

**INSPECTION REPORT FOR  
Hazardous Building Materials**

**Former Academy School (D-Wing)  
2153 Main Street  
Glastonbury, Connecticut**

**Prepared for:**

Mr. Gary Iadarola, LEP, CPG  
Senior Project Manager  
GEI Consultants, Inc.  
455 Winding Brook Drive  
Glastonbury, CT 06033

**Prepared by:**

Smith & Wessel Associates, Inc.  
8 Church Street  
Merrimac, MA 01860

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## SUMMARY

GEI Consultants, Inc. (GEI) retained Smith & Wessel Associates, Inc. (SWA) to conduct inspections for hazardous building materials at the former Academy School D-Wing located at 2153 Main Street in Glastonbury, Connecticut. A certified and accredited representative of SWA evaluated hazards associated with asbestos-containing building materials (ACBM), lead-based paints (LBP), polychlorinated biphenyls (PCBs), and mercury containing components throughout the D-wing. SWA conducted the inspection on May 9, 2011.

The D-wing is a 3 story structure that includes a basement, main level and second floor that comprises some 23,000 sf of usable floor space. The building is mainly unoccupied with the exception of several rooms that are used for storage for City maintenance.

### Asbestos

The purposes of SWA's inspection were to evaluate the types, locations, and extent of suspect ACBM throughout the interior and exterior of the building. SWA's inspection addressed both friable materials (materials that can be easily crushed, crumbled, or pulverized by hand pressure) and nonfriable materials. Of those suspect materials collected by SWA for analysis, the following were determined to contain asbestos as part of the materials composition:

• Joint compound	• Pipe fitting insulation	• Ceiling glue daubs
• 9" floor tiles	• Floor tile mastic adhesives	• Door caulking
• Vibration damper cloth	• Glue daubs	• 12" floor tiles

### Lead-Based Paint

The purposes of the inspection was to evaluate the types, locations, and extent of suspect LBP throughout the building, to evaluate potential hazards associated with LBP, and to provide appropriate recommendations for its abatement and management.

The lead content of painted surfaces tested at the site ranged from less than 0.1 to 15.5 milligrams per square centimeter ( $\text{mg}/\text{cm}^2$ ). The U.S. Housing and Urban Development (HUD) standard for determining elevated lead concentrations in housing units is  $1.0 \text{ mg}/\text{cm}^2$ . Although this standard does not apply directly to this site, it is a useful reference value for evaluating potential lead hazards in nonresidential buildings. If LBP are impacted by renovation or demolition, compliance with Occupational Safety and Health Administration (OSHA) regulations regarding worker exposure to lead must occur.

The testing for LBP that was conducted by SWA was for informational purposes only and was not meant to comply with HUD and Connecticut Lead Laws that apply to residential settings.

### **PCBs Light Ballasts, Transformers and Caulking/Glazing Compound**

SWA's investigation for PCBs in ballast and transformers was visual only. Typically, ballast installed after 1978 do not contain PCBs and are marked as such. All ballasts that do not exhibit the "No PCBs" wording on the affixed label are assumed to contain PCBs. Of those representative light fixtures inspected, all exhibited the "No PCBs" wording on their affixed labels. Therefore, all are assumed not to contain PCBs in their capacitor oils. However, because only representative ballasts were inspected, all ballasts will require further assessment for the "No PCBs" wording prior to being impacted by renovations.

SWA collected samples of suspect window and door caulking for PCBs analysis. Analytical results indicated that no PCBs are present in the window and door caulking samples collected. Typically, the US EPA regulates PCBs if they are at 50 ppm or greater.

### **Mercury Filled Fluorescent Light Fixtures and Thermostats**

SWA observed fluorescent light bulbs that if impacted by renovations must be recycled in accordance with the "Universal Waste" regulatory requirements as mercury containing components. SWA estimates that there are approximately 70 (8'), 450 (4'), 325 (2'), 18 (3') and 26 U-shaped fluorescent bulbs throughout the building. In addition, SWA observed 4 heat regulating thermostats with mercury containing tubes.

### **Miscellaneous Hazardous Materials**

SWA inventoried miscellaneous hazardous materials observed during our inspection. In particular, we identified fire strobe lights (6), emergency exits signs (8) and emergency lights with battery packs (6). Often, emergency exit signs contain tritium tubes that contain low levels of radiations that must be properly packaged for disposal/recycling if impacted.

### ***Exclusions***

While SWA endeavored to conduct a thorough, comprehensive inspection, some exclusion is warranted. Because our inspection addressed a limited number of areas, it is possible that the locations that we inspected are not representative of materials found in other areas. SWA's inspection included building areas only; no assessment of soil, debris, or subterranean areas was conducted. SWA did not inspect the interior of utility trenches, mechanical equipment, machinery, or other components that would require dismantling or heavy equipment to access for suspect ACM. SWA conducted limited intrusive investigations as practical using hand tools only. Therefore, there may be hidden materials present that contain asbestos and can only be exposed during renovations/demolition through the use of heavy equipment. Any suspect materials uncovered during renovations/demolition that are not addressed in this report must be assumed ACM until further testing indicated otherwise.

SWA did not inspect the roof system or behind the façade. Prior to be impacted by renovations or demolition, the roof system and façade must be inspected for asbestos-containing materials.

While SWA followed industry standards during the inspection, SWA does not warrant that all suspect hazardous building materials were identified in or on the buildings and shall not be held liable related to future abatement costs related to hazardous materials that are either not discovered or not appropriately characterized. This is due in part to inherent problems with every building inspection, such as, but not limited to:

- Poor light conditions due to no electricity in the building;
- Unsafe conditions due to deteriorated building conditions and presence of debris;
- Inability to access above fixed ceilings that are known to be coated with ACM;
- materials that were accessible but that we did not recognize as being hazardous or potentially hazardous;
- Seemingly homogeneous materials that are not in fact homogeneous;
- Seemingly representative locations that are not in fact representative;
- Layered materials that are not uniformly present or are isolated;
- Materials that are present in an isolated and limited quantity; and
- Materials that are present in locations that are unsafe or otherwise difficult to access.

During the course of future renovation/demolition work, it is likely that additional hazardous materials or materials suspected of being hazardous will be identified. Such materials must be assumed to be hazardous unless appropriate evaluation or sampling and analysis demonstrate otherwise. Contracts, specifications and plans should advise contractors to conduct controlled demolition work and stop immediately should any hazardous building materials be encountered during the course of their work.

## 1.0 ASBESTOS-CONTAINING BUILDING MATERIALS

### 1.1 *Scope of Work*

Glenn Nelson, SWA's Asbestos Inspector (cert. # 000407) performed the inspection of readily accessible and observable areas throughout the interior and exterior of the D-wing. SWA inspected for the following types of suspect ACBM:

- Thermal system insulation (TSI), such as insulation on pipes, boilers, tanks and related equipment;
- Surfacing material, acoustical and decorative plasters, fireproofing and other sprayed or trowel applications; and
- Miscellaneous materials, such as window caulking, wallboard, floor tile, adhesives, and other building materials that are not TSI or surfacing materials.

