LIMITED ASBESTOS INSPECTION
MUNICIPAL BUILDING WINDOWS
104 NOTCH ROAD
TOWN OF BOLTON
BOLTON, CONNECTICUT

Prepared for:

TOWN OF BOLTON

Prepared by:

ATC ASSOCIATES, INC.
290 ROBERTS STREET - SUITE 301
EAST HARTFORD, CT 06108

ATC PROJECT NUMBER 61.11585.0007 TASK 1

JUNE 24, 2011

Table of Contents

1.0 INTRODUCTION

ATC Associates, Inc. (ATC) of East Hartford, Connecticut was retained by the Town of Bolton to conduct a limited asbestos inspection of the windows of the Municipal Building located at 104 Notch Road in Bolton, Connecticut. The scope of the asbestos inspection included surveying, sampling, and testing of suspect building materials potentially impacted by planned window replacement.

The asbestos inspection was conducted by Mr. Scott Johnson of ATC on June 16, 2011. Mr. Johnson is a State of Connecticut Department of Public Health (CTDPH) licensed asbestos inspector (CTDPH license numbers 00576). The survey was performed as a walk-through visual inspection, combined with the collection and analysis of bulk samples.

2.0 ASBESTOS-CONTAINING MATERIALS SURVEY

Interior building components which were considered suspect ACM include interior window glaze. Exterior building components which were considered suspect ACM include exterior window caulk and exterior window glaze.

2.1 ASBESTOS BULK SAMPLE COLLECTION/ANALYSIS PROCEDURE

Building materials considered suspect ACM were inspected and assessed using the methods presented in the United States Environmental Protection Agency AHERA regulations (40 CFR Part 763) and NESHAP regulations (40 CFR Part 61).

ATC collected bulk samples of building materials utilizing a sampling strategy that correlated with 40 CFR 763.86 as follows:

(a) *Surfacing materials.* An accredited inspector shall collect, in a statistically random manner that is representative of the homogeneous area, bulk samples from each homogeneous area of friable surfacing material that is not assumed to be ACM, and shall collect the samples as follows:

- (1) At least three bulk samples shall be collected from each homogeneous area that is 1,000 ft^2 or less, except as provided in 40 CFR Part 763.87(c)(2).
- (2) At least five bulk samples shall be collected from each homogeneous area that is greater than 1,000 ft^2 but less than or equal to 5,000 ft^2, except as provided in 40 CFR Part 763.87(c)(2).
- (3) At least seven bulk samples shall be collected from each homogeneous area that is greater than 5,000 ft^2, except as provided in 40 CFR Part 763.87(c)(2).

(b) *Thermal system insulation.*

- (1) Except as provided in paragraphs (b)(2) through (4) of this section and 40 CFR Part 763.87(c), an accredited inspector shall collect, in a randomly distributed manner, at least three bulk samples from each homogeneous area of thermal system insulation that is not assumed to be ACM.
- (2) Collect at least one bulk sample from each homogeneous area of patched thermal system insulation that is not assumed to be ACM if the patched section is less than 6 linear or square feet.
- (3) In a manner sufficient to determine whether the material is ACM or not ACM, collect bulk samples from each insulated mechanical system that is not assumed to be ACM

where cement or plaster is used on fittings such as tees, elbows, or valves, except as provided under 40 CFR Part 763.87(c)(2).

(4) Bulk samples are not required to be collected from any homogeneous area where the accredited inspector has determined that the thermal system insulation is fiberglass, foam glass, rubber, or other non-ACM.

(c) *Miscellaneous materials.* In a manner sufficient to determine whether material is ACM or not ACM, an accredited inspector shall collect bulk samples from each homogeneous area of friable or non-friable miscellaneous material that is not assumed to be ACM.

The bulk samples collected during the survey were analyzed by EMSL Analytical, Inc. (NVLAP #101048-9) located in New York, NY. The bulk samples were analyzed by Polarized Light Microscopy (PLM) with dispersion staining using the EPA method as defined in Perkins, R.L. and B.W. Harvey "Method for the Determination of Asbestos in Bulk Materials," July 1993, p.61 (EPA 600/R-93/116 Method). Utilizing PLM, the microscopist is able to identify and distinguish between asbestos group minerals and other fibrous materials such as cellulose, mineral wool, fiberglass, or synthetic fibers. The quantities of each of these substances is estimated based on the procedures defined in the above-cited reference and are reported as a percentage.

