Client ID AS 12-1 Layer 1 Stack Paper Chrysotile 65.00% Dmogenous, fibrous. % non-asbestos	Lab ID	O0011-27	Location Basement
Type 1	Client ID AS 12-2 Layer 1 Stack Paper Not Analyzed - omogenous, fibrous.	Lab ID	O0011-28	Location Basement
Type 1	Client ID AS 12-3 Layer 1 Stack Paper Not Analyzed - omogenous, fibrous.	Lab ID	O0011-29	Location Basement
	Client ID AS 13-1 Layer 1 Vent Wrap Chrysotile 65.00% omogenous, fibrous. % non-asbestos	Lab ID	O0011-30	Location Basement
Analytical N Analyst: Reviewer:		0/R-93/116 by Polarized Light Mico er A Claes Laboratory Director ucchesi Quality Manager	roscopy	Accreditations NIST-NVLAP No. 600212-0

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Client	The Mannik & Smith Group 2193 Association Dr., Suite Okemos, MI, 48864		12/14/18 O	,	804 Randall 00011 1440003
		BULK SAMPLE AN	ALYSIS SUMMARY		
Type Gray,	Client ID AS 13-2 Layer 1 Vent Wrap Not Analyzed - homogenous, fibrous.	Lab ID	O0011-31	Lo	ocation Basement
Type Gray,	Client ID AS 13-3 Layer 1 Vent Wrap Not Analyzed - homogenous, fibrous.	Lab ID	O0011-32	Lo	ocation Basement
	Client ID AS 14-1 Layer 1 Stack Cement Non Detect 0.00% homogenous, fibrous. 00% non-asbestos	Lab ID	O0011-33	Lo	ocation Basement
	Client ID AS 14-2 Layer 1 Stack Cement Non Detect 0.00% , homogenous, fibrous. 00% non-asbestos	Lab ID	O0011-34	Lo	ocation Basement
Type Gray,	Client ID AS 15-1 Layer 1 ement Concrete Floor Non Detect 0.00% homogenous, fibrous. 00% non-asbestos	Lab ID	O0011-35	Lo	ocation Basement
Analytica Analyst: Reviewer	Christophe	0/R-93/116 by Polarized Light Mic er A Claes Laboratory Director ucchesi Quality Manager	roscopy		Accreditations NIST-NVLAP No. 600212-0

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Client	The Mannik & Smith Group 2193 Association Dr., Suite Okemos, MI, 48864		12/14/18	,	804 Randall 00011 I1440003
		BULK SAMPLE AN	ALYSIS SUMMARY		
Type Gray,	Client ID AS 15-2 Layer 1 ement Concrete Floor Non Detect 0.00% homogenous, fibrous00% non-asbestos	Lab ID	O0011-36	L	ocation Basement
	Client ID AS 16-1 Layer 1 Garage Drywall Non Detect 0.00% e, homogenous, fibrous. 2,00% non-asbestos	Lab ID	O0011-37	L	ocation Garage
	Client ID AS 16-2 Layer 1 Garage Drywall Non Detect 0.00% e, homogenous, fibrous. 200% non-asbestos	Lab ID	O0011-38	L	ocation Garage
	Client ID AS 16-3 Layer 1 Garage Drywall Non Detect 0.00% e, homogenous, fibrous00% non-asbestos	Lab ID	O0011-39	L	ocation Garage
Type White	Client ID AS 17-1 Layer 1 arage Window Glaze Non Detect 0.00% c, homogenous, fibrous. 00% non-asbestos	Lab ID	O0011-40	L	ocation Garage
Analytica Analyst: Reviewe	Christophe	D/R-93/116 by Polarized Light Mic r A Claes Laboratory Director ucchesi Quality Manager	roscopy		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 Analyzed Reported	12/14/18	Project Order # Project #	804 Randall 00011 I1440003
		BULK SAMPLE AN	ALYSIS SUMM	ARY	
Type White	Client ID AS 17-2 Layer 1 arage Window Glaze Non Detect 0.00% e, homogenous, fibrous. 1.00% non-asbestos	Lab ID	O0011-41	L	ocation Garage
	Client ID AS 19-1 Layer 1 Exterior Caulk Non Detect 0.00% e, homogenous, fibrous. 00% non-asbestos	Lab ID	O0011-42	L	ocation Exterior
	Client ID AS 19-2 Layer 1 Exterior Caulk Non Detect 0.00% e, homogenous, fibrous. 200% non-asbestos	Lab ID	O0011-43	l	ocation Exterior
	Client ID AS 18-1 Layer 1 Roof Shingle Non Detect 0.00% , homogenous, fibrous00% non-asbestos	Lab ID	O0011-44	L	ocation Roof
	Client ID AS 18-2 Layer 1 Roof Shingle Non Detect 0.00% , homogenous, fibrous00% non-asbestos	Lab ID	O0011-45	L	Location Roof
Analytica Analyst: Reviewe	Christopher A Clae	116 by Polarized Light Mice es Laboratory Director Quality Manager	roscopy		Accreditations NIST-NVLAP No. 600212-0

Client Project Comments: Address Turn Around 804 Randall 2193 Association Drive, Suite 200 The Mannik & Smith Group, Inc. ☐ 4 Hour AS 8-1 AS 7-2 AS 7-1 AS 5-1 AS 4-2 AS 4-1 AS 3-2 AS 3-1 AS 2-3 AS 1-1 AS 6-2 AS 6-1 AS 5-2 AS 2-2 AS 2-1 AS 1-5 AS 1-4 AS 1-3 AS 1-2 The Mannik & Smith Group AS 8-2 Analytical Laboratories Relinquished by 24 Hour Project# Wood paneling underlayment Wood paneling underlayment 48 Hour Bathroom Wall mastic Bathroom Wall mastic 11440003 Floor Underlayment Floor Underlayment Window Glaze Window Glaze Wall mastic Wall mastic Tan 12x12 Drywall Drywall Drywall Plaster Plaster Plaster Plaster Plaster Email City, State Lansing, MI Contact ✓ 72 Hour cbush@manniksmithgroup.com Charlie Bush Order Number: 1 Week Received by Chain of Custody Phone Report to Zip Code RM-2 RM-2 RM-5 RM-5 RM-3 RM-3 RM-3 RM-7 RM-3 RM-2 RM-3 RM-3 RM-3 RM-6 RM-1 RM-4 **RM-2** RM-1 RM-3 **RM-2** (517) 316-9232 ✓ Email 0 0011 Fax Date Sampled: *Bulk Samples Only* ✓ TTP ☐ Point Count 12/10/2018

Date and Time

Date and Time

1 of 3

Order Number:	Chain of Custody
	istody

The Mannik & Smith Gro	oup, Inc.		City			Zip Code	Ш	*Bulk Samples Only*
2193 Association Drive,	Suite 200		Cor			Phone (517) 316-9232	
804 Randall		Project# 11			smithgroup.com	Fax		Date Sampled:
1 2 1	4 Hour	24 Hour	48 Hour		☐ 1 Week	Report to	✓ Email ☐ Fax	12/10/2018
Customer ID			Material Type			Material Lo	cation	Notes
AS 9-1		72	ed and white S)x9		RM-7		
AS 9-2		R	ed and white s	9X6		RM-7		
AS 10-1			Brown 12x12			RM-7		
AS 10-2			Brown 12x12			RM-7		
AS 11-1		Base	ment Window	Glaze		Baseme	int	
AS 11-2		Base	ment Window	Glaze		Baseme	ent	
AS 12-1			Stack paper			Baseme	ent	
AS 12-2			Stack paper			Baseme	int	
AS 12-3			Stack paper			Baseme	int	
AS 13-1			Vent wrap			Baseme	nt	
AS 13-2			Vent wrap			Baseme	nt	
AS 13-3			Vent wrap			Baseme	nt	
AS 14-1			Stack Cement			Baseme	nt	
AS 14-2			Stack Cement			Baseme	int	
AS 15-1		Base	ment Concrete	e floor	3	Baseme	nt	
AS 15-2		Base	ment Concrete	e floor		Baseme	nt	
AS 16-1			Garage drywa	I		Garag	O	
AS 16-2			Garage drywa	I		Garag	е	
AS 16-3			Garage drywa	II		Garag	е	
AS 17-1		Ga	rage window g	laze		Garag	е	
	Client The Mannik & Smith Gra Address 2193 Association Drive, Project 804 Randall Turn Around Customer ID Lab ID Customer ID AS 9-1 AS 9-2 AS 10-1 AS 10-2 AS 11-1 AS 11-2 AS 12-1 AS 12-2 AS 12-2 AS 13-1 AS 13-3 AS 13-1 AS 13-3 AS 14-1 AS 15-1 AS 15-1 AS 16-1 AS 16-2 AS 17-1 AS 17-1	The Mannik & Smith Group, 2193 Association Drive, Suit 804 Randall Customer ID AS 9-1 AS 9-2 AS 10-1 AS 11-1 AS 11-2 AS 11-2 AS 11-2 AS 12-3 AS 12-3 AS 13-3 AS 13-1 AS 13-2 AS 13-2 AS 13-1 AS 13-2 AS 14-1 AS 15-1 AS 15-2 AS 16-2 AS 17-1	The Mannik & Smith Group, Inc. 2193 Association Drive, Suite 200 804 Randall Customer ID AS 9-1 AS 10-1 AS 11-1 AS 11-2 AS 12-2 AS 13-3 AS 13-3 AS 14-1 AS 15-2 AS 16-3 AS 17-1	The Mannik & Smith Group, Inc. 2193 Association Drive, Suite 200 804 Randall Customer ID AS 9-1 AS 10-1 AS 11-1 AS 11-2 AS 12-2 AS 13-2 AS 13-3 AS 14-1 AS 15-1 AS 16-1 AS 16-3 AS 17-1	The Mannik & Smith Group, Inc. City, State 200 City, State 200 Contact 200 <td>The Mannik & Smith Group, Inc. 2193 Association Drive, Suite 2000 2193 Association Drive, Suite 2000 Project # 1144,0003 Email chush@manniksmith (Charlie Bush) </td> <td>The Mannik & Smith Group, Inc. Project # 11440003 Email Churlie Bush Emonsing Mil Emonsing </td> <td>The Mannik & Smith Group, Inc. The Mannik & Smith Group, Inc. 2193 Association Drive, Suite 200 24 Hour A Hour A Hour A Hour A Hour A S9-1 A S9-1 A S9-1 A S10-1 A S10-1 A S11-1 A S11-1 A S11-2 A S11-2 A S11-2 A S13-3 A S13-3</td>	The Mannik & Smith Group, Inc. 2193 Association Drive, Suite 2000 2193 Association Drive, Suite 2000 Project # 1144,0003 Email chush@manniksmith (Charlie Bush)	The Mannik & Smith Group, Inc. Project # 11440003 Email Churlie Bush Emonsing Mil Emonsing	The Mannik & Smith Group, Inc. The Mannik & Smith Group, Inc. 2193 Association Drive, Suite 200 24 Hour A Hour A Hour A Hour A Hour A S9-1 A S9-1 A S9-1 A S10-1 A S10-1 A S11-1 A S11-1 A S11-2 A S11-2 A S11-2 A S13-3 A S13-3