To determine the asbestos content of suspect ACBM, SWA collected and analyzed representative bulk samples by extracting a small but representative portion of suspect material from the substrate. The samples, typically measuring one cubic centimeter, were collected using a variety of methods. Thermal insulations were collected using hollowed metal coring sleeves attached to a handle. A knife with a lockable blade was used to collect samples of sheetrock and other rigid materials. A hammer and chisel were used to collect samples of floor tile. The extracted samples were then placed into labeled individual sealed plastic bags for transport to the laboratory.

EMSL Analytical, Inc. (EMSL) of Woburn, Massachusetts, a fully accredited asbestos analytical laboratory, analyzed the bulk samples. EMSL utilized Polarized Light Microscopy (PLM) in accordance with the requirements of 40 CFR Part 763, Subpart F, Appendix A, to analyze the samples (see Appendix A of this report). Because PLM is not consistently reliable in detecting asbestos in floor coverings and similar nonfriable organically bound materials, when a negative result is obtained by PLM (less than one percent asbestos), Transmission Electron Microscopy (TEM) we request that the laboratory analyze the samples by TEM.

For each homogeneous sampling group, the laboratory analyzed samples until a positive result was obtained (i.e. greater than one percent asbestos). If one sample indicates an asbestos content greater than one percent, the entire homogenous area must be considered to be an ACBM even if one or more samples in the group indicates an asbestos content of less than one percent.

### 1.3 *Regulatory Guidance*

The United States Environmental Protection Agency (EPA), Occupational Health & Safety Administration (OSHA), Connecticut Department of Public Health (CT DPH) and Connecticut Department of Environmental Protection (CT DEP) are responsible for regulating the release of

asbestos into the environment and protecting workers from exposure to airborne asbestos fibers. OSHA and CT DPH are responsible for the health and safety of workers who may be exposed in connection with their jobs including asbestos abatement. The EPA, CT DPH and CT DEP are responsible for developing and enforcing regulations necessary to protect the general public from airborne contaminants that are known to be hazardous to human health.

OSHA and the CT DPH are responsible for the health and safety of workers who may be exposed to asbestos in connection with their jobs, including asbestos abatement, maintenance and custodial activities, and renovation work. They specify requirements for the work practices and engineering controls that must be utilized during asbestos abatement projects. They also require that ACM be repaired, removed, or otherwise appropriately abated before maintenance, renovation, or demolition work disturbs them. Thermal system insulation, surfacing materials, and floor tile installed before 1980 must be presumed to be ACM unless appropriate inspection and sampling analysis proves otherwise.

The EPA, CT DPH and CT DEP regulate ACM associated with renovation, demolition, and asbestos abatement projects via the NESHAP regulation and CT DPH Standard for Asbestos Abatement Sections 19a332a and 20-440. These regulations require that buildings be inspected for ACM prior to renovation/demolition projects. It stipulates that all friable ACM as well as nonfriable ACM that are in poor condition or will be made friable by renovation/demolition activity be removed or otherwise appropriately abated before they are disturbed.

### **1.3 Findings**

SWA observed the following *suspect* ACM in various quantities throughout the building:

- Floor tiles
- Joint compound
- Sink basin condensate mastic
- 1' x 1' Spline ceiling tiles
- Vibration damper cloth
- Fire-door insulation
- Window caulk
- Floor tile mastic adhesive
- Gypsum board
- Cementitious floor leveler
- Cement plaster
- Baseboard mastic adhesive
- Linoleum floor sheeting
- Expansion joint caulk
- Carpet mastic adhesive
- Suspended ceiling tiles
- Mudded pipe fitting insulation
- Ceiling tile glue daubs
- Glue daubs
- Window glazing

SWA collected a total of 62 representative bulk samples of the above materials of which 49 were analyzed. Thirteen of the samples did not require analysis as the first sample in the homogeneous sample group was determined to contain asbestos.



SWA has listed in **Table 1**, the location and estimated quantity, by square foot (sf), linear foot (lf), or other appropriate unit, of each type of ACBM identified at the site.

<b>Table 1 • List of Materials Testing Positive for Asbestos</b>			
<b>Type of Material</b>	<b>Location</b>	<b>Quantity</b>	<b>Sample number</b>
<b>Basement</b>			
Joint compound and associated gypsum wall/ceiling board	Storage B-1, Locksmith, Electric storage, D-15, Plumbing, Electric storage, D-10, D-12, D-14 and incoming water room	3,900 sf	02A
Gray pipe fitting insulation	Storage B-1, incoming water closet off of room D-14 and bathroom wet walls	50 fittings	03A
Tan 9" x 9" floor tile and underlying black mastic adhesive	Locksmith room, D-12, D-14	1,250 sf	04A, 05A
Black/white checkerboard 9" x 9" floor tile	D-10	680 sf	06A
<b>Main Level</b>			
Gray vibration damper cloth	Boy's bathroom	1 sf	10A
Tan mottled 12" x 12" floor tile and underlying black mastic adhesive	Stairwell landing outside boy's bathroom	100 sf	12A, 13A
Gray mottled 12" x 12" floor tile and mastic adhesive over older gray 12" x 12" floor tile	Hallway, stairwell landing off of boy's bathroom	885 sf	12A, 13A, 14A
Gray 12" x 12" floor tile over brown floor tile and underlying black mastic adhesive	Stair landing off girls' bathroom	185 sf	18B, 25A, 26A
Brown floor tile and mastic adhesive on pressed wood floor	D-101, D-102, D-103, D-104, D-105, D-106, D-107	3,425 sf	18A, 25A, 26A
Gray pipe fitting insulation	Bathroom wet walls	15 fittings	03A
Brown glue daubs associated with 1' x 1' ceiling tiles and affected ceiling plaster	Stairwell landings, D-102, D-103, D-104, D-105, D-106, D-107	4,230 sf	18A, 25A, 26A
<b>Second floor</b>			
Gray vibration damper cloth	Boy's bathroom, girl's bathroom	2 sf	10A
Gray 12" x 12" floor tile over brown floor tile and underlying black mastic adhesive	Stair landings, mid landings and hallway	1,360 sf	18B, 25A, 26A

<b>Table 1 • List of Materials Testing Positive for Asbestos</b>			
<b>Type of Material</b>	<b>Location</b>	<b>Quantity</b>	<b>Sample number</b>
Brown floor tile and mastic adhesive on pressed wood floor	D-201, D-202, D-203, D-204, D-205, D-206, D-207	4,360 sf	18A, 25A, 26A
Gray pipe fitting insulation	Bathroom wet walls, D-207	20 fittings	03A
Brown glue daubs associated with 1' x 1' ceiling tiles and affected ceiling plaster	Stairwell landings, D-201, D-202, D-203, D-204, D-205, D-206, D-207, D-208, boy's room, girl's room	4,650 sf	18A, 25A, 26A
Door/window caulking	Between door/window frames and masonry opening at exterior doors on circle side	2 door/window systems	09B
Window glazing	Stairwell windows	2 windows	Assumed

In **Table 2**, SWA has listed all materials that tested negative for asbestos, including the locations where these materials were observed and the corresponding bulk sample reference number(s).

<b>Table 2 • List of Materials Testing Negative for Asbestos</b>		
<b>Type of material</b>	<b>Location</b>	<b>Sample No.</b>
Gray gypsum board (see note 1)	Basement, various locations throughout	01A, 01B
Black mastic adhesive under checkerboard 9" x 9" floor tile	Basement, room D-10	07A
Gray ceiling plaster	Basement, hallway	08A, 08B, 08C
Gray door caulking	Basement, rear doors	09A
Ceramic floor tile grout	Bathrooms throughout	11A
Black mastic adhesive under gray 12" x 12" bottom layer of floor tile	Hallways throughout	15A, 15B, 15C
Cement plasters	Throughout	16A, 16B, 16C, 16D, 16E, 16F, 16G
Brown 12" x 12" floor tile (see note 2)	Northwest lower stairwell	18A
Black mastic adhesive underlying brown 12" x 12" floor tile	Northwest lower stairwell	19A, 19B
Brown mastic adhesive under vinyl baseboard	Various location throughout	20A, 20B
White 2' x 4' ceiling tile	Bathrooms, hallways, select rooms	22A, 22B, 22C
White, interior fire-door insulation	Hallways	23A

Table 2 • List of Materials Testing Negative for Asbestos		
Type of material	Location	Sample No.
Brown linoleum floor sheeting with fabric backing	Second floor room off of southeast stairwell where roof hatch is located	24A, 24B
Brown mastic under carpet	Second floor, Room D203	27A
Gray caulking associated with windows and expansion joint	Exterior	28A, 29A

**Note 1:** The gypsum board is cross-contaminated by asbestos-containing joint compound and must be treated as ACM.

**Note 2:** This floor tile is adhered to the substrate with asbestos-containing mastic adhesive and must be treated as ACM.

#### 1.4 **Conclusions and Recommendations**

On the basis of our findings, SWA offers the following conclusions and recommendations:

1. Both friable and nonfriable ACBM were identified at the site. Prior to being impacted by renovations/demolition, all ACBM must be removed by qualified personnel. SWA recommends that all ACBM be removed in accordance with a project design as prepared by a certified Abatement Project Designer. *This report is not intended for use as an abatement design.*
2. Because there are often hidden suspect materials that can only be identified through selective demolition, SWA does not guarantee that all ACM were identified. It is essential that Demolition Contractor's utilize selective demolition techniques to assess for hidden suspect materials prior to conducting aggressive demolition of the building. Often suspect materials are hidden including damp proofing behind the façade, suspect materials behind fixed walls, above fixed ceilings, within enclosed chases and under fixed floors just to name a few.
3. SWA did not inspect the roof system or behind the facade for ACM as part of our investigation. This **must** be conducted prior to the building being demolished as often roof materials including felts, tar flashings and sometimes decking materials as well as damp proofing behind the facade contain asbestos. It is recommended that this work be conducted prior to going out to bid as these materials if present will increase costs substantially.
4. SWA identified a trace amount of asbestos in ceiling plaster located in the basement hallway. Although the results are less than 1% asbestos and therefore the plaster is not a regulated material, there still may be some liability involved with allowing general laymen to impact this material.
5. Should any identified ACBM remain in the building, SWA recommends that an Operations and Management Program (O&M) be established to effectively manage them

in place. This should include a written O&M Plan that establishes an Asbestos Program Manager to oversee the program, procedures for handling and maintaining ACBM, Contractor notification forms, training of maintenance and other personnel that may come in contact with ACBM, record keeping requirements and periodic surveillance of known ACBM.

### 1.5 Cost Estimates

In **Table 3**, SWA has provided estimates of abatement costs associated with all identified ACBM in the inspected areas. These estimates are based on current industry standards that may fluctuate rapidly based on a variety of factors: the prevailing economic climate, seasonal differences, union labor considerations, scale of the abatement, occupancy of the building, and so on. SWA recommends that qualified abatement contractors be solicited to determine actual pricing involved. In addition to pricing for abatement, we have considered anticipated industrial hygiene costs associated with abatement, including air monitoring and oversight of the abatement.

<b>Table 3 • Estimated Costs for Removal of ACBM</b>		
<b>Type of Material</b>	<b>Quantity/Unit cost (\$)</b>	<b>Total Cost (\$)</b>
Joint compound and associated gypsum board	3,900 sf @ 4/sf	15,600.
Mudded fittings associated with fiberglass insulated pipes	65 fittings @ 50/fitting	3,250.
Floor tile and underlying black mastic adhesive on concrete	1,350 sf @ 2.5/sf	3,375.
9" x 9" floor tile on concrete	680 sf @ 2/lf	1,360.
Roofing felts	1,885 sf @ 3/sf	5,565.
Two layers of floor tile and underlying black mastic adhesive	2,430 sf @ 3/sf	7,290.
Gray vibration damper cloth	3 sf @ 75/sf	225.
Wall mastic coating	1,140 sf @ 4/sf	4,560.
Floor tile, mastic adhesive and cross-contaminated wood substrate	7,785 sf @ 4/sf	31,140.
Brown glue daubs and associated 1' x 1' ceiling tiles and affected ceiling plaster	8,880 sf @ 3/sf	26,640.
Window/door caulking (2 units)	2 units @ 300/unit	600.
Window glazing	2 windows @ 150/window	300.
<b>Total Abatement Cost</b>		99,905.
<b>Total Industrial Hygiene Fee</b>		10,000.
<b>Total Fee</b>		<b>\$ 109,905.</b>

## 2.0 LEAD-BASED PAINTS AND SURFACE CONTAMINATIONS

### 2.1 *Scope of Work*

SWA analyzed painted surfaces throughout the interior and exterior of the D-wing for lead content using the NITON XLS-303A X-ray Fluorescence Analyzer (XRFA) following the manufacturer's instructions for initial calibration and operation. SWA tested representative surfaces on a variety of components such as walls, door components, floors, columns, windows and other various components.

The XRFA uses a radioactive source to excite the electrons of lead atoms (if present) in paint. As the lead atom electrons return to their normal state, they emit x-rays that are measured by the XRFA. These data are then processed and the results converted to milligrams of lead per square centimeter of sampled surface area. On most substrates, the XRFA is precise to  $\pm 0.1$  mg/cm<sup>2</sup>.

### 2.2 *Regulatory Guidance*

In all areas where LBP is disturbed by demolition and where components covered by LBP are disposed of, applicable OSHA, CT DPH, CT DEP and EPA regulations apply. This LBP inspection was conducted for informational purposes only and not meant to comply with US HUD or Connecticut Lead Law requirements pertaining to housing.

#### **OSHA**

Renovation or demolition activities that disturb surfaces that contain lead must be conducted in accordance with the OSHA regulation 29 CFR 1926.62 "Lead Exposure in Construction: Interim Final Rule." This regulation requires that a site-specific health and safety plan be prepared before conducting activities that create airborne lead emissions. Such plan should include the identification of lead components, an exposure assessment and (if applicable) the required work procedures and personnel protection to be used.

An exposure assessment (personal air monitoring) must be performed if there is the potential for employees to be exposed to lead due to the renovation or demolition activity. If demolition is being conducted that will disturb lead-based paints, the employer must assume that employee exposure is in excess of the Permissible Exposure Limit (PEL) of 50 micrograms per cubic meter of air ( $\mu\text{g}/\text{m}^3$ ), until the exposure assessment is completed. This triggers the requirements for using half-face mask respirators with HEPA cartridges (and therefore the requirements for a written respirator program required by 29 CFR 1910.134). The lead standard also requires the following protective measures until the exposure assessment is completed:

- isolation of the work area
- appropriate personnel protective clothing and equipment
- change areas and hand washing facilities

- biological monitoring
- training

The results of the initial exposure assessment will determine the protective measures that must be followed for the remainder of the project. OSHA may allow air-monitoring data from previous projects conducted under conditions closely resembling the present project to be used for the exposure assessment. If the exposure assessment indicates that exposure levels are below the Action Level of  $30 \mu\text{m}^3$ , there are no additional requirements under the standard if the conditions remain the same.

### **EPA**

In addition to the worker protection requirements stipulated by OSHA, the CT DPH and EPA regulate the disposal of wastes that are potentially hazardous. Such wastes may include paint chips and residue generated during abatement or repainting work, or whole components, such as wood windows, doors, and trim that are coated with LBP and that are disposed as the result of renovation or demolition work. Metal components are not regulated if they will be recycled and not disposed of in a landfill.

To determine the required method for disposing of these permeable items that are coated with LBP or solids that are contaminated with lead, the EPA requires representative sampling of these materials for analysis. The representative sample(s) must be analyzed by TCLP to determine the levels of lead that will leach into the environment if the debris were disposed in a landfill. If the result of this procedure indicates that the sample leaches a lead concentration below five (5) parts per million (ppm), the debris is not regulated and can be disposed of in a traditional construction landfill. However, the debris must be disposed of as hazardous waste if the TCLP result exceeds 5 ppm. To minimize the total volume of hazardous waste, segregating hazardous from nonhazardous waste is advisable.

### **HUD**

The United States Department of Housing and Urban Development (HUD) has established a standard for lead-based paint, as tested using an XRF analyzer, of  $1.0 \text{ mg/cm}^2$ . Although this standard only applies to housing funded by the federal government, it is a useful reference concentration for assessing hazards associated with lead in paint in other settings. Thus, when paint contains greater than  $1.0 \text{ mg/cm}^2$ , special care should be taken when conducting activities that impact these paints. When conducting abrasive blasting, torch burning, or similar activities that generate significant dust or fume, hazards can be caused even at concentrations below the HUD standard.

## 2.3 Findings

### *Lead Based Paint Testing XRF*

Analysis of painted surfaces throughout the buildings indicates that lead levels range from <0.1 mg/cm<sup>2</sup> to 15.5 mg/cm<sup>2</sup>. A summary of paints with elevated concentrations of lead (greater than 1.0 mg/cm<sup>2</sup>) are presented in Table 4, and the results of all testing are presented in Appendix B.

Location	Substrate	Color	Component	Quantity
<b>Basement</b>				
Locksmith room	Wood	Beige	Window frame	2 windows
Slop sink closet	Ceramic	Beige	Wall	200 sf
Room D-17	Metal	Tan	Door	1 door
	Metal	Silver	Door	1 door
Room D-14	Wood	Orange	Door	1 door
<b>Exterior</b>				
Circle side	Wood	Brown	Door/window system	2 systems

## 2.4 Conclusions and Recommendations

Based on our findings, SWA offers the following conclusions and recommendations:

1. Few painted components were determined to contain elevated levels of LBP at the site. Handling of components that are covered by LBP will require compliance with the OSHA lead standard. To minimize exposure to airborne lead dust or lead fumes, torch cutting, sanding, grinding, or similar high impact work on components covered by LBP should be avoided. Such work would need to be conducted by properly trained workers using appropriate worker protection and engineering controls.
2. For work activities that may generate airborne lead, the contractor(s) should perform an initial exposure assessment in the form of personal air monitoring for each individual task (e.g. demolition, abrasive blasting, and painting) that has the potential for causing worker exposure to be at or above the OSHA Action Level. In lieu of monitoring, historical data from similar operations may be used to comply with OSHA requirements.
3. It should be noted that representative painted surfaces were tested for lead content and that findings indicated that restorations likely occurred over the history of the building. SWA noted that similar materials may either contain LBP or are free of LBP. TCLP testing for leachable lead will be necessary to determine proper disposal of the waste stream generated by renovations or demolition.

4. Should painted components be identified at later dates that are not addressed in this report, they must be assumed lead paint until further testing indicates otherwise.

## **2.5 Cost Estimates**

SWA estimates that costs associated with OSHA and EPA compliance relative to lead paint should not exceed **\$5,000** for this site. If all LBP components identified at the site were deleaded or if TCLP testing failed, costs for managing LBP would increase substantially.



## **3.0 POLYCHLORINATED BIPHENYLS**

### **3.1 Scope of Work**

Typically, the words "No PCBs" are imprinted on the affixed label of individual ballasts if it does not contain PCBs. Because the majority of older ballasts installed before 1978 contain PCBs, if the "No PCBs" wording is not observed, we assume that those ballast contain PCBs. To determine if light ballasts contain PCBs, SWA inspected ballast labels associated with each representative type of fluorescent light fixture throughout the D-wing. In addition, SWA inspected for other components that may contain PCBs such as electrical transformers and caulking.

### **3.2 Findings**

SWA's investigation for PCBs was visual only. All of the representative ballasts inspected by SWA did exhibit the "No PCB" wording on their affixed labels and are assumed not to contain PCBs. Because only representative ballasts were assessed, all individual ballasts must be inspected for the "No PCB" wording on their affixed labels prior to being impacted by renovation/demolition to determine proper disposal requirements.

The analytical results for PCB in window/expansion joint caulking were all nondetect. (See Appendix C)

### **3.3 Conclusions and Recommendations**

Based on our observations, SWA offers the following conclusions and recommendations:

1. SWA observed the "No PCB" wording on all representative ballasts inspected at the site. However, it will be necessary to inspect individual ballasts for the "No PCB" wording to determine proper disposal requirements.

### **3.4 Cost Estimates**

SWA estimates that the cost to inspect individual ballasts for the "No PCB" wording at the site should not exceed **\$1,500**. If PCB containing components are identified they must be properly containerized and sent to a facility that accepts PCB wastes.

## **4.0 MERCURY CONTAINING COMPONENTS**

### **4.1 Scope of Work**

SWA's made observations for mercury containing components at the site. Typically, when fluorescent light fixtures, thermostats, or electrical switches will be removed and disposed of, SWA makes a conservative assumption that they contain mercury and should be handled as a regulated waste. These materials are classified as "Universal Wastes" and must be appropriately handled and packaged for disposal or recycling.

### **4.2 Findings**

SWA estimates that there are approximately 70 (8'), 450 (4'), 325 (2'), 18 (3') and 26 U-shaped fluorescent bulbs throughout the D-wing. In addition, SWA observed 4 heat regulating thermostats with mercury containing tubes.

### **4.3 Conclusions and Recommendations**

Based on our observations SWA offers the following conclusions and recommendations.

1. SWA's inventory of fluorescent bulbs included bulbs located in fixtures as well as bulbs that are stored in containers. Some are still fully packaged and can be used as replacements in other facilities and do not require recycling/disposal.
2. All mercury containing components must be properly packaged and disposed/recycled in a facility permitted to accept such waste prior to being impacted by renovations/demolition. The recycling facility must provide the owner with a waste manifest detailing the proper disposal of all mercury components.