3.0 ASBESTOS-CONTAINING MATERIALS

The results of PLM laboratory analysis indicated that some of the materials tested are asbestos-containing materials (ACM). Specifically, the following materials were determined to be ACM:

- Exterior Window Caulk – Gray

The remaining materials which were sampled and tested were found to contain no detectable amounts of asbestos. Specifically, the following materials were determined to be non-ACM:

- Interior Window Glaze
- Exterior Window Glaze

Refer to Section 6.0, Bulk Sample Summary of Suspect Materials, for all suspect materials that were identified and sampled.

4.0 DISCUSSION AND RECOMMENDATIONS

EPA regulations require the removal of Regulated Asbestos-Containing Materials (RACM) prior to renovation or demolition activities. RACM is defined as (a) Friable ACM, (b) Category I non-friable ACM that has become friable, (c) Category I non-friable ACM that will be or has been subjected to sanding, grinding, cutting, or abrading, or (d) Category II non-friable ACM 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 activities. The CTDPH defines "asbestos abatement" as removal, encapsulation, enclosure, renovation, repair, demolition, or other disturbance of ACM but does not include activities which are related to (A) the removal or repair of asbestos cement pipe and are performed by employees of a water company as defined in section 25-32a, or (B) the removal of non-friable ACM found exterior to a building or structure other than material defined as RACM in 40 CFR 61, the National Emission Standards for Hazardous Air Pollutants (NESHAP). Based upon these definitions,

ACM identified in the building requires removal prior to renovation, demolition, or disturbance. The State of Connecticut Department of Environmental Protection (CTDEP) regulations require the proper disposal of all ACM, regardless of categorization.

5.0 LIMITATIONS

Materials tested were identified to ATC by others and the scope of this inspection was limited to those materials. As with all such assessments, the results of the sampling represent conditions found on the date of the survey and may not represent conditions found at other times. Additionally, this assessment was limited with respect to the specific parameters indicated above and should not be construed to be a comprehensive evaluation or a definitive representation of conditions within the facility. The information presented in this report is intended to be used as a guide to evaluate the need for further investigation or the need for modifications to the processes or procedures surveyed.

6.0 BULK SAMPLE SUMMARY OF SUSPECT MATERIALS

TABLE 6-1
BULK SAMPLE SUMMARY OF SUSPECT MATERIALS
TOWN OF BOLTON
104 NOTCH ROAD
MUNICIPAL BUILDING WINDOWS

Sample Number	Location	Material	Asbestos (% Type)
061611-M-1A	Room 10	Interior Window Glaze	NAD
061611-M-1B	Basement	Interior Window Glaze	NAD
061611-M-2A	Exterior	Exterior Window Glaze	NAD
061611-M-2B	Exterior	Exterior Window Glaze	NAD
061611-M-3A	**Exterior**	**Exterior Window Caulk – Gray**	**3% CH**
061611-M-3B	**Exterior**	**Exterior Window Caulk – Gray**	**NA/PS**
061611-M-4A	**Exterior**	**Exterior Window Caulk – Tan**	**4% CH**

NAD = Non Asbestos Detected
NA/PS = Not Analyzed/ Positive Stop
CH = Chrysotile

7.0 BULK SAMPLE RESULTS/CHAIN - OF - CUSTODY FORMS

EMSL Analytical, Inc.
307 West 38th Street, New York, NY 10018
Phone: (212) 290-0051 Fax: (212) 290-0058 Email: manhattanlab@emsl.com

Attn: **ATC Associates, Inc**
290 Roberts Street
Suite 301
East Hartford, CT 06108

Fax: (860) 282-9826 Phone: (860) 282-9924
Project: **MUNICIPAL BUILDING/ 104 NOTCH ROAD/ BOLTON, CT**

Customer ID: ATCE54
Customer PO:
Received: 06/20/11 8:57 AM
EMSL Order: 031118609

EMSL Proj:
Analysis Date: 6/21/2011

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
061611-M-1A *031118609-0001*	RM 10/ INTERIOR WINDOW GLAZE	Gray Non-Fibrous Homogeneous		0% Non-fibrous (other) 40% Ca Carbonate 60% Matrix	**None Detected**
			Recommended to go TEM.		
061611-M-1B *031118609-0002*	BASEMENT/ INTERIOR WINDOW GLAZE	Various Non-Fibrous Heterogeneous		60% Non-fibrous (other) 40% Ca Carbonate	**None Detected**
061611-M-2A *031118609-0003*	EXTERIOR/ EXTERIOR WINDOW GLAZE	Gray Non-Fibrous Homogeneous		20% Non-fibrous (other) 40% Ca Carbonate 40% Matrix	**None Detected**
			Recommended to go TEM.		
061611-M-2B *031118609-0004*	EXTERIOR/ EXTERIOR WINDOW GLAZE	Tan/White Non-Fibrous Heterogeneous	2% Fibrous (other)	48% Non-fibrous (other) 50% Ca Carbonate	**None Detected**
			Recommend TEM		
061611-M-3A *031118609-0005*	EXTERIOR/ EXTERIOR WINDOW CAULK - GRAY	Gray Non-Fibrous Homogeneous		12% Non-fibrous (other) 45% Matrix 40% Ca Carbonate	**3% Chrysotile**

