



HAZARDOUS MATERIALS SURVEY
Former Andover DPW Yard
11 Lewis Street
Andover, Massachusetts

September 2019

Project 17487



HAZARDOUS MATERIALS SURVEY

Former Andover DPW Yard

11 Lewis Street

Andover, Massachusetts

September 9, 2019

Project 17487

Prepared for:

The Town of Andover

36 Bartlet Street

Andover, MA 01810

ATTN: Ihor Raniuk

Prepared by:

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GREEN 
ENVIRONMENTAL

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1.0 INTRODUCTION

Green Environmental, Inc. (GREEN) was retained by the Town of Andover to conduct a hazardous materials survey of the buildings at the former Department of Public Works (DPW) yard located at 11 Lewis Street in Andover, Massachusetts. GREEN understands that the buildings are anticipated to be demolished. GREEN completed this Hazardous Materials Survey to support demolition activities.

1.1 Building Description

The property consists of approximately 1.9 acres of land and is improved with two (2) warehouse/garage buildings, two (2) salt barns, and one (1) abandoned shed. The warehouse/garage buildings are constructed with a slab-on-grade with concrete block or metal sheeting construction with flat rubber roofs. The salt barns are wood construction with tin roofs. The abandoned shed building is of wood construction with rolled asphalt roofing.

Representative site photographs are included in **Appendix A**.

1.2 Scope of Work

GREEN was retained to conduct a Hazardous Materials Survey to document the presence of oil or hazardous materials at the subject building that may require abatement and/or special handling and disposal prior to building renovation/demolition activities. The Survey included assessment for the presence of asbestos and the cataloging of oils and/or hazardous materials located within the buildings. Bulk samples of suspect building materials were collected using destructive measures, and submitted for laboratory analysis as appropriate.

2.0 ASBESTOS SURVEY

2.1 Regulatory Background

Regulations for asbestos exposure and/or asbestos releases have been promulgated by the United States Environmental Protection Agency (EPA), U.S. Occupational Safety and Health Administration (OSHA), and Massachusetts Department of Environmental Protection (DEP).

OSHA regulates asbestos in the workplace through the Asbestos for General Industry Standard (29 Code of Federal Regulations [CFR] 1910.1001) and the removal of regulated asbestos-containing material (RACM) through the Asbestos Standard for Construction (29 CFR 1926.1101). OSHA regulations are created for the protection of the health of workers who may be occupationally exposed to asbestos. These occupations include asbestos abatement, construction activities, building maintenance, and others. OSHA requires that asbestos containing materials (ACMs) be removed or appropriately abated prior to any work which will disturb the material, including demolition and renovation. Additionally, OSHA stipulates that thermal system insulation (TSI), surfacing materials, and floor tile installed before 1980 must be presumed to be ACM unless appropriate sampling and analysis prove otherwise.

EPA and DEP regulate ACM associated with building demolition, renovation, and abatement projects. The regulations are promulgated via the National Emission Standards for Hazardous Air Pollutants (NESHAP 40 CFR part 61) and the Code of Massachusetts Regulations (310 CMR part 7.00, 7.09, and 7.15). The regulations are developed to protect public health and the environment and require that buildings be inspected for asbestos prior to any demolition or renovation. Further, the regulations require that all affected friable and non-friable ACM which is damaged or will be damaged as a result of the demolition or renovation activities be properly removed or abated prior to disturbance by the work.

NESHAP defines three types of ACM:

- Friable ACM: ACM that can be reduced to powder by hand pressure requiring removal prior to renovation or demolition (e.g., thermal system insulation (TSI), plaster, joint compound, ceiling tiles).
- Category I non-friable ACM: ACM that is not friable and does not require removal prior to demolition, unless these materials have become friable, will become friable if disturbed, or are in poor condition; must be removed prior to renovation (e.g., resilient floor covering, packings, gaskets, asphalt roofing).
- Category II non-friable ACM: ACM that is not friable and does not require removal prior to demolition, unless these materials have become friable, will become friable if disturbed, or are in poor condition; must be removed prior to renovation (all other non-friable ACM).

RACM is friable ACM and non-friable ACM that may become friable during demolition or renovation activities. Practically speaking, both Category I non-friable ACM and Category II non-friable ACM will become friable in a typical commercial demolition or renovation scenario and must be abated prior to the work.

The Massachusetts Department of Labor Standards (DLS), as defined by 453 CMR 6.00, includes licensing requirements for asbestos abatement contractors, workers, and consultants, as well as requirements for asbestos abatement. All applicable federal, state, and local regulations must be followed during asbestos abatement.