Relinquished by

Date and Time

118

Date and Time

Received by

Client Project Comments: Address Turn Around 804 Randall 2193 Association Drive, Suite 200 The Mannik & Smith Group, Inc. AS 18-1 AS 19-2 AS 18-2 AS 17-2 AS 19-1 The Mannik & Smith Group Analytical Laboratories 4 Hour Project # 24 Hour Garage window glaze 11440003 **Exterior Caulk** Exterior Caulk Roof shingle Roof shingle 48 Hour Email Contact City, State Lansing, MI Charlie Bush ✓ 72 Hour cbush@manniksmithgroup.com Order Number: ☐ 1 Week Chain of Custody Zip Code ✓ TTP Point Count Phone (517) 316-9232 Report to Fax Exterior Garage Exterior Roof Roof ✓ Email ☐ Fax Date Sampled: *Bulk Samples Only* 12/10/2018

Relinquished by

Date and Time

Date and Time

Received by

ATTACHMENT D

NOTIFICATION OF INTENT TO RENOVATE/DEMOLISH



NOTIFICATION OF INTENT TO RENOVATE/DEMOLISH



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

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

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

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

(example: asbestos has fallen off of surface).

NOTIFICATION OF INTENT TO RENOVATE/DEMOLISH (continued)

11.	PROJECT DESCRIPTION: Complete A) for Renovation (asbestos remo	oval/encapsulation) and/or B) for Demolition:						
	carefully lower, etc.):							
	B) DEMOLITION: Describe the method of demolition of facility, bridge, et bridge, etc., will be demolished:	tc., and indicate if complete or partial. If partial, describe which part of facility						
12.	ENGINEERING CONTROLS: Describe work practices and engineering until proper disposal:	controls used to prevent visible emissions before, during, and after removal, and						
13.		n the event that unexpected RACM is found or previously non-friable asbestos efore regulated:						
14.		S: A) Indicate how you determined whether or not asbestos is in the facility. If ination of the presence or absence of asbestos must be made prior to submitting						
		survey:						
	C) Name, accreditation number of inspector, and date of inspection:							
15.	EMERGENCY RENOVATIONS: Date/time of emergency:	Describe the sudden, unexpected event:						
	Explain how the event caused unsafe conditions, and/or would cause equ	ipment damage and/or an unreasonable financial burden:						
16.	inspection at the renovation or demolition site.	Subpart M, will be on-site during the renovation and during demolition involving ence that this person has completed the required training will be available for						
	Signature of Owner or Abatement Contractor Date	Signature of Owner or Demolition Contractor Date						
17.	Signature of Building Owner or Lessee Date	ssure Enclosures: (required by LARA) ir monitoring is required for any asbestos abatement project involving 10 med within a negative pressure enclosure. I (the building owner or lessee) 135 to have clearance air monitoring performed on this project. Signature of Asbestos Abatement Contractor Representative Date sted. For affected projects, this section of the notification form must be completed, signed,						
18.	I certify that the above information is correct:							
	Printed Name of Owner/Operator Date	Signature of Owner/Operator Date						
MA	ILING ADDRESSES/PHONE NUMBERS: (See Item 1 to determine v	which agency requirements/regulations are applicable to your project.)						
mai	Public Act 135 of 1986, as amended, Section 220 (1-4) or (8), I to address below. For more info visit: ://www.michigan.gov/asbestos	For NESHAP Demolitions/Renovations , 40 CFR , Part 61 , Subpart M , please use the e-submittal process. For more information visit http://www.michigan.gov/air , under Air Links click on Asbestos NESHAP Program.						
LAF P.C	DSHA Asbestos Program RA, CSHD D. Box 30671 Ising, MI 48909-8171	NESHAP Asbestos Program DEQ, AQD P.O. Box 30260 Lansing, MI 48909-7760						
517	517.284.6777 (Office) 17.636.4551 (office), 517.322.1713 (fax)							

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



December 21, 2018

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

Re: Pre-Renovation Regulated Materials Survey

3116 Westmont Ave., Lansing, Ingham County, MI

Dear Ms. Case:

The Mannik & Smith Group, Inc. (MSG) is pleased to present Ingham County with the results of the limited prerenovation regulated materials survey (RMS) performed at 3116 Westmont Ave., Lansing, Ingham County, Michigan (hereinafter referred to as the "Site") by Kory McKay (Accreditation Number A47903).

SUMMARY

Building Information				
Property Address	3116 Westmont Ave., Lansing MI			
Parcel #	33-01-01-06-177-001			
No. Stories	2			
Square Footage (approx.)	800 SF			
Siding	Metal			
Basement	No			
Garage	Yes			



Asbestos Containing Material						
Location	Material Group	Friable/Non Friable	Asbestos	Quantity		
Exterior	Exterior Caulk	Non Friable	5% Chrysotile	130 LF		

Universal Waste Inventory				
Location	Material Description	Quantity		
No Universal Waste was found onsite				

Other Regulated Materials Inventory				
Location Material Description Quantity				
No Regulated Materials were found onsite				

Hazardous Materials					
Location Material Description Quantity					
Garage	1 Gallon Paint Can	20			
Garage	5 Gallon Paint Bucket	3			

PURPOSE AND SCOPE OF WORK

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

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

METHODOLOGIES

The RMS was conducted on December 5, 2018. During the time of the survey sections of the building roof and flooring was missing rendering it inaccessible and therefore the RMS was limited to the exterior of the home. 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:
 - o IATA International Air Transport Association; Dangerous Goods Regulations;
 - o ICAO International Civil Aviation Organization; Technical Instructions; and
 - AF Air Force "INTERSERVICE" Manual, Preparing Hazmat for Military Air Shipments (AFMAN 24-204).

Hazardous materials may also include:

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

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

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

the universal waste requirements overseen by the DEQ are addressed by R 299.9228 of Part 111 of 1994 P.A. 451, as amended and 40 CFR Part 273. These regulations are designed to encourage proper collection, recycling, treatment, or disposal of these wastes.

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

Other Regulated Materials

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

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

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

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

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

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

SURVEY RESULTS

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

ACM Survey Results

MSG performed a limited external survey due to the house being unsafe to enter and identified three (3) homogenous materials from the exterior of the house that were suspect as asbestos containing during the ACM survey. Six (6) bulk samples were collected from these suspect homogeneous materials and were

submitted to Mannik & Smith Group Analytical Laboratories (MSGAL) for laboratory analysis of Bulk Materials by Polarized Light Microscopy using USEPA Method 600/R-93/116. MSGAL is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP) to analyzed bulk samples for asbestos content. Of the aforementioned suspect homogenous materials identified during this ACM survey, laboratory analysis found one (1) homogenous material (sample 1-1) 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 three (3) homogenous materials collected as part of the limited ACM survey, one (1) homogenous material contained asbestos greater than 1% (sample 1-1) 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



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

Address:	3116 Westmont Avenue	Date:	December 5, 2018	
	Drawing not to scale			
	1 st Floor			
	Inside of house was unsafe to enter and was deemed inaccessible.			
	Garage		1-1, 2 2-1, 2 3-1, 2	

TABLES

TABLE 1
Asbestos Sampling Results

Client	Ingham County Land Bank Authority									
Survey Loca		3116 Westmo								
Survey Da	ate	December 5, 2	2018							
Functional Area	Floor	Sample ID	HM#	Homogeneous Material Group	Friable/Non Friable	Condition	EPA Classification	RACM	Asbestos	Quantity
Exterior	E	AS 1-1	HA-1	Grey caulk	Non-Friable	Good	Miscellaneous	Yes	5% Chrysotile	130 LF
Exterior	E	AS 1-2	HA-1	Grey caulk	Non-Friable	Good	Miscellaneous	Yes	NA	130 LF
Exterior	E	AS 2-1	HA-2	Window glaze	Non-Friable	Good	Miscellaneous	No	No	45 SF
Exterior	E	AS 2-2	HA-2	Window glaze	Non-Friable	Good	Miscellaneous	No	No	45 SF
Garage	E	AS 3-1	HA-3	Garage Roof shingles	Non-Friable	Good	Miscellaneous	No	No	225 SF
Garage	E	AS 3-2	HA-3	Garage Roof shingles	Non-Friable	Good	Miscellaneous	No	No	225 SF

Table 2 Universal Waste, Hazardous Materials, and Other Regulated Materials Inventory 3116 Westmont Ave.