Initial report from 06/22/2011 04:44:12

Analyst(s)

Alexander Balter (2)
Emily Myint (4)

James Hall, Laboratory Manager
or other approved signatory

EMSL Analytical, Inc.
307 West 38th Street, New York, NY 10018
Phone: (212) 290-0051 Fax: (212) 290-0058 Email: manhattanlab@emsl.com

Attn: **ATC Associates, Inc**
290 Roberts Street
Suite 301
East Hartford, CT 06108

Fax: (860) 282-9826 Phone: (860) 282-9924
Project: **MUNICIPAL BUILDING/ 104 NOTCH ROAD/ BOLTON, CT**

Customer ID: ATCE54
Customer PO:
Received: 06/20/11 8:57 AM
EMSL Order: 031118609

EMSL Proj:
Analysis Date: 6/21/2011

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
061611-M-3B *031118609-0006*	EXTERIOR/ EXTERIOR WINDOW CAULK - GRAY				**Stop Positive (Not Analyzed)**
061611-M-4A *031118609-0007*	EXTERIOR/ EXTERIOR WINDOW CAULK - GRAY	Gray/Tan Non-Fibrous Homogeneous		16% Non-fibrous (other) 20% Ca Carbonate 60% Matrix	**4% Chrysotile**

Initial report from 06/22/2011 04:44:12

Analyst(s)

Alexander Balter (2)
Emily Myint (4)

James Hall, Laboratory Manager
or other approved signatory

THIS IS THE LAST PAGE OF THE REPORT.

ATC Associates, Inc.

290 Roberts Street, Suite 204,
East Hartford, Connecticut 06108
Ph. 860.282.9924 • Fax 860.282.9626

Asbestos Bulk Sample Form

031118609

Date: 6/17/11 Page 1 of 1

ATC Inspector: SCOTT JOHNSON
Accreditation No.: 000526
Survey Date: 6/16/11
Signature: [signature]
Laboratory Name: EMSL

Client Name: Town of Bolton
Project No./Task No.: 61.
Client Contact: Ed Fennell
Requested Completion Date:

Requested turnaround time (circle) 3 hrs. same day 24 hrs. (48 hrs) 3 days 5 days 10 days

No. Samples Collected 7 Analyzed

Building: Municipal Building
Address: 104 Notch Rd Bolton CT

Room	Material Description / Location	Type S/TSI/Misc	Estimated Amt.	Friable yes/no	Condition (SD D ND)	Possible Reason for Damage	Damage Potential (NPD PD PSD)	Sample _of_ (homogeneous matls)		Field Number
Rm. 10 Basement	Interior Window Glaze	M		N				1 2	2	06/16/11-M-1A -1B
Exterior	Exterior Window Glaze	M		N				1 2	2	-2A -2B
"	Exterior Window Caulk-Gray	M		N				1 2	2	-3A -3B
"	Exterior Window Caulk-Tan	M		N				1	1	-4A

Comments (inaccessible areas, etc.):

(Analyze by PLM) SS

Notes
Damage Factors: Physical (sig dmg-dmg-no dmg)
Disturbance Factors: Proximity (<1ft- 1-6ft- >6ft)
Ventilation (yes-no; if yes, type)
Water (extensive-moderate-slight-none)
Accessibility (within reach-barely reachable-not reachable)
Air conduits (air plenum - air shaft - elevator shaft - duct)
Deterioration (heavy-moderate-light-none)
Vibration (gym-music rm-auditorium-mechanical rm-elevator-other)
Air movement (high-moderate-low)
Friability (yes-no; hard-mod-soft surface)
Barriers (perm airtight-enclosed-encapsulated)
Texture (rough-pitted-moderate-smooth)

Relinquished By/Date: [signature] 6/17/11
Relinquished By/Date:
Relinquished By/Date:

Received By/Date: Katy Cyr 6/20/11 8:57am
Received By/Date:
Received By/Date: