

## DEMOLITION INSPECTION FOR THE PRESENCE OF ASBESTOS-CONTAINING MATERIALS



**3035 US Route 2  
East Montpelier, Vermont**

Report Prepared for:

**Mr. Bruce Johnson, Town Manager  
Town of East Montpelier  
40 Kelton Road  
East Montpelier, Vermont**

Inspection Date:

May 31, 2018

## TABLE OF CONTENTS

1.0	Summary .....	3
1.1	Asbestos-Containing Materials .....	3
2.0	Disclaimers .....	3
3.0	Asbestos-Containing Materials .....	3
3.1	Scope of Work .....	3
3.2	Bulk Sample Inventory and Analytical Results.....	4
3.3	Inventory of Confirmed Asbestos-Containing Materials.....	7
4.0	Demolition Requirements .....	7
4.1	Friable Asbestos-Containing Materials .....	7
4.2	Non-Friable Asbestos-Containing Materials .....	8
4.3	Demolition Notification .....	9
5.0	Hazard Communication Requirements .....	9
6.0	Qualifications/Signatures .....	10

## 1.0 Summary

Crothers Environmental Group, Inc. (CEG) is pleased to provide the Town of East Montpelier with this asbestos inspection report from the inspection conducted at 3035 US Route 2 in East Montpelier, Vermont. We conducted sampling of various areas and building materials throughout the interior and exterior of the building that would be disturbed by demolition activities. Since this was a demolition inspection, destructive sampling was conducted of walls, ceilings and floors to access materials that were behind the surface materials.

The inspection was conducted on May 31, 2018 by Brian Lima, also a Vermont-licensed Asbestos Site Inspector/Management Planner.

### 1.1 Asbestos-Containing Materials

The asbestos inspection was conducted to comply with demolition requirements set forth by the Vermont Regulations for Asbestos Control (V.S.A Title 18, Chapter 26), the U.S. Environmental Protection Agency Asbestos NESHAP Regulation (40 CFR Part 61 Subpart M) and the Occupational Safety & Health Administration (29 CFR 1926.1101 Construction Standard for Asbestos). An asbestos-containing material (ACM) is defined as any material containing greater than 1% asbestos.

**The following materials were determined by laboratory analysis to be asbestos-containing:**

- *Linoleum backing remnant*
- *Chimney flue cement*

## 2.0 Disclaimers

- 1) Some suspect asbestos-containing materials may be present in locations such as behind walls, in chases, above rigid ceilings, inside crawl spaces, etc. that were not observed or accessible to the Inspector. In the event suspect materials not identified in this report are discovered during demolition activities, the discovered material must be presumed as asbestos-containing and treated accordingly.
- 2) This inspection did not include any materials that may be underground, such as, but not limited to, cement water lines, sewage pipes, buried trash and debris, etc.

## 3.0 Asbestos-Containing Materials

### 3.1 Scope of Work

CEG was retained to collect bulk samples of materials that are anticipated to be disturbed by upcoming demolition activities. If additional materials are discovered during the demolition that are not included in this report, CEG should be contacted immediately to sample and analyze the material to determine the asbestos content.

### 3.2 Bulk Sample Inventory and Analytical Results

Fifty-six (56) bulk samples were collected (including layers) and delivered to Crothers Environmental Group, Inc. Laboratory Division. Proper chain-of-custody procedures were followed during transport of samples. Crothers is a Vermont-licensed asbestos laboratory. All samples, unless noted, were analyzed by Polarized Light Microscopy “PLM” in accordance with EPA test method 40 CFR Part 763, Subpart F. The analyst visually estimates the percentages of identified asbestos. In the event that a sample appears to contain 2% asbestos or less, the analysis is repeated utilizing the point count method (a more statistically reliable method at lower concentrations).

**The following tables provide asbestos bulk sampling information:**

Sample Number	Homogeneous Material	Sample Location	Analytical Result
444215-1	Tan exterior siding paper	West portion - northeast corner - east side of section	No Asbestos Detected (NAD)
444215-2	Tan exterior siding paper	West portion - northeast corner - west side of section	NAD
444215-3A	Plaster (historic remnants, wall) - base coat	West portion - bathroom - north wall - left side	NAD
444215-3B	Plaster (historic remnants, wall) - skim coat	West portion - bathroom - north wall - left side	NAD
444215-4A	Plaster (historic remnants, wall) - base coat	West portion - bathroom - north wall - center	NAD
444215-4B	Plaster (historic remnants, wall) - skim coat	West portion - bathroom - north wall - center	NAD
444215-5A	Plaster (historic remnants, wall) - base coat	West portion - bathroom - north wall - right side	NAD
444215-5B	Plaster (historic remnants, wall) - skim coat	West portion - bathroom - north wall - right side	NAD
444215-6	Gypsum wall board (no joint compound)	West portion - northeast corner	NAD
444215-7	Gypsum wall board (no joint compound)	West portion - south bathroom wall - center	NAD
444215-8	Black exterior siding paper	West portion - left side - front door	NAD
444215-9	Black exterior siding paper	West portion - southeast corner	NAD
444215-10	Chimney flue cement	East portion chimney - west face - left side	<b>5% Chrysotile Asbestos</b>
444215-11	Chimney flue cement	East portion chimney - west face - right side	<b>5% Chrysotile Asbestos</b>