2.2 Sample Collection and Analysis

Bulk samples were collected based on type and quantity of each suspect material following the sampling guidelines set forth in the Asbestos Hazard Emergency Response Act (AHERA 40 CFR 763.86). Field assessment included inspection for suspect materials by EPA's AHERA regulation which include:

- Thermal system insulation (TSI) (e.g., pipe/boiler lagging, duct insulation);
- Surfacing materials (e.g., spray-on insulation, texturing materials, plaster), and;
- Miscellaneous materials (e.g., ceiling tiles, transite panels, flooring, vibration joints, drywall).

Fiberglass, foam glass, rubber, wood products, plastic products, glass and steel were not sampled as they are not considered suspect ACM. GREEN requested copies of prior asbestos documentation from the owner's representative. No information was available to document past asbestos abatement on the property or prior test results.

On August 27, 2019, Massachusetts Certified Asbestos Inspector, Mr. Luke Krzyzewski (AI900665) conducted bulk sampling activities. A copy of personnel accreditation is included in **Appendix B**. The building was visually evaluated for the presence of suspect asbestos-containing materials and homogeneous building materials. A homogeneous material is a surfacing material, thermal system insulation material, or miscellaneous material that is uniform in color and texture. A total of 124 bulk samples of suspect materials were collected. The samples were collected using hand tools, and sampling equipment was cleaned between the collection of samples.

Each interior sample location was wetted with water prior to sampling to avoid dust creation during sampling. Bulk samples were placed in individual air tight plastic bags and transferred to Asbestos Identification Laboratory of Woburn, Massachusetts for analysis via EPA 600/R-93/116 and/or EPA Interim Method 600/M4-82-020 methods using Polarized Light Microscopy (PLM). Asbestos Identification Laboratory is licensed by the Commonwealth of Massachusetts (#AA 000208) for bulk asbestos analysis. The field survey, chain of custody documentation and laboratory certificates of analysis are included in **Appendix C**. In accordance with NESHAP and DEP regulations, materials are considered asbestos-containing if they contain at least 1% asbestos as determined by PLM.

The following is a list of materials that were determined to be **asbestos-containing**:

Water/Forestry Department Building

- Rectangle Pattern Sheet Floor
- Door Caulking

Highway Department Building

- 9" Red Floor Tile
- 9" Red Floor Tile Black Mastic

Shed

- Field/Flash Material

The following is a list of materials that were determined to contain **trace (<1%) asbestos**:

Highway Department Building

- Black Coating on Roof Deck

The following is a list of materials that were determined to be **non-asbestos-containing**:

Water/Forestry Department Building

- Square Patter Sheet Floor and Adhesive
- Red Duct Sealant
- 2' x 2' Fissure Dot Ceiling Tile
- Exterior Black Water Proofing
- Gray Exterior Window Caulking
- Field/Flash Material
- Drywall
- Gray Window Caulking
- Fiberboard Ceiling Material
- Exterior Garage Door Caulking
- Exterior Chimney Caulking
- Black Coating on Deck

Highway Department Building

- 12" Tan Floor Tile and Black Mastic
- Rubber Sheet Floor Adhesive
- Brown Cove Base and Adhesive
- Ceramic Wall Tile Grout and Adhesive
- Joint Compound
- Brown Window Caulking
- 2' x 2' Fissure Dot Ceiling Tile
- Exterior Brown Window Caulking
- Gray Roof Caulking
- White Vent Caulking
- 12" Beige Floor Tile and Black Mastic
- Black Cove Base and Adhesive
- Ceramic Floor Tile Grout and Adhesive
- Drywall
- Textured Ceiling
- Gray Duct Sealant
- Exterior Gray Building Caulking
- Exterior Brown Vent Caulking
- Field/Flash Material
- Black Vent Caulking

Shed

- Siding Paper

Based on our review of analytical data associated with the above bulk sample collection, asbestos was **positively** identified at 11 Lewis Street. Please refer to **Appendix D** which summarizes the materials, locations, and estimated quantities that tested positive for asbestos at the DPW Yard building located at 11 Lewis Street. Materials containing trace amounts (less than 1%) of asbestos are not fully regulated as an ACM in Massachusetts, however, they must still be handled in accordance with OSHA 1926.1101 and per current DEP regulations, must be disposed of under an asbestos waste shipment record as asbestos-containing waste material. Site Schematics depicting the approximate location of identified ACMs are included as **Figures 1, 2, & 3**. Site photographs are included in **Appendix A**.

3.0 OTHER HAZARDOUS MATERIALS

3.1 Paints, Oils & Cleaners

One (1) 15-gallon hydraulic oil tank, associated with the above grade vehicle lift, is located within the building. Prior to removal activities, remaining oil (if any) should be removed and disposed or reused as appropriate. Lift closure should be in accordance with applicable environmental regulations.

