

June 3, 2014

Mr. Mike Williams
Knight, Bagge and Anderson, Inc
6 Thirteenth Street
Charlestown Navy Yard
Charlestown, MA 02129

Reference: **Asbestos Abatement Project**
Greater Lowell Technical High School

Dear Mr. Williams:

Thank you for providing Universal Environmental Consultants (UEC) the opportunity to serve your environmental needs.

Enclosed is the project monitoring report for the asbestos abatement project at the Greater Lowell Technical High School. The scope of work included the removal of non-friable (Friable: ***Any materials that contain more than 1% asbestos by weight and can be crumbled, pulverized, or reduced to powder by hand pressure (i.e., asbestos pipe coverings, boiler casings, spray-on, etc.)***) material that asbestos containing materials (ACM) transite panels. The asbestos abatement project was performed on May 24-25 and May 30-June 1, 2014 by a Massachusetts licensed asbestos abatement contractor RM Technologies under the full supervision of Massachusetts licensed asbestos project monitors.

All asbestos abatement activities were performed in accordance with federal and state regulations using state of the art containment enclosures that are usually used during removal of friable ACM.

The abatement process was performed as follows:

- A. All work was performed using the full containment method.
- B. The following scope was performed:
 - 1. Pre-cleaning the area using HEPA machines and wet wiping surfaces and fixed to remain furniture.
 - 2. Erecting a 3-stage de-contamination unit and load-out chamber.
 - 3. Sealing all critical barriers including lights, etc. with polyethylene sheeting.
 - 4. Installing polyethylene sheeting on walls other than where ACM is found and covering the floor.
 - 5. Covering all remaining furniture with polyethylene sheeting (see photos).
 - 6. Installing negative air machines in the work area to create negative pressure and exhausting to the outside.

- C. Panels removed intact without breaking by unscrewing the panels from the studs.
- D. Removing any possible debris that might be generated or previously found behind the panels.
- E. Removing fiberglass batting insulation found behind the panels.
- F. Lowering the ACM panels and cover with polyethylene sheeting and sealing with duct tape.
- G. Placing all waste in asbestos labeled bags.
- H. Transporting the waste to the dumpster.
- I. Performing visual inspections by the project monitors to insure all ACM has been removed.
- J. Performing clearance air sampling by the project monitors.
- K. Tearing down the containment.
- L. Removing the polyethylene sheeting and wet wiping of surfaces.

Since the removed ACM is non-friable, the Department of Labor Standard has reviewed and approved the above mentioned procedures and waived clearance air sampling by Transmission Electron Microscopy (TEM).

Additional air sampling was performed today, Tuesday, June 3, 2014 and samples results indicated that no asbestos fibers were found in the air. The air samples were analyzed by a Massachusetts licensed laboratory EMSL using TEM.

Three (3) wipe samples were also collected today from suspect dust on various surfaces within room 1407. Samples results indicated that no asbestos was found. The wipe samples were analyzed by a Massachusetts licensed laboratory EMSL using Polarized Light Microscopy (PLM).

Please do not hesitate to call our office if you have any questions.

Very truly yours,

Universal Environmental Consultants



Ammar M. Dieb
President

UEC:\214 075\Letter0603.DOC

Enclosure

AIR SAMPLING DATA SHEET

131402101

Date: 6-3-14

Project Number: 214075.00

Project Location: GLTHS Tynghaven

Work Area: Rm 1A07

Contractor: Rm Tech

Project Monitor Name: Jason Beattie

License Number: Am034107

Type of Sampling: TEM

Project Monitor Signature: *Jason Beattie*

Samples Analysis By: _____

6-hour TAT

Sample #	Type B, G, C	Location of Sample	Start Time	Stop Time	Run Time (Total Min)	Flow Rates			Volume (Liters)	Fibers/Field	Distribution (F/mm ²)	Concentration (F/CC)
						Start	Stop	Ave.				
1	B	@ Teachers desk	1032	1247	135	9.4	9.4	9.4	1269			
2	B	5g chalk board	1036	1249	133	9.7	9.7	9.7	1290			

Type: B: Background; G: General Area; C: Clearance.
 Flow Rates: PCM: Up to 16; TEM: Up to 9.5.
 Distribution: (Fibers/Field)/0.00785. If results less than 7 F/mm², then write < LOD
 Type of Sampling: PCM or TEM.

1: I certify that the above samples were collected in accordance with all applicable guidelines.
 2: I certify that the above samples were analyzed in accordance with all applicable guidelines.