Lansing, Ingham County, Michigan

Universal Waste Inventory						
Location	Location Type of Waste					
-	-	1				
	Hazardous Materials Inventory					
Location	Type of Waste	Approximate Quantity				
Garage	1 Gallon Paint Can	20				
Garage	5 Gallon Paint Bucket	3				
Other Regulated Materials Inventory						
Location	Location Type of Waste					
-	-	-				

ATTACHMENT A PHOTO LOG



Ingham County Land Bank 3116 Westmont Ave, Lansing, MI Photographs taken by: Kory McKay on 12/05/2018

Property Photos



3116 Westmont Ave, Front of House



Back of House



Side of House



Side of House

Samples



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



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



Sample ID: AS 3-1 Location: Garage Notes: Garage Roof Shingle

Ingham County Land Bank 3116 Westmont Ave, Lansing, MI Photographs taken by: Kory McKay on 12/05/2018

Inaccessible Areas



Description:



Description:



Description:



Description:



Description:



Description:

ATTACHMENT B LIMITATIONS



REGULATED MATERIALS SURVEY LIMITATIONS

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

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

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

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

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

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

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

ATTACHMENT C

ANALYTICAL REPORTS AND CHAINS OF CUSTODY



The Mannik & Smith Group Analytical Laboratories

00005

Client	The Mannik & Smith Group 2193 Association Dr., Suite Okemos, MI, 48864		12/11/18 Order #	3116 Westmont Ave 00005 I1440003						
	BULK SAMPLE ANALYSIS SUMMARY									
	Client ID AS 1-1 Layer 1 Grey Caulk Chrysotile 5.00% homogenous, fibrous. 95% non-asbestos	Lab ID	O0005-1 L	ocation Exterior						
Type Gray,	Client ID AS 1-2 Layer 1 Grey Caulk Not Analyzed - homogenous, fibrous.	Lab ID	O0005-2 L	ocation Exterior						
	Client ID AS 2-1 Layer 1 Window Glaze Non Detect 0.00% , homogenous, fibrous. 00% non-asbestos	Lab ID	O0005-3 L	ocation Exterior						
	Client ID AS 2-2 Layer 1 Window Glaze Non Detect 0.00% , homogenous, fibrous. 00% non-asbestos	Lab ID	O0005-4 L	ocation Exterior						
Type Black,	Client ID AS 3-1 Layer 1 arage Roof Shingles Non Detect 0.00% homogenous, fibrous. 00% non-asbestos	Lab ID	O0005-5 L	ocation Garage						
Analytica Analyst: Reviewer	Christophe	0/R-93/116 by Polarized Light Micer A Claes Laboratory Director ucchesi Quality Manager	roscopy	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

00005

Client The Mannik & Smith Group, Inc.

Received 12/06/18

Project 3116 Westmont Ave

2193 Association Dr., Suite 200 Okemos, MI, 48864 Analyzed 12/11/18 Reported 12/11/18 Order # 00005 Project # 11440003

BULK SAMPLE ANALYSIS SUMMARY

Client ID AS 3-2 Layer 1 Lab ID 00005-6

Location Garage

Garage Roof Shingles

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

Analytical Method:US EPA 600/R-93/116 by Polarized Light MicroscopyAccreditationsAnalyst:Christopher A ClaesLaboratory DirectorNIST-NVLAPReviewer:Joshua P LucchesiQuality ManagerNo. 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

0rde	
Order Number:	Chain
<u> </u>	of Custody
000	29.5

liant		Con Pince		City State Lancing MI	Zin Code	27.0	*Bulk Samples Only*
Address	2193 Association Drive, Suite 200	ite 200		Contact Charlie Bush	Phone	ne (517) 316-9232	✓ TTP Point Count
roject	3116 Westmont Ave		Project# 11440003	Email cbush@manniksmithgroup.com	ngroup.com Fax		
furn Around		24 Hour	☐ 48 Hour	72 H		Report to 🗸 Email 🗌 Fax	12/5/2018
Lab ID	Customer ID		Material Type	Type	Ma	Material Location	Notes
	AS 1-1		Grey caulk	aulk		Exterior	
	AS 1-2		Grey caulk	aulk		Exterior	
	AS 2-1	(Acc	Window glaze	glaze		Exterior	
	AS 2-2		Window glaze	glaze		Exterior	
	AS 3-1		Garage Roof shingles	f shingles		Garage	
	AS 3-2		Garage Roof shingles	f shingles		Garage	
	72						
×							
*							
Comments:							
3							

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

Relinquished by_

Date and Time

Date and Time 12/6/16

Received by

1 of 1

ATTACHMENT D

NOTIFICATION OF INTENT TO RENOVATE/DEMOLISH



NOTIFICATION OF INTENT TO RENOVATE/DEMOLISH



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

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

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

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

(example: asbestos has fallen off of surface).

NOTIFICATION OF INTENT TO RENOVATE/DEMOLISH (continued)

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

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



December 21, 2018

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

Re: Pre-Renovation Regulated Materials Survey

810 Cypress St., Lansing, Ingham County, MI

Dear Ms. Case:

The Mannik & Smith Group, Inc. (MSG) is pleased to present Ingham County with the results of the limited prerenovation regulated materials survey (RMS) performed at 810 Cypress St., Lansing, Ingham County, Michigan (hereinafter referred to as the "Site") by Kory McKay (Accreditation Number A47903).

SUMMARY

Building Information		
Property Address	810 Cypress St., Lansing, MI	
Parcel #	33-01-01-08-229-181	
No. Stories	2	
Square Footage (approx.)	900 SF	
Siding	Transite	
Basement	Yes	
Garage	No	



Asbestos Containing Material				
Location	Material Group	Friable/Non Friable	Asbestos	Quantity
RM-4	Yellow Linoleum	Non Friable	2% Chrysotile	40 SF
Exterior	Siding	Non Friable	20% Chrysotile	1,800 SF

Universal Waste Inventory				
Location	Material Description	Quantity		
RM-1	Thermostat	1		
RM-6	Fluorescent Light Bulb	1		
RM-5, RM-6, Basement	Smoke Detector	3		
RM-2	Fire Extinguisher	1		

	Other Regulated Materials Inventory			
Location Material Description Quantity				
**	**No Other Regulated Materials were found onsite**			

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

PURPOSE AND SCOPE OF WORK

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

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

METHODOLOGIES

The RMS was conducted on December 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:
 - o IATA International Air Transport Association; Dangerous Goods Regulations;
 - o ICAO International Civil Aviation Organization; Technical Instructions; and
 - AF Air Force "INTERSERVICE" Manual, Preparing Hazmat for Military Air Shipments (AFMAN 24-204).

Hazardous materials may also include:

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

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

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

the universal waste requirements overseen by the DEQ are addressed by R 299.9228 of Part 111 of 1994 P.A. 451, as amended and 40 CFR Part 273. These regulations are designed to encourage proper collection, recycling, treatment, or disposal of these wastes.

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

Other Regulated Materials

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

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

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

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

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

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

SURVEY RESULTS

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

ACM Survey Results

MSG identified fifteen (15) homogenous materials that were suspect as asbestos containing during the ACM survey. Thirty four (34) bulk samples were collected from these suspect homogeneous materials and were submitted to Mannik & Smith Group Analytical Laboratories (MSGAL) for laboratory analysis of Bulk

Materials by Polarized Light Microscopy using USEPA Method 600/R-93/116. MSGAL is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP) to analyzed bulk samples for asbestos content. Of the aforementioned suspect homogenous materials identified during this ACM survey, laboratory analysis found two (2) homogenous materials (samples 6-1 and 11-1) 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. One sample (6-1) was point count confirmed.

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

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

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

CONCLUSIONS AND RECOMMENDATIONS

Asbestos Containing Materials

Of the fifteen (15) homogenous materials collected as part of the ACM survey, two (2) homogenous materials contained asbestos greater than 1% (samples 6-1 and 11-1) with these two (2) homogenous materials being classified as RACM. All materials containing ACM must be disposed of in a licensed landfill.

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

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

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

Universal Wastes, Hazardous Materials, and Other Regulated Materials

The universal waste, hazardous materials, and other regulated materials (see Table 2) must be properly characterized (as necessary) and properly removed from the Site building for recycling and/or disposed of in accordance with Parts 111, 115, or 147 of Michigan Public Act 451 of 1994, as amended. If additional universal wastes, hazardous materials, and other regulated materials are discovered during renovation

activities in areas that were determined during this survey to be structurally unsound and unsafe, inaccessible, concealed and/or in buried areas, these materials shall be characterized (as necessary) and properly removed in accordance with the above-mentioned regulations.

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

Sincerely,

Kory McKay

Environmental Scientist Accreditation Number A47903 Charlie Bush

Senior Project Manager Accreditation Number A34293

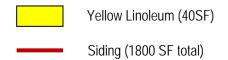
Attachments

FIGURE



TECHNICAL SKILL. 721 N. Capitol Avenue, Suite 2, Lansing, Michigan 48906 Tel: 517.316.9232 Fax: 517.316.9233 www.MannikSmithGroup.com Address: 810 Cypress Street Date: December 5, 2018 Drawing not to scale 1st Floor 2-2 Room 3 Room 2 2-1 4-1, 2 5-1, 2 2-3 1-3 Room 4 Room 5 6-1, 2 7-1, 2 2-4 8-1, 2







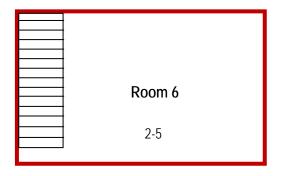
TECHNICAL SKILL.

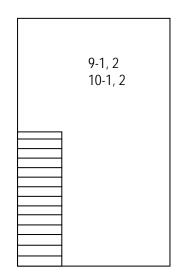
721 N. Capitol Avenue, Suite 2, Lansing, Michigan 48906 Tel: 517.316.9232 Fax: 517.316.9233 www.MannikSmithGroup.com

Address: 810 Cypress Street December 5, 2018

Drawing not to scale

2nd Floor Basement





TABLES

TABLE 1
Asbestos Sampling Results

011		l								
Client Survey Loc		Ingham Count 810 Cypress S		ank Authority						
Survey D		December 5, 2								
Functional Area	Floor	Sample ID	HM#	Homogeneous Material Group	Friable/Non Friable	Condition	EPA Classification	RACM	Asbestos	Quantity
RM-1	1	AS 1-1	HA-1	Plaster	Non-Friable	Good	Miscellaneous	No	No	1200 SF
RM-7	1	AS 1-2	HA-1	Plaster	Non-Friable	Good	Miscellaneous	No	No	1200 SF
RM-5	1	AS 1-3	HA-1	Plaster	Non-Friable	Good	Miscellaneous	No	No	1200 SF
RM-2	1	AS 2-1	HA-2	Drywall	Non-Friable	Good	Miscellaneous	No	No	1500 SF
RM-2	1	AS 2-2	HA-2	Drywall	Non-Friable	Good	Miscellaneous	No	No	1500 SF
RM-3	1	AS 2-3	HA-2	Drywall	Non-Friable	Good	Miscellaneous	No	No	1500 SF
RM-5	1	AS 2-4	HA-2	Drywall	Non-Friable	Good	Miscellaneous	No	No	1500 SF
RM-6	2	AS 2-5	HA-2	Drywall	Non-Friable	Good	Miscellaneous	No	No	1500 SF
RM-1	1	AS 3-1	HA-3	Window Glaze	Non-Friable	Good	Miscellaneous	No	No	180 SF
RM-1	1	AS 3-2	HA-3	Window Glaze	Non-Friable	Good	Miscellaneous	No	No	180 SF
RM-2	1	AS 4-1	HA-4	White Linoleum	Non-Friable	Good	Miscellaneous	No	No	160 SF
RM-2	1	AS 4-2	HA-4	White Linoleum	Non-Friable	Good	Miscellaneous	No	No	160 SF
RM-2	1	AS 5-1	HA-5	Tan Linoleum	Non-Friable	Good	Miscellaneous	No	No	125 SF
RM-2	1	AS 5-2	HA-5	Tan Linoleum	Non-Friable	Good	Miscellaneous	No	No	125 SF
RM-4	1	AS 6-1	HA-6	Yellow linoleum	Non-Friable	Good	Miscellaneous	Yes	2% Chrysotile	40 SF
RM-4	1	AS 6-2	HA-6	Yellow linoleum	Non-Friable	Good	Miscellaneous	Yes	NA	40 SF
RM-4	1	AS 7-1	HA-7	Wall mastic	Non-Friable	Good	Miscellaneous	No	No	60 SF

TABLE 1
Asbestos Sampling Results

0!!		I		1 A 11 11						
Client Survey Loca	ation	Ingham Count 810 Cypress S		ank Authority						
Survey Da		December 5, 2								
Functional Area	Floor	Sample ID	HM#	Homogeneous Material Group	Friable/Non Friable	Condition	EPA Classification	RACM	Asbestos	Quantity
RM-4	1	AS 7-2	HA-7	Wall mastic	Non-Friable	Good	Miscellaneous	No	No	60 SF
RM-5	1	AS 8-1	HA-8	Brown Linoleum	Non-Friable	Good	Miscellaneous	No	No	15 SF
RM-5	1	AS 8-2	HA-8	Brown Linoleum	Non-Friable	Good	Miscellaneous	No	No	15 SF
Basement	В	AS 9-1	HA-9	Stack Cement	Non-Friable	Good	Miscellaneous	No	No	5 SF
Basement	В	AS 9-2	HA-9	Stack Cement	Non-Friable	Good	Miscellaneous	No	No	5 SF
Basement	В	AS 10-1	HA-10	Basement floor Concrete	Non-Friable	Good	Miscellaneous	No	No	300 SF
Basement	В	AS 10-2	HA-10	Basement floor Concrete	Non-Friable	Good	Miscellaneous	No	No	300 SF
Exterior	E	AS 11-1	HA-11	Siding	Non-Friable	Good	Miscellaneous	Yes	20% Chrysotile	1800 SF
Exterior	E	AS 11-2	HA-11	Siding	Non-Friable	Good	Miscellaneous	Yes	NA	1800 SF
Exterior	Е	AS 12-1	HA-12	Chimney Mortar	Non-Friable	Good	Miscellaneous	No	No	160 SF
Exterior	E	AS 12-2	HA-12	Chimney Mortar	Non-Friable	Good	Miscellaneous	No	No	160 SF
Exterior	E	AS 13-1	HA-13	Chimney Caulk	Non-Friable	Good	Miscellaneous	No	No	50 SF
Exterior	Е	AS 13-2	HA-13	Chimney Caulk	Non-Friable	Good	Miscellaneous	No	No	50 SF
Exterior	Е	AS 14-1	HA-14	Exterior Caulk	Non-Friable	Good	Miscellaneous	No	No	150 SF
Exterior	Е	AS 14-2	HA-14	Exterior Caulk	Non-Friable	Good	Miscellaneous	No	No	150 SF
Roof	Е	AS 15-1	HA-15	Roof Shingle	Non-Friable	Good	Miscellaneous	No	No	1050 SF
Roof	Е	AS 15-2	HA-15	Roof Shingle	Non-Friable	Good	Miscellaneous	No	No	1050 SF

Table 2 Universal Waste, Hazardous Materials, and Other Regulated Materials Inventory 810 Cypress St. Lansing, Ingham County, Michigan

Universal Waste Inventory						
Location	Type of Waste	Approximate Quantity				
RM-1	Thermostat	1				
RM-6	Fluorescent Light Bulb	1				
RM-5, RM-6, Basement	Smoke Detector	3				
RM-2	Fire Extenguisher	1				
	Hazardous Materials Inventory					
Location	Type of Waste	Approximate Quantity				
-	-	-				
Otl	ner Regulated Materials Inventory					
Location	Type of Waste	Approximate Quantity				
-	-	-				

ATTACHMENT A PHOTO LOG



Property Photos



810 Cypress St, Front of House



Back of House



Side of House



Side of House

Ingham County Land Bank 810 Cypress St, Lansing, MI Photographs taken by: Kory McKay on 12/05/2018

Samples



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



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



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



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



Sample ID: AS 6-1 Location: RM-4 Notes: Yellow Linoleum



Sample ID: AS 4-1 Location: RM-2 Notes: White Linoleum

Ingham County Land Bank 810 Cypress St, Lansing, MI Photographs taken by: Kory McKay on 12/05/2018

Samples



Sample ID: AS 5-1 Location: RM-2 Notes: Tan Linoleum



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



Sample ID: AS 7-1 Location: RM-4 Notes: Wall Mastic



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



Sample ID: AS 8-1 Location: RM-5 Notes: Brown Linoleum



Sample ID: AS 14-1 Location: Exterior Notes: Exterior Caulk

ATTACHMENT B LIMITATIONS



REGULATED MATERIALS SURVEY LIMITATIONS

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

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

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

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

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

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

TECHNICAL SKILL. CREATIVE SPIRIT.

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

ATTACHMENT C

ANALYTICAL REPORTS AND CHAINS OF CUSTODY



00003

Client	The Mannik & Smith Group 2193 Association Dr., Suite Okemos, MI, 48864	200 Ar	nalyzed	12/06/18 12/11/18 12/11/18	Project Order # Project #	810 Cypress St O0003 I1440003
		BULK SAMP	LE AN	ALYSIS SUMIV	IARY	
	Client ID AS 1-1 Layer 1 Plaster Non Detect 0.00% , homogenous, fibrous. 100% non-asbestos			O0003-1		ocation RM-1
	Client ID AS 1-2 Layer 1 Plaster Non Detect 0.00% , homogenous, fibrous. 100% non-asbestos	Layer 2 Skim Coat	0.00% orous.	O0003-2	L	ocation RM-7
	Client ID AS 1-3 Layer 1 Plaster Non Detect 0.00% , homogenous, fibrous. 100% non-asbestos	L	ab ID	O0003-3	L	ocation RM-5
	Client ID AS 2-1 Layer 1 Drywall Non Detect 0.00% e, homogenous, fibrous. 100% non-asbestos	Layer 2 Joint Compound	0.00% orous.	O0003-4	L	ocation RM-2
	Client ID AS 2-2 Layer 1 Drywall Non Detect 0.00% e, homogenous, fibrous. 100% non-asbestos	Layer 2 Joint Compound Type Non Detect White, homogenous, fib. 100% non-asbestos	0.00% orous.	O0003-5	L	ocation RM-2
Analytica Analyst: Reviewe	Christoph	00/R-93/116 by Polarized Li er A Claes Laboratory Dire ucchesi Quality Manage	ctor	oscopy		Accreditations NIST-NVLAP No. 600212-0

00003

Client	The Mannik & Smith Group 2193 Association Dr., Suite Okemos, MI, 48864	200 An	alyzed	12/06/18 12/11/18 12/11/18	Project Order # Project #	810 Cypress St O0003 I1440003
		BULK SAMPI	LE AN	ALYSIS SUMMARY		
	Client ID AS 2-3 Layer 1 Drywall Non Detect 0.00% homogenous, fibrous. 00% non-asbestos	Layer 2 Joint Compound).00% rous.	O0003-6	L	ocation RM-3
	Client ID AS 2-4 Layer 1 Drywall Non Detect 0.00% homogenous, fibrous. 00% non-asbestos	Layer 2 Joint Compound).00% rous.	O0003-7	L	ocation RM-5
	Client ID AS 2-5 Layer 1 Drywall Non Detect 0.00% homogenous, fibrous. 00% non-asbestos	Layer 2 Joint Compound).00% rous.	O0003-8	L	ocation RM-6
	Client ID AS 3-1 Layer 1 Window Glaze Non Detect 0.00% homogenous, fibrous. 00% non-asbestos	La	ab ID	O0003-9	L	ocation RM-1
	Client ID AS 3-2 Layer 1 Window Glaze Non Detect 0.00% homogenous, fibrous. 00% non-asbestos	La	ab ID	O0003-10	L	ocation RM-1
Analytica Analyst: Reviewer	Christophe	0/R-93/116 by Polarized Lig er A Claes Laboratory Direc ucchesi Quality Manager	ctor	oscopy		Accreditations NIST-NVLAP No. 600212-0

00003

Client	The Mannik & Smith Group 2193 Association Dr., Suite Okemos, MI, 48864		Received Analyzed Reported	12/11/18	Project Order # Project #	810 Cypress St 00003 I1440003
		BULK SAN	1PLE AN	ALYSIS SUMM	ARY	
	Client ID AS 4-1 Layer 1 White Linoleum Non Detect 0.00% the homogenous, fibrous. 00% non-asbestos	Layer 2 Mastic Type Non Detect Cream, homogenous, 100% non-asbes	0.00% fibrous.	O0003-11	L	ocation RM-2
	Client ID AS 4-2 Layer 1 White Linoleum Non Detect 0.00% homogenous, fibrous. 00% non-asbestos	Layer 2 Mastic Type Non Detect Cream, homogenous, 100% non-asbes	0.00% fibrous.	O0003-12	L	ocation RM-2
	Client ID AS 5-1 Layer 1 Tan Linoleum Non Detect 0.00% homogenous, fibrous00% non-asbestos	Layer 2 Mastic Type Non Detect Brown, homogenous, 100% non-asbes	0.00% fibrous.	O0003-13	L	ocation RM-2
,	Client ID AS 5-2 Layer 1 Tan Linoleum Non Detect 0.00% homogenous, fibrous. 00% non-asbestos	Layer 2 Mastic Type Non Detect Brown, homogenous, 100% non-asbes	0.00% fibrous.	O0003-14	L	ocation RM-2
Type Yellow	Client ID AS 6-1 Layer 1 Yellow Linoleum Non Detect 0.00% In, homogenous, fibrous. 1,00% non-asbestos	Layer 2 Mastic Type Chrysotile Cream, homogenous, 98% non-asbest Point count perfor	2.00% fibrous.	O0003-15	L	ocation RM-4
Analytica Analyst: Reviewer	Christophe	0/R-93/116 by Polarized er A Claes Laboratory Di ucchesi Quality Mana	rector	roscopy		Accreditations NIST-NVLAP No. 600212-0