### **4.4 Cost Estimates**

The cost to collect and dispose/recycle mercury containing components associated with the D-wing is not expected to exceed \$2,500.

## **5.0 MISCELLANEOUS HAZARDOUS MATERIALS**

### **5.1 Scope of Work**

During SWA's inspection, observations were made for miscellaneous hazardous materials that may require special handling and or disposal during renovations. These include but are not limited to stored solvents, batteries, emergency exit signs, and so forth.

### **5.2 Findings**

During the assessment of D-wing, we identified fire strobe lights (6), emergency exits signs (8) and emergency lights with battery packs (6). Often, emergency exit signs contain tritium tubes that contain low levels of radiations that must be properly packaged for disposal/recycling if impacted. We also identified stored paints and the like that were being stored on-site.

### **5.3 Conclusions and Recommendations**

Based on our observations, SWA offers the following conclusions and recommendations.

1. Typically, older emergency lights and illuminated exit signs contain tritium tubes that house low levels of radiation and or batteries. SWA observed these throughout the building. Once under containment, these lights must be inspected for tritium tubes and collected and properly packaged for disposal according to the visual inspection..
2. All battery packs must be properly packaged and delivered to a facility that as permitted to accept such items for recycling/disposal.
3. Because of conditions at the site, SWA does not guarantee that all miscellaneous hazardous materials were identified. If miscellaneous hazardous materials are identified that are not listed in this report they must be handled and disposed of in accordance with the requirements of all Federal, State and local regulatory requirements.

### **5.4 Cost Estimates**

The cost to collect and dispose/recycle hazardous miscellaneous materials at this site is not expected to exceed \$1,500.

**APPENDIX A**

***Certificates of Asbestos Bulk Sample Analysis (PLM)***



**EMSL Analytical, Inc.**

7 Constitution Way, Suite 107, Woburn, MA 01801

Phone: (781) 933-8411 Fax: (781) 933-8412 Email: bostonlab@emsl.com

**Attn: Glenn Nelson  
Smith & Wessel Associates, Inc  
8 Church Street  
Suite 3  
Merrimac, MA 01860**

Customer ID: SMT50  
Customer PO:  
Received: 05/11/11 9:35 AM  
EMSL Order: 131101892

Fax (978) 346-7265 Phone: (978) 346-4800  
Project 11144 / 2153 Main Street; Glastonbury, CT

EMSL Proj:  
Analysis Date: 5/12/2011

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

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Cellulose	% Non-Fibrous	% Type
01A 131101892-0001	Basement Storage B-1 - White Gypsum Board	Tan/White Fibrous Heterogeneous	15%	85% Non-fibrous (other)	None Detected
01B 131101892-0002	Basement Ceiling D-1 - White Gypsum Board	Tan/White Fibrous Heterogeneous	15%	85% Non-fibrous (other)	None Detected
02A 131101892-0003	Basement Storage B-1 - Cream Joint Compound	Cream Non-Fibrous Homogeneous		98% Non-fibrous (other)	2% Chrysotile
02B 131101892-0004	Basement Storage B-1 - Cream Joint Compound				Stop Positive (Not Analyzed)
03A 131101892-0005	Basement Storage B-1 - Gray Fitting Insulation	Gray Fibrous Homogeneous	20% Min. Wool	65% Non-fibrous (other)	15% Chrysotile
03B 131101892-0006	2nd Fl D207 - Gray Fitting Insulation				Stop Positive (Not Analyzed)
03C 131101892-0007	2nd Fl D207 - Gray Fitting Insulation				Stop Positive (Not Analyzed)

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Analyst(s)

Steve Grise (49)

Renaldo Drakes, Laboratory Manager  
or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. Woburn, MA NVLAP Lab Code 101147-0, CTPH-0318, MA AA000188, RI AAL-10773 and VT AL357102

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7 Constitution Way, Suite 107, Woburn, MA 01801

Phone: (781) 933-8411 Fax: (781) 933-8412 Email: [bostonlab@emsl.com](mailto:bostonlab@emsl.com)

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8 Church Street  
Suite 3  
Merrimac, MA 01860**

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

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
04A 131101892-0006	Basement Locksmith Room - Brown/Tan 9x9 Floor Tile	Brown Non-Fibrous Homogeneous		95% Non-fibrous (other)	5% Chrysotile
04B 131101892-0009	Basement D-14 - Brown/Tan 9x9 Floor Tile				Stop Positive (Not Analyzed)
05A 131101892-0010	Basement Locksmith Room - Black Mastic	Black Non-Fibrous Homogeneous		90% Non-fibrous (other)	10% Chrysotile
05B 131101892-0011	Basement D-14 - Black Mastic				Stop Positive (Not Analyzed)
06A 131101892-0012	Basement Room D-10 - Black/Tan 9x9 Checkerboard Floor Tile	Tan Non-Fibrous Homogeneous		95% Non-fibrous (other)	5% Chrysotile
07A 131101892-0013	Basement Room D-10 - Black Mastic under Checkerboard	Black Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected

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7 Constitution Way, Suite 107, Woburn, MA 01801

Phone: (781) 933-8411 Fax: (781) 933-8412 Email: [bostonlab@emsl.com](mailto:bostonlab@emsl.com)

**Attn: Glenn Nelson**  
**Smith & Wessel Associates, Inc**  
**8 Church Street**  
**Suite 3**  
**Merrimac, MA 01860**

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EMSL Order: 131101892

Fax: (978) 346-7265 Phone: (978) 346-4800  
Project: 11144 / 2153 Main Street; Glastonbury, CT

EMSL Proj:  
Analysis Date: 5/12/2011

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

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
08A 131101892-0014	Basement Halfway Ceiling - White/Gray Ceiling Cement Plaster	Gray Non-Fibrous Heterogeneous		100% Non-fibrous (other)	<1% Chrysotile
08B 131101892-0015	Basement Ceiling - White/Gray Ceiling Cement Plaster	Gray Non-Fibrous Heterogeneous		100% Non-fibrous (other)	<1% Chrysotile
08C 131101892-0018	Basement Vertical Chasse - White/Gray Ceiling Cement Plaster	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	<1% Chrysotile
09A 131101892-0017	Basement Entrance Door to B-1 Storage - Gray Door Caulking	White Non-Fibrous Homogeneous	<1% Fibrous (other)	100% Non-fibrous (other)	None Detected
TEM analysis is recommended for this sample.					
09B 131101892-0018	Exterior Circle Side - Gray Door Caulking	Gray Non-Fibrous Homogeneous		95% Non-fibrous (other)	5% Chrysotile

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**EMSL Analytical, Inc.**

7 Constitution Way, Suite 107, Woburn, MA 01801

Phone: (781) 933-8411 Fax: (781) 933-8412 Email: [bostonlab@emsl.com](mailto:bostonlab@emsl.com)

**Attn: Glenn Nelson**  
**Smith & Wessel Associates, Inc**  
**8 Church Street**  
**Suite 3**  
**Merrimac, MA 01860**

Fax (978) 346-7265 Phone: (978) 346-4800  
Project 11144 / 2153 Main Street; Glastonbury, CT

Customer ID: SMT30  
Customer PO:  
Received: 05/11/11 9:35 AM  
EMSL Order: 131101892

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Analysis Date: 5/12/2011

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

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
10A 131101892-0019	Main Level Boy's Bathroom - Gray Vibration Damper Cloth	Gray Fibrous Homogeneous	45% Cellulose	10% Non-fibrous (other)	45% Chrysotile
11A 131101892-0020	Main Level Boy's Bathroom - Gray Ceramic Floor Tile Grout	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
12A 131101892-0021	Main Level Stairwell O/S Boy's Room - Tan 12x12 Mottled Floor Tile; Top Layer	Tan Non-Fibrous Homogeneous		98% Non-fibrous (other)	2% Chrysotile
12B 131101892-0022	2nd Fl Hallway - Tan 12x12 Mottled Floor Tile; Top Layer				Stop Positive (Not Analyzed)
13A 131101892-0023	Main Level Stairwell O/S Boy's Room - Black/Brown Mastic on Concrete	Black Non-Fibrous Homogeneous		95% Non-fibrous (other)	5% Chrysotile

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**EMSL Analytical, Inc.**

7 Constitution Way, Suite 107, Woburn, MA 01801

Phone: (781) 933-8411 Fax: (781) 933-8412 Email: [bostonlab@emsl.com](mailto:bostonlab@emsl.com)

**Attn: Glenn Nelson  
Smith & Wessel Associates, Inc  
8 Church Street  
Suite 3  
Merrimac, MA 01860**

Customer ID: SMT50  
Customer PO:  
Received: 05/11/11 9:35 AM  
EMSL Order: 131101892

Fax (978) 346-7265 Phone: (978) 346-4800  
Project 11144 / 2153 Main Street; Glastonbury, CT

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

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
13B 131101892-0024	Halfway - Black/Brown Mastic on Concrete				Stop Positive (Not Analyzed)
14A 131101892-0025	Main Level Halfway - Gray 12x12 Floor Tile; Bottom Layer on Conc under Mottled 12x12	Tan Non-Fibrous Homogeneous		95% Non-fibrous (other)	5% Chrysotile
14B 131101892-0026	Main Level D-104 - Gray 12x12 Floor Tile; Bottom Layer on Conc under Mottled 12x12				Stop Positive (Not Analyzed)
14C 131101892-0027	2nd Fl Halfway - Gray 12x12 Floor Tile; Bottom Layer on Conc under Mottled 12x12				Stop Positive (Not Analyzed)
15A 131101892-0028	Main Level Halfway on conc - Black Mastic	Black Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected

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Steve Grise (49)

Renaldo Drake, Laboratory Manager  
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**EMSL Analytical, Inc.**

7 Constitution Way, Suite 107, Woburn, MA 01801

Phone: (781) 933-8411 Fax: (781) 933-8412 Email: [bostonlab@emsl.com](mailto:bostonlab@emsl.com)

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**Smith & Wessel Associates, Inc**  
**8 Church Street**  
**Suite 3**  
**Merrimac, MA 01860**

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EMSL Order: 131101892

Fax: (978) 346-7265 Phone: (978) 346-4800  
Project: 11144 / 2153 Main Street; Glastonbury, CT

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

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
15B 131101892-0029	Main Level D-104 - Black Mastic	Black Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
15C 131101892-0030	2nd Fl Hallway - Black Mastic	Black Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
16A 131101892-0031	Main Level D-101 Wall - White/Tan/Gray Cement Plaster	Gray/Tan Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
16B 131101892-0032	Main Level Hallway - White/Tan/Gray Cement Plaster	Gray/White Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
16C 131101892-0033	Main Level D-104 - White/Tan/Gray Cement Plaster	Gray/Tan Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
16D 131101892-0034	Main Level Ceiling O/S Boy's Room - White/Tan/Gray Cement Plaster	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected

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Analyst(s)

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Renaldo Drakee, Laboratory Manager  
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**EMSL Analytical, Inc.**

7 Constitution Way, Suite 107, Woburn, MA 01801

Phone: (781) 933-8411 Fax: (781) 933-8412 Email: [bostonlab@emsl.com](mailto:bostonlab@emsl.com)

**Attn: Glenn Nelson**  
**Smith & Wessel Associates, Inc**  
**8 Church Street**  
**Suite 3**  
**Merrimac, MA 01860**

Fax (978) 346-7265 Phone: (978) 346-4800  
Project 11144 / 2153 Main Street; Glastonbury, CT

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
16E 131101892-0035	2nd Fl D205 - White/Tan/Gray Cement Plaster	Tan Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
16F 131101892-0036	2nd Fl D204 - White/Tan/Gray Cement Plaster	Tan Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
16G 131101892-0037	2nd Fl Hallway - White/Tan/Gray Cement Plaster	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
17A 131101892-0038	Main Level D104 - Brown Glue Daub on 1x1 Ceiling Tile	Brown Non-Fibrous Homogeneous		98% Non-fibrous (other)	2% Chrysotile
17B 131101892-0039	Main Level Stair Landing near Boy's Room - Brown Glue Daub on 1x1 Ceiling Tile				Stop Positive (Not Analyzed)
17C 131101892-0040	Main Level near Girl's Room - Brown Glue Daub on 1x1 Ceiling Tile				Stop Positive (Not Analyzed)

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Steve Grise (49)

Renato Drake, Laboratory Manager  
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**EMSL Analytical, Inc.**

7 Constitution Way, Suite 107, Woburn, MA 01801

Phone: (781) 933-8411 Fax: (781) 933-8412 Email: [bostonlab@emsl.com](mailto:bostonlab@emsl.com)

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
18A 131101892-0041	Main Level Lower Stairwell @ Entrance - Brown 12x12 Floor Tile	Brown Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
18B 131101892-0042	Main Level D101 - Brown 12x12 Floor Tile	Brown Non-Fibrous Homogeneous		95% Non-fibrous (other)	5% Chrysotile
19A 131101892-0043	Main Level Lower Landing - Black Mastic	Black Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
19B 131101892-0044	Main Level D101 - Black Mastic	Black Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
20A 131101892-0045	Main Level Stairwell Landing - Brown Mastic under Blue Baseboard	Tan Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
20B 131101892-0046	2nd Fl D203 - Brown Mastic under Blue Baseboard	Brown Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected

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**EMSL Analytical, Inc.**

7 Constitution Way, Suite 107, Woburn, MA 01801

Phone: (781) 933-8411 Fax: (781) 933-8412 Email: [bostonlab@emsl.com](mailto:bostonlab@emsl.com)

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
21A 131101892-0047	Main Level Stair Landing near Boy's Room - White 1x1 Fissured Ceiling Tile	Gray Fibrous Heterogeneous	65% Min. Wool	35% Non-fibrous (other)	None Detected
21B 131101892-0048	Main Level near Girl's Room - White 1x1 Fissured Ceiling Tile	Gray Fibrous Heterogeneous	65% Min. Wool	35% Non-fibrous (other)	None Detected
21C 131101892-0049	2nd Fl D203 on Wall - White 1x1 Fissured Ceiling Tile	Gray Fibrous Heterogeneous	65% Min. Wool	35% Non-fibrous (other)	None Detected
22A 131101892-0050	Main Level Hallway - White 2x4 Ceiling Tile	Gray/White Fibrous Heterogeneous	35% Cellulose 35% Min. Wool	30% Non-fibrous (other)	None Detected
22B 131101892-0051	Main Level Hallway - White 2x4 Ceiling Tile	Gray/White Fibrous Heterogeneous	35% Cellulose 35% Min. Wool	30% Non-fibrous (other)	None Detected