RECEIVED
 JUN 03 2014
 By: SK 13:28



EMSL Analytical, Inc.

7 Constitution Way, Suite 107, Woburn, MA 01801
Phone/Fax: (781) 933-8411 / (781) 933-8412
<http://www.EMSL.com> bostonlab@emsl.com

EMSL Order: 131402101
CustomerID: UEC63
CustomerPO:
ProjectID:

Attn: **Jason Becotte**
Universal Environmental Consultants
12 Brewster Road
Framingham, MA 01702

Phone: (508) 628-5486
Fax: (508) 628-5488
Received: 06/03/14 1:28 PM
Analysis Date: 6/3/2014
Collected: 6/3/2014

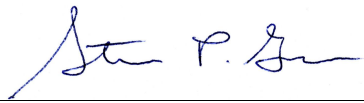
Project: 214075.00 / GLTHS Tyngsboro; Room 1407

Test Report: Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM)
Performed by EPA 40 CFR Part 763 Appendix A to Subpart E

Sample	Location	Volume (Liters)	Area Analyzed (mm ²)	Non Asb	Asbestos Type(s)	# Structures		Analytical Sensitivity (S/cc)	Asbestos Concentration	
						≥ 0.5μ < 5μ	≥ 5μ		(S/mm ²)	(S/cc)
1 131402101-0001	@ Teachers Desk - TEM	1269.00	0.0645	0	None Detected			0.0047	<16.00	<0.0047
2 131402101-0002	By Chalkboard - TEM	1290.00	0.0645	0	None Detected			0.0046	<16.00	<0.0046

Analyst(s)

Steve Grise (2)



Steve Grise, Laboratory Manager
or other approved signatory

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. Results reported in both structures/cm3 and structures/mm2 are dependent on the volume of air sampled and measured by non-laboratory personnel are not the responsibility of EMSL and are not covered by the laboratory's NVLAP accreditation. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request.
Samples analyzed by EMSL Analytical, Inc. Woburn, MA NVLAP Lab Code 101147-0, CT PH-0315, MA AA000188, RI AAL-107T3 and VT AL357102

Initial report from 06/03/2014 15:37:45

131402100

CHAIN OF CUSTODY

Universal Environmental Consultants
12 Brewster Road
Framingham, MA 01702
Tel: (508) 628-5486 - Fax: (508) 628-5488
adieb@uec-env.com

PLM
6-hour TAT

Town/City: Tyngsboro, MA Building Name GLTHS Room 1407

Sample	Result	Description of Material	Sample Location
1		Dust wipe	Teachers desk
2			center workstation
3			student table

Reported By: Jason Berotte Date: 6-3-14 Due Date: _____

Received By: _____ Date: _____



W-in

**EMSL Analytical, Inc.**

7 Constitution Way, Suite 107, Woburn, MA 01801

Phone/Fax: (781) 933-8411 / (781) 933-8412

<http://www.EMSL.com>bostonlab@emsl.com

EMSL Order: 131402100

CustomerID: UEC63

CustomerPO:

ProjectID:

Attn: **Jason Becotte**
Universal Environmental Consultants
12 Brewster Road
Framingham, MA 01702

Phone: (508) 628-5486
 Fax: (508) 628-5488
 Received: 06/03/14 1:28 PM
 Analysis Date: 6/3/2014
 Collected: 6/3/2014

Project: **GLTHS Room 1407; Tyngsboro, MA****Test Report: Asbestos Analysis via Polarized Light Microscopy, Qualitative**

Sample	Description	Appearance	Result	Notes
1 131402100-0001	Teacher's Desk - Dust Wipe		None Detected	
2 131402100-0002	Center Work Station - Dust Wipe		None Detected	
3 131402100-0003	Student Table - Dust Wipe		None Detected	

Analyst(s)

Kevin Pine (3)

Steve Grise, Laboratory Manager
or other approved signatory

EMSL recommends that soil samples reported as "ND" be tested by the EPA Screening Method/Qualitative. The above report relates only to the items tested. This report may not be reproduced, except in full, without written approval by EMSL Analytical, Inc. The above test must not be used by the client to claim product endorsement by NVLAP nor any agency of the United States Government. Unless otherwise noted, the results in this report have not been blank corrected. Samples received in good condition unless otherwise noted.

Samples analyzed by EMSL Analytical, Inc. Woburn, MA

Initial report from 06/03/2014 14:46:45