00003

Client The Mannik & Smith Group 2193 Association Dr., Suite		12/06/18 12/11/18	Project Order #	810 Cypress St 00003
Okemos, MI, 48864	Reported	12/11/18	Project #	I1440003
	BULK SAMPLE AN	IALYSIS SUMM	ARY	
Client ID AS 6-2 Layer 1 Yellow Linoleum Type Non Detect 0.00% Yellow, homogenous, fibrous. 100% non-asbestos	Lab ID Layer 2 Mastic Type Not Analyzed - Cream, homogenous, fibrous.	O0003-16	L	ocation RM-4
Client ID AS 7-1 Layer 1 Wall Mastic Type Non Detect 0.00% White, homogenous, fibrous. 100% non-asbestos	Lab ID Layer 2 Mastic Type Non Detect 0.00% Brown, homogenous, fibrous. 100% non-asbestos	00003-17	L	ocation RM-4
Client ID AS 7-2 Layer 1 Wall Mastic Type Non Detect 0.00% White, homogenous, fibrous. 100% non-asbestos	Lab ID Layer 2 Mastic Type Non Detect 0.00% Brown, homogenous, fibrous. 100% non-asbestos	O0003-18	L	ocation RM-4
Client ID AS 8-1 Layer 1 Brown Linoleum Type Non Detect 0.00% Brown, homogenous, fibrous. 100% non-asbestos	Lab ID Layer 2 Mastic Type Non Detect 0.00% Black, homogenous, fibrous. 100% non-asbestos	O0003-19	L	ocation RM-5
Client ID AS 8-2 Layer 1 Brown Linoleum Type Non Detect 0.00% Brown, homogenous, fibrous. 100% non-asbestos	Lab ID Layer 2 Mastic Type Non Detect 0.00% Black, homogenous, fibrous. 100% non-asbestos	O0003-20	L	ocation RM-5
	0/R-93/116 by Polarized Light Mic er A Claes Laboratory Director ucchesi Quality Manager	roscopy		Accreditations NIST-NVLAP No. 600212-0

00003

2	he Mannik & Smith Group, Inc. 193 Association Dr., Suite 200 kemos, MI, 48864	Received Analyzed Reported	12/11/18	Project Order # Project #	810 Cypress St 00003 I1440003
		BULK SAMPLE AN	ALYSIS SUMM	ARY	
St Type Gray, ho	Client ID AS 9-1 Layer 1 cack Cement Non Detect 0.00% mogenous, fibrous. % non-asbestos	Lab ID	O0003-21	L	ocation Basement
St Type Gray, ho	Client ID AS 9-2 Layer 1 cack Cement Non Detect 0.00% mogenous, fibrous. % non-asbestos	Lab ID	O0003-22	L	ocation Basement
Baseme Type Gray, hom	Client ID AS 10-1 Layer 1 ent Floor Concrete Non Detect 0.00% ogenous, nonfibrous. % non-asbestos	Lab ID	O0003-23	L	ocation Basement
Baseme Type Gray, hom	Client ID AS 10-2 Layer 1 ent Floor Concrete Non Detect 0.00% ogenous, nonfibrous. % non-asbestos	Lab ID	O0003-24	L	ocation Basement
Type Gray, ho	Client ID AS 11-1 Layer 1 Siding Chrysotile 20.00% mogenous, fibrous. in non-asbestos	Lab ID	O0003-25	L	ocation Exterior
Analytical M Analyst: Reviewer:		116 by Polarized Light Mice es Laboratory Director Quality Manager	roscopy		Accreditations NIST-NVLAP No. 600212-0

00003

Client	The Mannik & Smith Group, 2193 Association Dr., Suite : Okemos, MI, 48864		12/11/18 Or	oject 810 Cypress St der # 00003 oject # 11440003
		BULK SAMPLE AN	ALYSIS SUMMARY	
Type Gray,	Client ID AS 11-2 Layer 1 Siding Not Analyzed - , homogenous, fibrous.	Lab ID	O0003-26	Location Exterior
Type Gray,	Client ID AS 12-1 Layer 1 Chimney Mortar Non Detect 0.00% , homogenous, fibrous. 100% non-asbestos	Lab ID	O0003-27	Location Exterior
Type Gray,	Client ID AS 12-2 Layer 1 Chimney Mortar Non Detect 0.00% homogenous, fibrous. 100% non-asbestos	Lab ID	O0003-28	Location Exterior
	Client ID AS 13-1 Layer 1 Chimney Caulk Non Detect 0.00% c, homogenous, fibrous. 100% non-asbestos	Lab ID	O0003-29	Location Exterior
	Client ID AS 13-2 Layer 1 Chimney Caulk Non Detect 0.00% c, homogenous, fibrous. 100% non-asbestos	Lab ID	O0003-30	Location Exterior
Analytica Analyst: Reviewe	Christophe	D/R-93/116 by Polarized Light Mico r A Claes Laboratory Director ucchesi Quality Manager	roscopy	Accreditations NIST-NVLAP No. 600212-0

00003

Client	The Mannik & Smith Group 2193 Association Dr., Suite Okemos, MI, 48864		12/11/18 Order #	810 Cypress St 00003 # 11440003
		BULK SAMPLE AN	ALYSIS SUMMARY	
	Client ID AS 14-1 Layer 1 Exterior Caulk Non Detect 0.00% homogenous, fibrous. 00% non-asbestos	Lab ID	O0003-31	Location Exterior
	Client ID AS 14-2 Layer 1 Exterior Caulk Non Detect 0.00% homogenous, fibrous. 00% non-asbestos	Lab ID	O0003-32	Location Exterior
	Client ID AS 15-1 Layer 1 Roof Shingle Non Detect 0.00% homogenous, fibrous. 00% non-asbestos	Lab ID	O0003-33	Location Roof
	Client ID AS 15-2 Layer 1 Roof Shingle Non Detect 0.00% homogenous, fibrous. 00% non-asbestos	Lab ID	O0003-34	Location Roof

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

Order Number:	Chain of Custody
0	stody
0003	7

Address	2193 Association Drive, Suite 200	p, Inc. Contact Charlie Bush	Phone (517) 316-9232	✓ TTP Point Count
	810 Cypress St	Project# 1440003 Email	Fax	Date Sampled:
Turn Around	4 Hour	☐ 24 Hour ☐ 48 Hour ☐ 72 Hour ☐ 1 Week	reek Report to Fmail Fax	12/5/2018
Lab ID	Customer ID	Material Type	Material Location	Notes
	AS 1-1	Plaster	RM-1	
	AS 1-2	Plaster	RM-7	
	AS 1-3	Plaster	RM-5	
	AS 2-1	Drywall	RM-2	
•	AS 2-2	Drywall	RM-2	
	AS 2-3	Dŋwall	RM-3	
	AS 2-4	Drywall	RM-5	
	AS 2-5	Drywall	RM-6	
	AS 3-1	Window Glaze	RM-1	
	AS 3-2	Window Glaze	RM-1	
	AS 4-1	White Linoleum	RM-2	
	AS 4-2	White Linoleum	RM-2	
	AS 5-1	Tan Linoleum	RM-2	
	AS 5-2	Tan Linoleum	RM-2	
	AS 6-1	Yellow linoleum	RM-4	
	AS 6-2	Yellow linoleum	RM-4	
	AS 7-1	Wall mastic	RM-4	
	AS 7-2	Wall mastic	RM-4	
	AS 8-1	Brown Linoleum	RM-5	
	AS 8-7	Brown Linoleum	RM-5	

Relinquished by Kovy McKax

Date and Time 12-6-18

Date and Time 12/6/18

Received by

The Mannik & Analytical La

દ્રે Smith Group	Chain of Custody
aboratories	Order Niimher:

Client	The Mannik & Smith Group, Inc.	p, Inc.	City, State Lansing, MI	de	Bulk Sar
Address	2193 Association Drive, Suite 200		Contact Charlie Bush	Phone (517) 316-9232	✓ IIP Point Count
roject	810 Cypress St	Project# 11440003	Email cbush@manniksmithgroup.com	Fax	Date Sampled:
furn Around		☐ 24 Hour ☐ 48 Hour	✓ 72 Hour ☐ 1 Week	Report to	12/5/2018
Lab ID	Customer ID	Material Type	l Type	Material Location	Notes
	AS 9-1	Stack Cement	ement	Basement	
	AS 9-2	Stack Cement	ement	Basement	
	AS 10-1	Basement floor Concrete	or Concrete	Basement	
	AS 10-2	Basement floor Concrete	or Concrete	Basement	
	AS 11-1	Siding	ng	Exterior	
	AS 11-2	Siding	ng	Exterior	
	AS 12-1	Chimney Mortar	Mortar	Exterior	
	AS 12-2	Chimney Mortar	Mortar	Exterior	
	AS 13-1	Chimney Caulk	/ Caulk	Exterior	
	AS 13-2	Chimney Caulk	/ Caulk	Exterior	
	AS 14-1	Exterior Caulk	Caulk	Exterior	
	AS 14-2	Exterior Caulk	Caulk	Exterior	
	AS 15-1	Roof Shingle	ningle	Roof	
	AS 15-2	Roof Shingle	ningle	Roof	
Comments:					

Relinquished by

Date and Time

Date and Time

Received by

ATTACHMENT D

NOTIFICATION OF INTENT TO RENOVATE/DEMOLISH





REGULATED MATERIALS SURVEY LIMITATIONS

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

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

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

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

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

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

TECHNICAL SKILL. CREATIVE SPIRIT.

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

NOTIFICATION OF INTENT TO RENOVATE/DEMOLISH



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

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

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

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

(example: asbestos has fallen off of surface).

NOTIFICATION OF INTENT TO RENOVATE/DEMOLISH (continued)

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

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



December 21, 2018

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

Re: Pre-Renovation Regulated Materials Survey

1106 West Allegan St., Lansing, Ingham County, MI

Dear Ms. Case:

The Mannik & Smith Group, Inc. (MSG) is pleased to present Ingham County with the results of the limited prerenovation regulated materials survey (RMS) performed at 1106 West Allegan St., Lansing, Ingham County, Michigan (hereinafter referred to as the "Site") by Kory McKay (Accreditation Number A47903).