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**EMSL Analytical, Inc.**

7 Constitution Way, Suite 107, Woburn, MA 01801

Phone: (781) 933-8411 Fax: (781) 933-8412 Email: [bostonlab@emsl.com](mailto:bostonlab@emsl.com)

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**Smith & Wessel Associates, Inc**  
**8 Church Street**  
**Suite 3**  
**Merrimac, MA 01860**

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
22C 131101892-0052	Main Level Hallway - White 2x4 Ceiling Tile	Gray/White Fibrous Heterogeneous	35% Cellulose 35% Min. Wool	30% Non-fibrous (other)	None Detected
23A 131101892-0053	Main Level Hallway - White Interior Fire Door Insulation	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
24A 131101892-0054	2nd Fl D208 - Brown Linoleum/Fabric	Brown Non-Fibrous Homogeneous	10% Cellulose	90% Non-fibrous (other)	None Detected
24B 131101892-0055	2nd Fl Room with Roof Hatch - Brown Linoleum/Fabric	Brown Non-Fibrous Homogeneous	10% Cellulose	90% Non-fibrous (other)	None Detected
25A 131101892-0056	2nd Fl D207 - Brown 12x12 Floor Tile under Carpet on Wood	Brown Non-Fibrous Homogeneous		95% Non-fibrous (other)	5% Chrysotile
26A 131101892-0057	2nd Fl D207 - Black Mastic	Black Non-Fibrous Homogeneous		90% Non-fibrous (other)	10% Chrysotile

Initial report from 05/12/2011 14:23:15

Analyst(s)

Steve Grise (49)

Renaldo Drake, Laboratory Manager  
or other approved signatory

Due to magnification limitations inherent in PLM, asbestos fibers in dimensions below the resolution capability of PLM may not be detected. Samples reported as <1% or none data require additional testing by TEM to confirm asbestos quantities. The above test report relates only to the items tested and may not be reproduced in any form without the express approval of EMSL Analytical, Inc. EMSL's liability is limited to the cost of analysis. EMSL bears no responsibility for sample collection activities or analytical method limitations. If and use of test results are the responsibility of the client. Samples received in good condition unless otherwise noted.

Samples analyzed by EMSL Analytical, Inc. Woburn, MA NVLAP Lab Code 101147-0, CT PH-0315, MA AA000188, RI AAL-18773 and VT AL357102

Test Report PLM-7.23.0 Printed 5/12/2011 2:23:15 PM

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**EMSL Analytical, Inc.**

7 Constitution Way, Suite 107, Woburn, MA 01801

Phone: (781) 933-8411 Fax: (781) 933-8412 Email: [bostonlab@emsl.com](mailto:bostonlab@emsl.com)

**Attn: Glenn Nelson**  
**Smith & Wessel Associates, Inc**  
**8 Church Street**  
**Suite 3**  
**Merrimac, MA 01860**

Customer ID: SMT50  
Customer PO:  
Received: 05/11/11 9:35 AM  
EMSL Order: 131101892

Fax (978) 346-7265 Phone: (978) 346-4800  
Project 11144 / 2153 Main Street, Glastonbury, CT

EMSL Proj:  
Analysis Date: 5/12/2011

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

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
27A 131101892-0059	2nd Fl D203 - Brown Mastic on Wood Floor under Carpet	Brown Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
17D 131101892-0059	2nd Fl D207 - Brown Glue Daub w/ Pressedboard CT				Stop Positive (Not Analyzed)
17E 131101892-0060	2nd Fl D203 on Upper Wall - Brown Glue Daub w/ Pressedboard CT				Stop Positive (Not Analyzed)
28A 131101892-0061	Exterior - Gray Window Seem Caulking	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
29A 131101892-0062	Exterior - Gray Window Caulking	Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected

Initial report from 05/12/2011 14:23:15

Analyst(s)

Steve Grise (49)

Renaldo Drakee, Laboratory Manager  
or other approved signatory

Due to magnification limitations inherent in PLM, asbestos fibers in dimensions below the resolution capability of PLM may not be detected. Samples reported as <1% or none data require additional testing by TEM to confirm asbestos quantities. The above test report relates only to the items tested and may not be reproduced in any form without the express approval of EMSL Analytical, Inc. EMSL's liability is limited to the cost of analysis. EMSL bears no responsibility for sample collection activities or analytical method limitations. If and use of test results are the responsibility of the client. Samples received in good condition unless otherwise noted.  
Samples analyzed by EMSL Analytical, Inc., Woburn, MA NPLAP Lab Code 101147-0, CT PH-0315, MA AAR00188, RI AAL-10773 and VT AL957102

Test Report PLM-7.23.0 Printed 5/12/2011 2:23:15 PM

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**Appendix B**

***Results of Testing for Lead-Based Paint***



**Results of XRF Testing  
Former Academy School (D-Wing)  
Glastonbury, CT**

<b>Location</b>	<b>Substrate</b>	<b>Color</b>	<b>Component</b>	<b>Result mg/cm<sup>2</sup></b>
<i>Basement</i>				
Storage B-1	Concrete	Blue	Wall	<0.1
	Wood	Brown	Door	<0.1
	Wood	Green	Door frame	<0.1
Hallway	Concrete	Yellow	Wall	<0.1
	Wood	Orange	Door	0.3
	Metal	Brown	Door frames	<0.1
Locksmith	Wood	Beige	Window frame	<b>3.5</b>
	Metal	Beige	Window	<0.1
	Concrete	Blue	Wall	0.3
Slop sink closet	Ceramic	Beige	Wall	<b>1.7</b>
Carpentry	Metal	Beige	Window	<0.1
	Wood	Beige	Window frame	0.3
Room D-17	Metal	Tan	Door	<b>7.d</b>
	Metal	Silver	Door	<b>1.7</b>
Room D-14	Wood	Orange	Door	<b>1.4</b>
Room D-10	Wood	Orange	Door	0.5
	Wood	Blue	Window frame	<0.1
	Wood	Blue	Window sill	<0.1
<i>Main Level</i>				
Hallway	Metal	Black	Deck joist	<0.1
	Plaster	Yellow	Wall	<0.1
	Metal	Tan	Locker	<0.1
Room D-101	Metal	Brown	Door frame	<0.1
	Wood	Beige	Window frame	0.2
	Wood	Beige	Window sill	<0.1
Room D-105	Wood	Yellow	Window frame	<0.1
	Wood	Brown	Door frame	<0.1