Sample Number	Homogeneous Material	Sample Location	Analytical Result
444215-12A	12" x 12" tan vinyl floor tile	East portion - far east side - southwest corner of section	NAD
444215-12B	Black mastic	East portion - far east side - southwest corner of section	NAD
444215-13A	12" x 12" tan vinyl floor tile	East portion - far east side - northeast corner of section	NAD
444215-13B	Black mastic	East portion - far east side - northeast corner of section	NAD
444215-14	Light pink flooring remnant	East portion - north side - east central - northeast corner of section	NAD
444215-15	Light pink flooring remnant	East portion - north side - east central - southeast corner of section	NAD
444215-16	Black flooring paper remnant	East portion - south side - east central - northeast corner of section	NAD
444215-17	Black flooring paper remnant	East portion - south side - east central - southwest corner of section	NAD
444215-18	Linoleum backing remnant	East portion - north side - east central - northwest corner of section	<b>35% Chrysotile Asbestos</b>
444215-19	Linoleum backing remnant	East portion - north side - east central - southwest corner of section	<b>30% Chrysotile Asbestos</b>
444215-20A	Tile pattern Homasote-like flooring	East portion - north side - center - northwest corner of section	NAD
444215-20B	Backing	East portion - north side - center - northwest corner of section	NAD
444215-21A	Tile pattern Homasote-like flooring	East portion - north side - center - south central corner of section	NAD
444215-21B	Backing	East portion - north side - center - south central corner of section	NAD
444215-22A	12" x 12" tan vinyl floor tile	East portion - north side - west central - southeast corner of section	NAD
444215-22B	Black mastic	East portion - north side - west central - southeast corner of section	NAD
444215-23A	12" x 12" tan vinyl floor tile	East portion - north side - west central - southwest corner of section	NAD
444215-23B	Black mastic	East portion - north side - west central - southwest corner of section	NAD
444215-24	Asphalt shingle (top)	West portion - west face - south side	NAD
444215-25	Asphalt shingle (bottom)	West portion - west face - south side	NAD

Sample Number	Homogeneous Material	Sample Location	Analytical Result
444215-26	Asphalt shingle (top)	West portion - west face - north side	NAD
444215-27	Asphalt shingle (bottom)	West portion - west face - north side	NAD
444215-28A	Trowel applied plaster (layer 1)	West portion - chimney - south face	NAD
444215-28B	Trowel applied plaster (layer 2)	West portion - chimney - south face	NAD
444215-29A	Trowel applied plaster (layer 1)	West portion - chimney - east face	NAD
444215-29B	Trowel applied plaster (layer 2)	West portion - chimney - east face	NAD
444215-30A	Trowel applied plaster (layer 1)	West portion - chimney - north face	NAD
444215-30B	Trowel applied plaster (layer 2)	West portion - chimney - north face	NAD
444215-31	Asphalt shingle (top)	East portion - north face - center	NAD
444215-32	Asphalt shingle (middle)	East portion - north face - center	NAD
444215-33	Asphalt shingle (bottom)	East portion - north face - center	NAD
444215-34	Asphalt shingle (top)	East portion - south face - center	NAD
444215-35	Asphalt shingle (middle)	East portion - south face - center	NAD
444215-36	Asphalt shingle (bottom)	East portion - south face - center	NAD
444215-37	Brick mortar	East portion - chimney - north face	NAD
444215-38	Brick mortar	East portion - chimney - south face	NAD
444215-39	Brick mortar	West portion - chimney - north face	NAD
444215-40	Brick mortar	West portion - chimney - south face	NAD
444215-41	Exterior window glazing	East portion - front picture window - bottom - left side	NAD
444215-42	Exterior window glazing	East portion - front picture window - bottom - right side	NAD

Sample Number	Homogeneous Material	Sample Location	Analytical Result
444215-43	White window glazing	East portion - western-most window - left side	NAD
444215-44	White window glazing	East portion - western-most window - right side	NAD

### 3.3 Inventory of Confirmed Asbestos-Containing Materials

Homogeneous Area/Material	Material Location	Approximate Quantity
Linoleum backing remnant	East portion	200 sq. ft. +/- remnants
Chimney flue cement	East portion chimney	2 sq. ft.