SUMMARY

Building Information			
Property Address	1106 W Allegan St., Lansing MI		
Parcel #	33-01-01-17-401-291		
No. Stories	2		
Square Footage (approx.)	1000 SF		
Siding	Wood		
Basement	Yes		
Garage	No		



Asbestos Containing Material				
Location	Material Group	Friable/Non Friable	Asbestos	Quantity
RM-1, RM-5 thru RM-10	Plaster	Non Friable	2% Chrysotile	2400 SF
RM-7	Yellow 12x12	Non Friable	20% Chrysotile	50 SF
Basement	Vent Wrap	Non Friable	65% Chrysotile	5 LF

	Universal Waste Inventory	
Location	Material Description	Quantity
Basement	Smoke Detector	1
RM-1	Thermostat	1

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

	Hazardous Materials	
Location	Material Description	Quantity
Basement	5 Gallon Paint Bucket	1

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:
 - o DOT Department of Transportation; Hazardous Materials Regulations (49 CFR 100-180);
 - IMO International Maritime Organization; International Maritime Dangerous Goods (IMDG)
 Code;
 - o IATA International Air Transport Association; Dangerous Goods Regulations;
 - o ICAO International Civil Aviation Organization; Technical Instructions; and
 - AF Air Force "INTERSERVICE" Manual, Preparing Hazmat for Military Air Shipments (AFMAN 24-204).

Hazardous materials may also include:

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

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

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

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

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

Other Regulated Materials

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

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

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

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

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

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

SURVEY RESULTS

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

ACM Survey Results

MSG identified 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 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 1-3, 10-1 and 15-1) 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. One sample (1-3) was point count confirmed.

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

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

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

CONCLUSIONS AND RECOMMENDATIONS

Asbestos Containing Materials

Of the eighteen (18) homogenous materials collected as part of the ACM survey, three (3) homogenous materials contained asbestos greater than 1% (samples 1-3, 10-1 and 15-1) 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

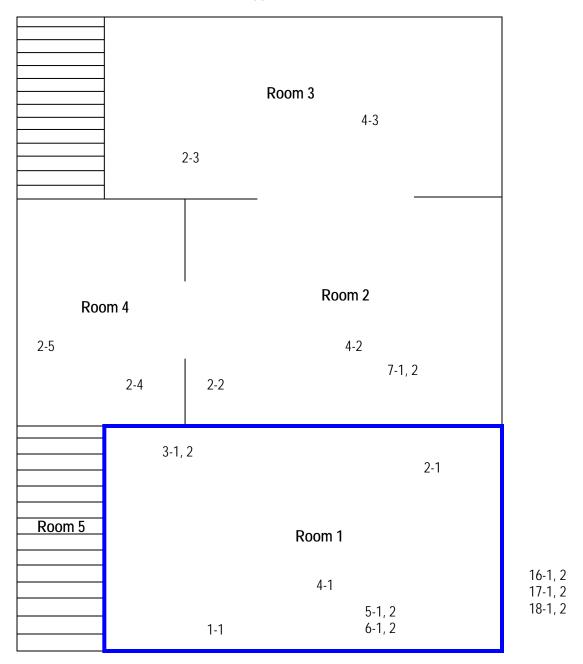
FIGURE

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

Address: 1106 West Allegan Street Date: December 11, 2018

Drawing not to scale

1st Floor





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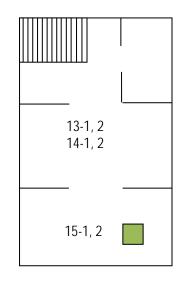
721 N. Capitol Avenue, Suite 2, Lansing, Michigan 48906 Tel: 517.316.9232 Fax: 517.316.9233 www.MannikSmithGroup.com

Address: 1106 West Allegan Street Date: December 11, 2018

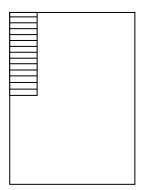
Drawing not to scale

2nd Floor

Basement



Attic



Vent Wrap (5 LF total)

Yellow 12x12 (50 SF total)

Plaster (2400 SF total)

TABLES

TABLE 1
Asbestos Sampling Results

		T								
Client Survey Loc		Ingham Count 1106 W Allega		ank Authority						
Survey D		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	Plaster	Non-Friable	Good	Miscellaneous	Yes	Yes	2400 SF
RM-6	2	AS 1-2	HA-1	Plaster	Non-Friable	Good	Miscellaneous	Yes	Yes	2400 SF
RM-8	2	AS 1-3	HA-1	Plaster	Non-Friable	Good	Miscellaneous	Yes	2% Chrysotile	2400 SF
RM-9	2	AS 1-4	HA-1	Plaster	Non-Friable	Good	Miscellaneous	Yes	NA	2400 SF
RM-10	2	AS 1-5	HA-1	Plaster	Non-Friable	Good	Miscellaneous	Yes	NA	2400 SF
RM-1	1	AS 2-1	HA-2	Drywall	Non-Friable	Good	Miscellaneous	No	No	1700 SF
RM-2	1	AS 2-2	HA-2	Drywall	Non-Friable	Good	Miscellaneous	No	No	1700 SF
RM-3	1	AS 2-3	HA-2	Drywall	Non-Friable	Good	Miscellaneous	No	No	1700 SF
RM-4	1	AS 2-4	HA-2	Drywall	Non-Friable	Good	Miscellaneous	No	No	1700 SF
RM-4	1	AS 2-5	HA-2	Drywall	Non-Friable	Good	Miscellaneous	No	No	1700 SF
RM-1	1	AS 3-1	HA-3	Fireplace brick mortar	Non-Friable	Good	Miscellaneous	No	No	50 SF
RM-1	1	AS 3-2	HA-3	Fireplace brick mortar	Non-Friable	Good	Miscellaneous	No	No	50 SF
RM-1	1	AS 4-1	HA-4	Textured Ceiling	Non-Friable	Good	Miscellaneous	No	No	800 SF
RM-2	1	AS 4-2	HA-4	Textured Ceiling	Non-Friable	Good	Miscellaneous	No	No	800 SF
RM-3	1	AS 4-3	HA-4	Textured Ceiling	Non-Friable	Good	Miscellaneous	No	No	800 SF
RM-1	1	AS 5-1	HA-5	Window caulk	Non-Friable	Good	Miscellaneous	No	No	200 LF
RM-1	1	AS 5-2	HA-5	Window caulk	Non-Friable	Good	Miscellaneous	No	No	200 LF

TABLE 1
Asbestos Sampling Results

Client		Ingham Count	ty Land Ra	ink Authority							
Survey Loc		1106 W Allegan St									
Survey D	ate	December 11,	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 6-1	HA-6	Window Glaze	Non-Friable	Good	Miscellaneous	No	No	350 SF	
RM-1	1	AS 6-2	HA-6	Window Glaze	Non-Friable	Good	Miscellaneous	No	No	350 SF	
RM-2	1	AS 7-1	HA-7	Black and white 12x12	Non-Friable	Good	Miscellaneous	No	No	200 SF	
RM-2	1	AS 7-2	HA-7	Black and white 12x12	Non-Friable	Good	Miscellaneous	No	No	200 SF	
RM-6	2	AS 8-1	HA-8	Tan 12x12	Non-Friable	Good	Miscellaneous	No	No	75 SF	
RM-6	2	AS 8-2	HA-8	Tan 12x12	Non-Friable	Good	Miscellaneous	No	No	75 SF	
RM-7	2	AS 9-1	HA-9	Blue 12x12	Non-Friable	Good	Miscellaneous	No	No	50 SF	
RM-7	2	AS 9-2	HA-9	Blue 12x12	Non-Friable	Good	Miscellaneous	No	No	50 SF	
RM-7	2	AS 10-1	HA-10	Yellow 12x12	Non-Friable	Good	Miscellaneous	Yes	20% Chrysotile	50 SF	
RM-7	2	AS 10-2	HA-10	Yellow 12x12	Non-Friable	Good	Miscellaneous	Yes	NA	50 SF	
RM-7	2	AS 11-1	HA-11	Wall mastic	Non-Friable	Good	Miscellaneous	No	No	50 SF	
RM-7	2	AS 11-2	HA-11	Wall mastic	Non-Friable	Good	Miscellaneous	No	No	50 SF	
RM-10	2	AS 12-1	HA-12	Brown Linoleum	Non-Friable	Good	Miscellaneous	No	No	50 SF	
RM-10	2	AS 12-2	HA-12	Brown Linoleum	Non-Friable	Good	Miscellaneous	No	No	50 SF	
Basement	В	AS 13-1	HA-13	Basement Concrete floor	Non-Friable	Good	Miscellaneous	No	No	700 SF	
Basement	В	AS 13-2	HA-13	Basement Concrete floor	Non-Friable	Good	Miscellaneous	No	No	700 SF	

TABLE 1
Asbestos Sampling Results

Client		Ingham Count	v Land Ra	ank Authority						
Survey Loca	ation	1106 W Allega	n St	THE AUTORY						
Survey Da Functional Area	Floor	December 11, Sample ID	HM #	Homogeneous Material Group	Friable/Non Friable	Condition	EPA Classification	RACM	Asbestos	Quantity
Basement	В	AS 14-1	HA-14	Stack cement	Non-Friable	Good	Miscellaneous	No	No	5 SF
Basement	В	AS 14-2	HA-14	Stack cement	Non-Friable	Good	Miscellaneous	No	No	5 SF
Basement	В	AS 15-1	HA-15	Vent wrap	Non-Friable	Good	Miscellaneous	Yes	65% Chrysotile	5 LF
Basement	В	AS 15-2	HA-15	Vent wrap	Non-Friable	Good	Miscellaneous	Yes	NA	5 LF
Basement	В	AS 15-3	HA-15	Vent wrap	Non-Friable	Good	Miscellaneous	Yes	NA	5 LF
Exterior	E	AS 16-1	HA-16	Siding underlayment	Non-Friable	Good	Miscellaneous	No	No	1800 SF
Exterior	E	AS 16-2	HA-16	Siding underlayment	Non-Friable	Good	Miscellaneous	No	No	1800 SF
Exterior	E	AS 17-1	HA-17	Exterior Caulk	Non-Friable	Good	Miscellaneous	No	No	200 LF
Exterior	Е	AS 17-2	HA-17	Exterior Caulk	Non-Friable	Good	Miscellaneous	No	No	200 LF
Roof	Е	AS 18-1	HA-18	Roof Shingle	Non-Friable	Good	Miscellaneous	No	No	1000 SF
Roof	Е	AS 18-2	HA-18	Roof Shingle	Non-Friable	Good	Miscellaneous	No	No	1000 SF

Table 2 Universal Waste, Hazardous Materials, and Other Regulated Materials Inventory 1106 Allegan St.