Miscellaneous cleaning or maintenance supplies were noted within the property building. Please refer to **Appendix E**, for approximate quantities and locations of oil, paints, and cleaners

3.2 Mercury Containing Devices

No mercury containing devices were noted within the buildings at the 11 Lewis Street property.

3.3 Fluorescent Lights & Ballasts

Fluorescent light fixtures were noted within the buildings. Fluorescent lighting tubes can contain both mercury and lead, and have special handling and disposal requirements. Under federal regulations used fluorescent lamp becomes a waste on the day that it is discarded. The disposal of fluorescent lighting tubes is regulated under the Resource Conservation and Recovery Act (RCRA).

Additionally, fluorescent light ballasts manufactured prior to 1979 may contain polychlorinated biphenyls (PCBs). PCB-based oils were used as insulating oil in many types of ballast to provide cooling and electrical isolation. PCBs are regulated by the EPA and also have special handling and disposal requirements, depending on the concentration.

The light fixture should be inspected for “No PCBs” labeling, prior to removal. Lighting ballasts which contain PCBs should be segregated from non-PCB containing ballasts and properly disposed. Ballasts with no labeling should be considered PCB. The fluorescent tubes should be transported off-site for recycling. Please refer to **Appendix E**, for approximate quantities and locations of fluorescent lights and ballasts.

3.4 Refrigerants

Air conditioning units, refrigerators, and a water bubbler were observed within the buildings. Prior to disposal, all refrigerants should be recovered and properly reclaimed prior to dismantling or disposal in accordance with federal law 40 CFR Part 82 Subpart F. Please refer to **Appendix E**, for approximate quantities and locations of refrigerants.

3.5 Emergency Equipment

Emergency lights and exit lights were observed within the subject buildings. Batteries associated with these units are an alkaline, NiMH and NiCAD source. The batteries should be either recycled or properly disposed, prior to being disturbed. Emergency exit signs can also contain radioactive components requiring proper disposal. Several dry chemical fire extinguishers were noted in the buildings. These should be properly recycled prior if disposal. Please refer to **Appendix E**, for approximate quantities and locations of emergency equipment.

4.0 RESULTS AND RECOMMENDATIONS

GREEN has completed a Hazardous Materials Survey of the former DPW buildings located at 11 Lewis Street in Andover, Massachusetts. The property consists of approximately 1.9 acres of land and is improved with two (2) warehouse/garage buildings, two (2) salt barns, and one (1) abandoned shed. GREEN completed this Hazardous Materials Survey to support the anticipated demolition activities. The Survey included assessment for the presence of asbestos via bulk sample collection and laboratory analysis, and the cataloging of oils and/or hazardous materials located within the buildings.

Asbestos was positively identified at the 11 Lewis Street buildings, as summarized in **Section 2** and **Appendix D**. In accordance with NESHAP and DEP regulations, all friable ACM, or materials made friable by demolition or renovation activities, must be removed from the building by a licensed asbestos abatement contractor, prior to demolition or renovation. Removal of ACM is regulated by MassDEP and DLS. GREEN recommends the identified ACMs be removed from the buildings in accordance with applicable asbestos abatement regulations prior to the start of planned renovation activities. Asbestos abatement must be done by a Massachusetts licensed Asbestos Abatement Contractor and be properly disposed of off-site at an appropriate receiving facility in compliance with all applicable state and federal regulations. The Massachusetts asbestos regulations require a visual inspection and clearance air monitoring at the completion of an asbestos abatement project. Full-time project monitoring activities during asbestos abatement activities to ensure compliance with design specifications and regulations is recommended.

DEP and DLS both require notification of asbestos abatement activities. DEP regulations require notification of abatement of any amount of asbestos at least 10 working days prior to conducting any removal work. DLS regulations require notification of an asbestos response action of more than 3 linear-feet or 3 square feet of ACM at least 10 calendar days prior to conducting asbestos removal work. Notifications made to DEP via form ANF-001 satisfy both DEP and DLS requirements. Note that DEP notification requirements are more stringent. Additionally, DEP requires separate notification of construction or demolition project 10 working days prior to the start of work. Construction/demolition notification is made using DEP's BWP AQ-06 form.

Materials containing trace amounts (less than 1%) of asbestos are not fully regulated as an ACM in Massachusetts, however, they must still be handled in accordance with OSHA 1926.1101 and per current DEP regulations, must be disposed of under an asbestos waste shipment record as asbestos-containing waste material.

Other oil and hazardous materials were identified within the building and should be properly segregated, disposed/or recycled as appropriate as summarized in **Section 4** and **Appendix E** of this Survey report.