Results of XRF Testing Former Academy School (D-Wing) Glastonbury, CT				
	Plaster	Beige	Wall	<0.1
	Wood	Beige	Wainscot	<0.1
<i>Second floor</i>				
Stairwell	Metal	Brown	Rail	0.5
	Metal	Brown	Kick-plate	<0.1
	Metal	Brown	Stair baluster	0.4
Room D-206	Wood	Yellow	Window frame	0.2
	Plaster	Beige	Wall	<0.1
	Wood	Brown	Door frame	<0.1
Room D-205	Wood	Beige	Door frame	<0.1
	Plaster	Yellow	Wall	0.2
	Wood	Brown	Door frame	<0.1
Hallway	Wood	Beige	Display case	<0.1
<i>Exterior</i>				
Circle side	Wood	Brown	Door frame	15.5
	Metal	Brown	Door	<0.1
	Wood	Brown	Window frame	5.5
Rear	Metal	Green	Door	<0.1

**Appendix C**  
**Results of Testing for PCBs**

## EMSL Analytical, Inc.

<http://www.emsl.com>

3 Cooper St.  
Westmont, NJ 08108  
Phone: (856) 858-4800  
Fax: (856) 858-4571

EMSL

Attn: **Glenn Nelson**  
**Smith & Wessel Associates, Inc**  
**8 Church Street**  
**Suite 3**  
**Merrimac, MA 01860**  
Phone: (978) 346-4800  
Fax: (978) 346-7265

5/17/2011

The following analytical report covers the analysis performed on samples submitted to EMSL Analytical, Inc. on 5/11/2011. The results are tabulated on the attached data pages for the following client designated project:

**D Building, Glastonbury, CT (2153 Main Street)**

The reference number for these samples is EMSL Order #011102404. Please use this reference when calling about these samples. If you have any questions, please do not hesitate to contact me at (856) 858-4800.

Reviewed and Approved By:



Julia Smith - Laboratory Director or other approved signatory



The test results contained within this report meet the requirements of NELAP and/or the specific certification program that is applicable, unless otherwise noted.  
NELAP Certifications: NJ 04653, NY 10895, PA 68-00367

The samples associated with this report were received in good condition unless otherwise noted. This report relates only to those items tested as received by the laboratory. The QC data associated with the sample results meet the recovery and precision requirements established by the NELAP, unless specifically indicated. All results for soil samples are reported on a dry weight basis, unless otherwise noted. This report may not be reproduced except in full and without written approval by EMSL Analytical, Inc.

**EMSL Analytical, Inc.**

3 Cooper St., Westmont, NJ 08108

Phone: (856) 858-4800 Fax: (856) 858-4971 Email: jsmith@emsl.com



Attn: **Glenn Nelson**  
**Smith & Wessel Associates, Inc**  
**8 Church Street**  
**Suite 3**  
**Merrimac, MA 01860**

Customer ID: SMIT50  
 Customer PO:  
 Received: 05/11/11 12:00 PM  
 EMSL Order: 011102404

Fax: (978) 346-7265 Phone: (978) 346-4800  
 Project: D Building, Glastonbury, CT (2153 Main Street)

**Analytical Results**

Client Sample Description	Window Caulk 01	Collected:	5/10/2011	Lab ID:	0001	
Method	Parameter	Result	Reporting Limit	Units	Analysis Date	Analyst
3540C/8082	Aroclor-1016	ND	0.99	mg/Kg	5/13/2011	ehernandez
3540C/8082	Aroclor-1221	ND	0.99	mg/Kg	5/13/2011	ehernandez
3540C/8082	Aroclor-1232	ND	0.99	mg/Kg	5/13/2011	ehernandez
3540C/8082	Aroclor-1242	ND	0.99	mg/Kg	5/13/2011	ehernandez
3540C/8082	Aroclor-1248	ND	0.99	mg/Kg	5/13/2011	ehernandez
3540C/8082	Aroclor-1254	ND	0.99	mg/Kg	5/13/2011	ehernandez
3540C/8082	Aroclor-1260	ND	0.99	mg/Kg	5/13/2011	ehernandez
3540C/8082	Aroclor-1262	ND	0.99	mg/Kg	5/13/2011	ehernandez
3540C/8082	Aroclor-1268	ND	0.99	mg/Kg	5/13/2011	ehernandez

Client Sample Description	Door Caulk 02	Collected:	5/10/2011	Lab ID:	0002	
Method	Parameter	Result	Reporting Limit	Units	Analysis Date	Analyst
3540C/8082	Aroclor-1016	ND	0.90	mg/Kg	5/13/2011	ehernandez
3540C/8082	Aroclor-1221	ND	0.90	mg/Kg	5/13/2011	ehernandez
3540C/8082	Aroclor-1232	ND	0.90	mg/Kg	5/13/2011	ehernandez
3540C/8082	Aroclor-1242	ND	0.90	mg/Kg	5/13/2011	ehernandez
3540C/8082	Aroclor-1248	ND	0.90	mg/Kg	5/13/2011	ehernandez
3540C/8082	Aroclor-1254	ND	0.90	mg/Kg	5/13/2011	ehernandez
3540C/8082	Aroclor-1260	ND	0.90	mg/Kg	5/13/2011	ehernandez
3540C/8082	Aroclor-1262	ND	0.90	mg/Kg	5/13/2011	ehernandez
3540C/8082	Aroclor-1268	ND	0.90	mg/Kg	5/13/2011	ehernandez

**Definitions:**

ND - indicates that the analyte was not detected at the reporting limit

EMSL Analytical, Inc.  
 2 Cooper St  
 Westport, NJ 08166  
 Phone: (877) 885-5195  
 Fax: (877) 885-5195

**Environmental Chemistry**  
**Chain of Custody**  
 EMSL Order Number (Lab Use Only):

01102904



EMSL ANALYTICAL, INC.  
 CHAIN OF CUSTODY FORM

Report To Contact Name: Glenn Nelson		Bill To Company: Same		Sampled By (Signature): <i>Glenn Nelson</i>			
Company Name: Smith & Wessel (SMIT50)		Attention To:		Number of Samples in Shipment: 2			
Address 1: 8 Church Street		Address 1:		Date of Shipment: 5-10-11			
Address 2: Merrimac, MA 01860		Address 2:		U.S. State where Samples Collected: CT			
Phone: (877) 885 5195 Fax: (508) 885 5195		Phone:		Purchase Order:			
Email Results To: gnelson@smithwessel.com		Project Name: D Building (Glenborough) CT (2153 Main Street)					
Standard Turnaround Time: <input checked="" type="checkbox"/> 2 Weeks		The following TAT's are subject to lab approval: <input type="checkbox"/> 1 Week <input type="checkbox"/> 4 Days <input type="checkbox"/> 3 Days <input type="checkbox"/> 2 Days <input type="checkbox"/> 1 Day					
Failure to complete will hinder processing of samples							
Client Sample ID	Comp Grab	Date/Time	Matrix	Preservative	TCLP RCA Meths	PCa	Comments
1 Wishes Creek 01			Q	None		X	
2 Deer Creek 02						X	SW-846 method 9082
Released By (Signature): <i>Glenn Nelson</i>		Date & Time: 5-10-11		Received By: <i>ES</i>		Date & Time: 5/11/11 12:00 pm	
Please indicate reporting requirements: <input type="checkbox"/> Results Only <input type="checkbox"/> Results and QC <input type="checkbox"/> Reduced Deliverables <input type="checkbox"/> Disk Deliverable <input type="checkbox"/> Other							
Instructions or Comments:							