Lansing, Ingham County, Michigan

Universal Waste Inventory							
Location	Type of Waste	Approximate Quantity					
Basement	Smoke Detector	1					
RM-1	Thermostat	1					
Hazardous Materials Inventory							
Location	Type of Waste	Approximate Quantity					
Basement	5 Gallon Paint Bucket	1					
Oth	ner Regulated Materials Inventory						
Location	Type of Waste	Approximate Quantity					

ATTACHMENT A PHOTO LOG

Ingham County Land Bank 1106 W Allegan St, Lansing, MI Photographs taken by: Kory McKay on 12/11/2018

Property Photos



1106 W Allegan St, Front of House



Back of House



Side of House



Side of House

Ingham County Land Bank 1106 W Allegan St, Lansing, MI Photographs taken by: Kory McKay on 12/11/2018

Samples



Sample ID: AS 1-3 Location: RM-8 Notes: Plaster



Sample ID: AS 15-1 Location: Basement Notes: Vent Wrap



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



Location: RM-1 Notes: Fireplace Brick Mortar

Sample ID: AS 3-1



Sample ID: AS 10-1 Location: RM-7 Notes: Yellow 12x12 Tile



Sample ID: AS 4-1 Location: RM-1 Notes: Textured Ceiling

Ingham County Land Bank 1106 W Allegan St, Lansing, MI Photographs taken by: Kory McKay on 12/11/2018

Samples



Sample ID: AS 6-1 Location: RM-1 Notes: Window Glaze



Sample ID: AS 12-1 Location: RM-10 Notes: Brown Linoleum



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



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



Sample ID: AS 11-1 Location: RM-7 Notes: Wall Mastic



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

ATTACHMENT B LIMITATIONS



REGULATED MATERIALS SURVEY LIMITATIONS

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

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

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

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

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

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

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

ATTACHMENT C

ANALYTICAL REPORTS AND CHAINS OF CUSTODY



00014

Client	The Mannik & Smith Group 2193 Association Dr., Suite Okemos, MI, 48864		12/17/18 Order #	1106 W Allegan St O0014 I1440003
		BULK SAMPLE ANA	ALYSIS SUMMARY	
	Client ID AS 1-1 Layer 1 Plaster Non Detect 0.00% , homogenous, fibrous. 100% non-asbestos	Lab ID(O0014-1 l	ocation RM-1
	Client ID AS 1-2 Layer 1 Plaster Non Detect 0.00% , homogenous, fibrous. 100% non-asbestos	Lab ID(O0014-2 l	Location RM-6
-	Client ID AS 1-3 Layer 1 Plaster Chrysotile 2.00% , homogenous, fibrous. 98% non-asbestos int count performed.	Lab ID(O0014-3 L	ocation RM-8
Type Gray	Client ID AS 1-4 Layer 1 Plaster Not Analyzed - homogenous, fibrous.	Lab ID(00014-4 l	ocation RM-9
Type Gray	Client ID AS 1-5 Layer 1 Plaster Not Analyzed - , homogenous, fibrous.	Lab ID(O0014-5 l	Location RM-10
Analytic Analyst: Reviewe	Christophe	0/R-93/116 by Polarized Light Micro er A Claes Laboratory Director ucchesi Quality Manager	oscopy	Accreditations NIST-NVLAP No. 600212-0

00014

Client	The Mannik & Smith Group 2193 Association Dr., Suite Okemos, MI, 48864	200 Analyzed	12/13/18 12/17/18 1 12/17/18	Project 1106 W Allegan St Order # 00014 Project # 11440003
		BULK SAMPLE AI	NALYSIS SUMM	ARY
	Client ID AS 2-1 Layer 1 Drywall Non Detect 0.00% e, homogenous, fibrous. 2,00% non-asbestos	Lab ID Layer 2 Joint Compound Type Non Detect 0.00% White, homogenous, fibrous. 100% non-asbestos	O0014-6	Location RM-1
	Client ID AS 2-2 Layer 1 Drywall Non Detect 0.00% A, homogenous, fibrous. 2,00% non-asbestos	Lab ID Layer 2 Joint Compound Type Non Detect 0.00% White, homogenous, fibrous. 100% non-asbestos	O0014-7	Location RM-2
	Client ID AS 2-3 Layer 1 Drywall Non Detect 0.00% c, homogenous, fibrous. 200% non-asbestos	Lab ID Layer 2 Joint Compound Type Non Detect 0.00% White, homogenous, fibrous. 100% non-asbestos	O0014-8	Location RM-3
	Client ID AS 2-4 Layer 1 Drywall Non Detect 0.00% e, homogenous, fibrous. 00% non-asbestos	Lab ID Layer 2 Joint Compound Type Non Detect 0.00% White, homogenous, fibrous. 100% non-asbestos	O0014-9	Location RM-4
	Client ID AS 2-5 Layer 1 Drywall Non Detect 0.00% e, homogenous, fibrous. 00% non-asbestos	Lab ID Layer 2 Joint Compound Type Non Detect 0.00% White, homogenous, fibrous. 100% non-asbestos	O0014-10	Location RM-4
Analytica Analyst: Reviewe	Christophe	0/R-93/116 by Polarized Light Mi er A Claes Laboratory Director ucchesi Quality Manager	croscopy	Accreditations NIST-NVLAP No. 600212-0

00014

Client	The Mannik & Smith Group 2193 Association Dr., Suite Okemos, MI, 48864	200 Ar	nalyzed	12/13/18 12/17/18 12/17/18	Project Order # Project #	1106 W Allegan St 00014 I1440003
		BULK SAMP	PLE AN	ALYSIS SUMN	//ARY	
Type Pink,	Client ID AS 3-1 Layer 1 replace Brick Mortar Non Detect 0.00% homogenous, fibrous. 100% non-asbestos	L	∟ab ID	O0014-11	L	ocation RM-1
Type Pink,	Client ID AS 3-2 Layer 1 replace Brick Mortar Non Detect 0.00% homogenous, fibrous. 100% non-asbestos	L	₋ab ID	O0014-12	L	ocation RM-1
Type White	Client ID AS 4-1 Layer 1 Textured Ceiling Non Detect 0.00% e, homogenous, fibrous. 100% non-asbestos	Layer 2 Backing	0.00%	O0014-13	L	ocation RM-1
Type White	Client ID AS 4-2 Layer 1 Textured Ceiling Non Detect 0.00% c, homogenous, fibrous. 100% non-asbestos	Layer 2 Backing	0.00%	O0014-14	L	ocation RM-2
Type White	Client ID AS 4-3 Layer 1 Textured Ceiling Non Detect 0.00% c, homogenous, fibrous. 100% non-asbestos	Layer 2 Backing	0.00%	O0014-15	L	ocation RM-3
Analytica Analyst: Reviewe	Christophe	0/R-93/116 by Polarized Li er A Claes Laboratory Dire ucchesi Quality Manage	ctor	roscopy		Accreditations NIST-NVLAP No. 600212-0

00014

Client	The Mannik & Smith Group 2193 Association Dr., Suite Okemos, MI, 48864	200 Analyzed	12/13/18 12/17/18 12/17/18	Project Order # Project #	1106 W Allegan St 00014 I1440003
		BULK SAMPLE AN	IALYSIS SUMM	1ARY	
	Client ID AS 5-1 Layer 1 Window Caulk Non Detect 0.00% e, homogenous, fibrous. 100% non-asbestos	Lab ID	O0014-16	L	ocation RM-1
	Client ID AS 5-2 Layer 1 Window Caulk Non Detect 0.00% e, homogenous, fibrous. 100% non-asbestos	Lab ID	O0014-17	L	ocation RM-1
	Client ID AS 6-1 Layer 1 Window Glaze Non Detect 0.00% n, homogenous, fibrous. 100% non-asbestos	Lab ID	O0014-18	L	ocation RM-1
	Client ID AS 6-2 Layer 1 Window Glaze Non Detect 0.00% n, homogenous, fibrous. 100% non-asbestos	Lab ID	O0014-19	L	ocation RM-1
Type Black	Client ID AS 7-1 Layer 1 ack and White 12x12 Non Detect 0.00% s, homogenous, fibrous. 100% non-asbestos	Lab ID Layer 2 Adhesive Type Non Detect 0.00% Yellow, homogenous, fibrous. 100% non-asbestos	O0014-20	L	ocation RM-2
Analytic Analyst: Reviewe	Christoph	10/R-93/116 by Polarized Light Mic er A Claes Laboratory Director Lucchesi Quality Manager	croscopy		Accreditations NIST-NVLAP No. 600212-0

00014

Client	The Mannik & Smith 2193 Association Dr. Okemos, MI, 48864		Received Analyzed Reported	12/17/18	Project Order # Project #	1106 W Allegan St 00014 I1440003
		BULK SAM	1PLE AN	ALYSIS SUMMAF	RY	
Type Black,	Client ID AS Layer 1 ck and White 12x12 Non Detect 0.0 homogenous, fibro 00% non-asbestos	Layer 2 Adhesive Type Non Detect	0.00% fibrous.	O0014-21	l	ocation RM-2
	Client ID AS Layer 1 Tan 12x12 Non Detect 0.0 nomogenous, fibrou 00% non-asbestos	00%	Lab ID	O0014-22	l	ocation RM-6
	Client ID AS Layer 1 Tan 12x12 Non Detect 0.0 nomogenous, fibrou	00%	Lab ID	O0014-23	L	ocation RM-6
Type Blue, l	Client ID AS Layer 1 Blue 12x12 Non Detect 0.0 homogenous, fibroto 100% non-asbestos	00%	Lab ID	O0014-24	L	ocation RM-7
	Client ID AS Layer 1 Blue 12x12 Non Detect 0.0 homogenous, fibrot 00% non-asbestos	00%	Lab ID	O0014-25	L	ocation RM-7
Analytica Analyst: Reviewer	Chri	PA 600/R-93/116 by Polarized stopher A Claes Laboratory Di ua P Lucchesi Quality Mana	rector	roscopy		Accreditations NIST-NVLAP No. 600212-0

00014

Client	The Mannik & Smith C 2193 Association Dr., Okemos, MI, 48864		Received Analyzed Reported	12/17/18	Project Order # Project #	1106 W Allegan St 00014 I1440003
		BULK SAN	∕IPLE AN	IALYSIS SUMMA	ARY	
	Client ID AS 1 Layer 1 Yellow 12x12 Non Detect 0.00 homogenous, fibroud 100% non-asbestos	Layer 2 Floor Tile Type Chrysotile	20.00% fibrous.	O0014-26	L	ocation RM-7
	Client ID AS 1 Layer 1 Yellow 12x12 Non Detect 0.00 homogenous, fibrou	Layer 2 Floor Tile Type Not Analyzed	-	O0014-27	L	ocation RM-7
	Client ID AS 1 Layer 1 Wall Mastic Non Detect 0.00 nomogenous, fibrous 00% non-asbestos)%	Lab ID	O0014-28	L	ocation RM-7
	Client ID AS 1 Layer 1 Wall Mastic Non Detect 0.00 nomogenous, fibrous 00% non-asbestos	0%	Lab ID	O0014-29	L	ocation RM-7
Type Brown,	Client ID AS 1 Layer 1 Brown Linoleum Non Detect 0.00 homogenous, fibrou)%	Lab ID	O0014-30	L	ocation RM-10
Analytical		A 600/R-93/116 by Polarized opher A Claes Laboratory D	_	roscopy		Accreditations NIST-NVLAP

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.