## 4.0 Demolition Requirements

### 4.1 Friable Asbestos-Containing Materials

Friable ACM or PACM is an asbestos-containing material that when dry can be crumbled, pulverized, or reduced to powder by hand pressure, or a non-friable material that has been made friable by actions such as, but not limited to: sanding, grinding, sawing, abrading, etc. The following materials were identified in the facility as friable ACM:

⇒ **Linoleum backing remnant**

**\*Linoleum is technically a non-friable material, however, the paper backing adhered to the linoleum is a friable material and must be removed as a friable material.**

The following regulatory agencies have regulations in effect when removing/disturbing friable ACM:

#### Vermont Department of Health

The Vermont Regulations for Asbestos Control (**VRAC**) - V.S.A. Title 18, Chapter 26, requires that all friable ACM that will be disturbed by renovation or demolition activities be properly removed prior to disturbance. VRAC requires the use of a Vermont Certified Asbestos Abatement Entity to remove these materials. The work must be performed in accordance with VRAC Section 2.4.2 .

### Occupational Safety and Health Administration

(V)OSHA Title 29 Code of Federal Regulations (“CFR”) 1926.1101 *Asbestos Standard for the Construction Industry* classifies these materials as Class 1. With the exception of respiratory protection, VRAC has more stringent requirements when removing friable ACM.

### U.S. Environmental Protection Agency

USEPA - Title 40 CFR Part 61 *National Emission Standards for Hazardous Air Pollutants; Asbestos NESHAP Revision; Final Rule* regulates the removal of friable ACM whenever 1) a “facility” will be demolished or 2) a “facility” being renovated will disturb quantities of regulated asbestos-containing materials (RACM) in excess of 160 square feet or 260 linear feet. VRAC has more stringent requirements when removing friable ACM. **The USEPA requires written notification of planned demolition ten (10) working days from the date of receipt prior to commencing demolition activities, regardless of whether asbestos is present or not.**

#### 4.2 Non-Friable Asbestos-Containing Materials

Non-friable ACM or PACM is an asbestos-containing material that when dry cannot be crumbled, pulverized, or reduced to powder by hand pressure. The following materials were identified as non-friable ACM:

⇒ **Chimney flue cement**

VRAC requires that all non-friable asbestos-containing materials that will be disturbed by renovation or demolition activities be properly removed prior to disturbance. VRAC Section 6 only requires minimal abatement procedures when removing non-friable materials. Vermont certified abatement personnel are not required. In short, the removal procedures include but do not limit:

- ◆ adequately wetting the material;
- ◆ removing the material in as large of sections as feasible; and
- ◆ properly packaging, labeling and disposing of the material.

**The material cannot be sanded, sawn, chipped, ground, abraded or drilled.**

VOSHA classifies these materials as Class II. This regulation is more stringent than VRAC, requiring the supervision by a competent person, specifically trained in a training course that meets the EPA’s Model Accreditation Plan (Title 40 CFR 763, *Asbestos-Containing Materials in Schools; Final Rule and Notice*) or a supervisor or project designer or its equivalent. Employees must also be trained, medically monitored and etc. Unless a negative exposure assessment has been carried out, full procedures are required under this regulation.

EPA NESHAP requirements do not apply unless the non-friable ACM is subjected to sanding, sawing, chipping, grinding, abrading or drilling or other dust generating removal operation.



### 4.3 Demolition Notification

The USEPA and the State of Vermont Department of Health require a Demolition Notification at least 10 business days prior to scheduled demolition.

## 5.0 Hazard Communication Requirements

This section applies to the communication of information concerning asbestos hazards in construction & general industry to facilitate compliance with VOSHA 1926.1101 (construction) and 1910.1001 (general industry). Building owners are often the only and/or best sources of information concerning the presence of previously installed ACM. Therefore they, along with employers of potentially exposed employees, are assigned specific duties for hazard communication. ***Building and/or facility owners*** shall notify the following persons of the presence, location and quantity of ACM or PACM, at the work sites in their buildings and facilities. Notification shall be either in writing, or shall consist of a personal communication between the owner and the person to whom notification must be given or their authorized representatives:

- Prospective employers applying or bidding for work whose employees reasonably can be expected to work in or adjacent to areas containing such material;
- Employees of the owner who will work in or adjacent to areas containing such material;
- On multi-employer worksites, all employers of employees who will be performing work within or adjacent to areas containing such material; and
- Tenants who will occupy areas containing such material.

## 6.0 Qualifications/Signatures

Crothers Environmental Group, Inc. Project #: CEG444215

Vermont Licensed Asbestos Consulting Entity:  
Entity Certificate #: Crothers Environmental Group, Inc.  
CE475400



Vermont Licensed Asbestos Inspector:  
Asbestos Inspector Certificate #: Brian Lima  
MP488882

Vermont Licensed Asbestos Laboratory:  
Vermont Laboratory License #: Crothers Environmental Group, Inc.  
AL475400

Inspection Date: May 31, 2018

Laboratory Analysis Date: June 7, 2018

Report Date: June 7, 2018