Quality Manager

Reviewer:

Joshua P Lucchesi

No. 600212-0

00014

Client The Mannik & Smith Group, In 2193 Association Dr., Suite 20 Okemos, MI, 48864		12/17/18 Order #	1106 W Allegan St 00014 I1440003
	BULK SAMPLE AN	ALYSIS SUMMARY	
Client ID AS 12-2 Layer 1 Brown Linoleum Type Non Detect 0.00% Brown, homogenous, fibrous. 100% non-asbestos	Lab ID	O0014-31 I	Location RM-10
Client ID AS 13-1 Layer 1 Basement Concrete Floor Type Non Detect 0.00% Gray, homogenous, nonfibrous. 100% non-asbestos	Lab ID	O0014-32	Location Basement
Client ID AS 13-2 Layer 1 Basement Concrete Floor Type Non Detect 0.00% Gray, homogenous, nonfibrous. 100% non-asbestos	Lab ID	O0014-33	Location Basement
Client ID AS 14-1 Layer 1 Stack Cement Type Non Detect 0.00% Gray, homogenous, fibrous. 100% non-asbestos	Lab ID	O0014-34	Location Basement
Client ID AS 14-2 Layer 1 Stack Cement Type Non Detect 0.00% Gray, homogenous, fibrous. 100% non-asbestos	Lab ID	O0014-35	Location Basement
	R-93/116 by Polarized Light Mic A Claes Laboratory Director chesi Quality Manager	roscopy	Accreditations NIST-NVLAP No. 600212-0

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Client	The Mannik & Smith Group, Inc 2193 Association Dr., Suite 200 Okemos, MI, 48864		12/17/18	Project Order # Project #	1106 W Allegan St O0014 I1440003	
		BULK SAMPLE AN	ALYSIS SUMI	MARY		
	Client ID AS 15-1 Layer 1 Vent Wrap Chrysotile 65.00% homogenous, fibrous. 35% non-asbestos	Lab ID	O0014-36	Ĺ	ocation Basement	
Type Gray,	Client ID AS 15-2 Layer 1 Vent Wrap Not Analyzed - homogenous, fibrous.	Lab ID	O0014-37		Location Basement	
Type Gray,	Client ID AS 15-3 Layer 1 Vent Wrap Not Analyzed - homogenous, fibrous.	Lab ID	O0014-38	I	Location Basement	
Type Tan, I	Client ID AS 16-1 Layer 1 ding Underlayment Non Detect 0.00% homogenous, fibrous. 00% non-asbestos	Lab ID	O0014-39		Location Exterior	
Type Tan, I	Client ID AS 16-2 Layer 1 ding Underlayment Non Detect 0.00% homogenous, fibrous. 00% non-asbestos	Lab ID	O0014-40		Location Exterior	
Analytica Analyst: Reviewer	Christopher A	-93/116 by Polarized Light Mic Claes Laboratory Director hesi Quality Manager	roscopy		Accreditations NIST-NVLAP No. 600212-0	

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Client	The Mannik & Smith Group, In 2193 Association Dr., Suite 200 Okemos, MI, 48864		12/17/18 Order #	· ·
		BULK SAMPLE AN	ALYSIS SUMMARY	
	Client ID AS 17-1 Layer 1 Exterior Caulk Non Detect 0.00% 1, homogenous, fibrous. 00% non-asbestos	Lab ID	O0014-41	Location Exterior
	Client ID AS 17-2 Layer 1 Exterior Caulk Non Detect 0.00% 1, homogenous, fibrous. 00% non-asbestos	Lab ID	O0014-42	Location Exterior
	Client ID AS 18-1 Layer 1 Roof Shingle Non Detect 0.00% , homogenous, fibrous. 00% non-asbestos	Lab ID	O0014-43	Location Roof
	Client ID AS 18-2 Layer 1 Roof Shingle Non Detect 0.00% , homogenous, fibrous. 00% non-asbestos	Lab ID	O0014-44	Location Roof

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

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Order Number:	Chain of Custody
O6014	Custody

Client	The Mannik & Smith Group, Inc.	up, inc.		٦,	anon dra		Dulk Salliples Ollly
Project	2193 Association Drive, Suite 200 1106 W Allegan St	iuite 200 Project#	ct# 11440003	Email cbush@manniksmithgroup.com	group.com Fax	(517) 316-9232	Date Sampled:
Turn Around		24 Hour	48 Hour	✓ 72 Hour ☐ 1 Week	eek Report to	⊃ Email ☐ Fax	12/11/2018
Lab ID	Customer ID		Material Type	Type	Materi	Material Location	Notes
	AS 1-1		Plaster		7	RM-1	
	AS 1-2		Plaster	- T	7	RM-6	
	AS 1-3		Plaster		H	RM-8	
	AS 1-4		Plaster		H	RM-9	
	AS 1-5		Plaster	in .	R	RM-10	
	AS 2-1		Drywall		H	RM-1	
	AS 2-2		Drywall		R	RM-2	
	AS 2-3		Drywall		A	RM-3	
	AS 2-4		Drywall		A	RM-4	
	AS 2-5		Drywall		A	RM-4	
	AS 3-1		Fireplace brick mortar	k mortar	R	RM-1	
	AS 3-2		Fireplace brick mortar	k mortar	R	RM-1	
	AS 4-1	U	Textured Ceiling	eiling	R	RM-1	
	AS 4-2		Textured Ceiling	eiling	R	RM-2	
	AS 4-3		Textured Ceiling	eiling	R	RM-3	
	AS 5-1		Window caulk	aulk	R	RM-1	
	AS 5-2		Window caulk	aulk	R	RM-1	
	AS 6-1		Window Glaze	ilaze	R	RM-1	
	AS 6-2		Window Glaze	ilaze	R	RM-1	
	AS 7-1		Black and white 12x12	te 12x12	R	RM-2	

Relinquished by

Date and Time_

Date and Time

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Received by

Order Number:	Chain of Custody
	ody

Client	The Mannik & Smith Group, Inc.	p, Inc. City, State Lansing, MI	Zip Code	*Bulk Samples Only*
Address	2193 Association Drive, Suite 200	Contact	Phone (517) 316-9232	✓ TTP
Project	1106 W Allegan St	Project# 11440003 Email cbush@manniksmithgroup.com	Fax	Date Sampled:
Turn Around	99	☐ 24 Hour ☐ 48 Hour ☐ 72 Hour ☐ 1 Week	Report to 🗸 Email 🔲 Fax	12/11/2018
Lab ID	Customer ID	Material Type	Material Location	Notes
	AS 7-2	Black and white 12x12	RM-2	
	AS 8-1	Tan 12x12	RM-6	
	AS 8-2	Tan 12x12	RM-6	
	AS 9-1	Blue 12x12	RM-7	
	AS 9-2	Blue 12x12	RM-7	
	AS 10-1	Yellow 12x12	RM-7	
	AS 10-2	Yellow 12x12	RM-7	
	AS 11-1	Wall mastic	RM-7	
	AS 11-2	Wall mastic	RM-7	
	AS 12-1	Brown Linoleum	RM-10	
	AS 12-2	Brown Linoleum	RM-10	
	AS 13-1	Basement Concrete floor	Basement	
	AS 13-2	Basement Concrete floor	Basement	
	AS 14-1	Stack cement	Basement	
	AS 14-2	Stack cement	Basement	
	AS 15-1	Vent wrap	Basement	
	AS 15-2	Vent wrap	Basement	
	AS 15-3	Vent wrap	Basement	
	AS 16-1	Siding underlayment	Exterior	
	AS 16-2	Siding underlayment	Exterior	

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Date and Time

Date and Time

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	of
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	Analytic	Analytical Laboratories	Order Number:		
lient	The Mannik & Smith Group, Inc.	, Inc.	City, State Lansing, MI	Zip Code	*Bulk Samples Only*
ddress	2193 Association Drive, Suite 200	te 200		Phone (517) 316-9232	✓ TTP ☐ Point Count
roject	1106 W Allegan St	Project# 11440003	Email cbush@manniksmithgroup.com	com Fax	Date Sampled:
urn Around		24 Hour 48 Hour	✓ 72 Hour	Report to 🗸 Email 🔲 Fax	12/11/2018
Lab ID	Customer ID	Material Type	Туре	Material Location	Notes
	AS 17-1	Exterior Caulk	Caulk	Exterior	
	AS 17-2	Exterior Caulk	Caulk	Exterior	
	AS 18-1	Roof Shingle	ngle	Roof	
	AS 18-2	Roof Shingle	ngle	Roof	
				c .	
omments:					
)			

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Date and Time

Date and Time

Received by

ATTACHMENT D

NOTIFICATION OF INTENT TO RENOVATE/DEMOLISH



NOTIFICATION OF INTENT TO RENOVATE/DEMOLISH



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

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

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

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

(example: asbestos has fallen off of surface).

NOTIFICATION OF INTENT TO RENOVATE/DEMOLISH (continued)

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

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