5.0 LIMITATIONS

This report documents the findings of a Hazardous Materials Survey conducted of the buildings located at 11 Lewis Street in Andover, Massachusetts. The Survey was performed to support renovation/demolition of the existing structures. The opinions expressed by GREEN are based solely on the observations, sampling and analysis, and information cited in this report. Observations were made at the subject site under the conditions stated. The purpose of this study was to determine the nature and approximate quantities of hazardous materials that can be anticipated prior to renovation. This report does not constitute a complete determination of whether past or current owners, operators or occupants of the site have been in compliance with all applicable state, federal or local environmental regulations. This report does not constitute an AHERA survey. GREEN makes no representative regarding material located in inaccessible areas.

Semi-destructive measures were implemented to obtain bulk samples for asbestos analysis. However, GREEN makes no representation regarding inaccessible materials which may be located within walls, below grade or other currently inaccessible areas. Additional field measurements and/or bulk sampling may be required following the exposure/removal of walls, flooring, etc. Should additional material be identified during demolition activities that are not listed in this report the work should be stopped and samples collected, to determine if hazardous classification is warranted.

Our conclusions are based solely on the information described herein and are believed to be representative of conditions at the time of the field survey. If additional information concerning the environmental conditions of the subject site becomes available, GREEN should be notified and presented with that information. Based on the new information, we will reevaluate the conclusions stated in this report to determine whether modifications are warranted.

This report is not a project specification and should not be used as a bidding document, including an asbestos abatement or building demolition specification.

We appreciate the opportunity to provide you with these environmental services. Please contact the undersigned with any questions at 617-479-0550.

Sincerely,
GREEN ENVIRONMENTAL, INC.



Luke Krzyzewski
Project Manager
Environmental Consulting Services

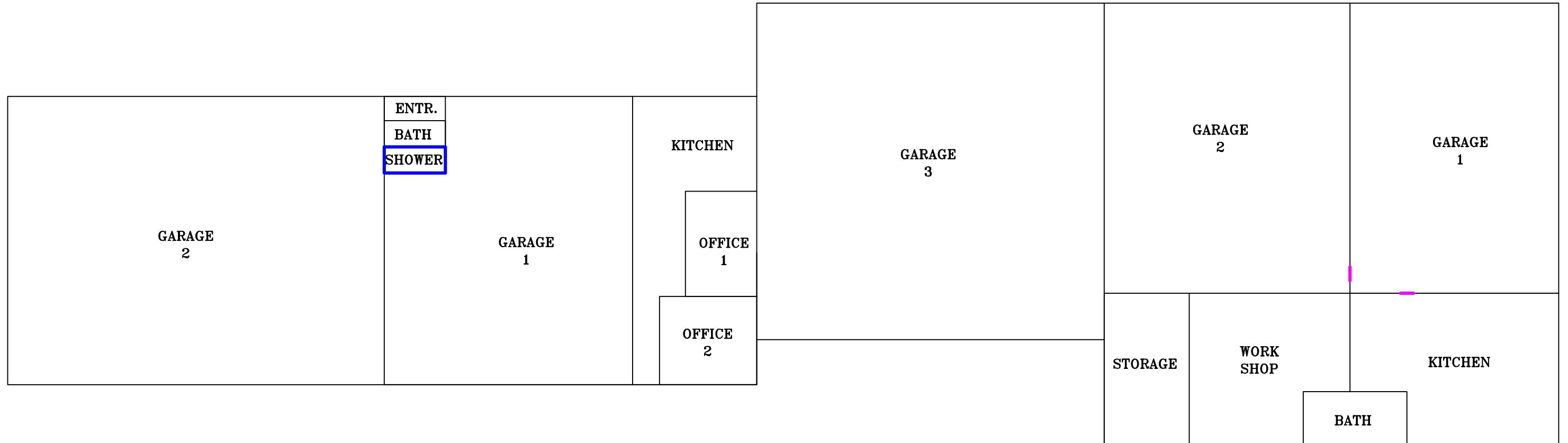


Kristen Awed-Ladas
Senior Project Manager
Environmental Consulting Services



Plans and Figures





— APPROXIMATE LOCATION OF ASBESTOS-CONTAINING
RECTANGLE PATTERN SHEET FLOOR

— APPROXIMATE LOCATION OF ASBESTOS-CONTAINING
DOOR CAULKING

WATER/FORESTRY DEPARTMENT BUILDING
11 LEWIS STREET – FORMER DPW YARD
ANDOVER, MASSACHUSETTS

TOWN OF ANDOVER
36 BARTLET STREET
ANDOVER, MASSACHUSETTS

GREEN ENVIRONMENTAL 

FIGURE: 1
PROJECT NO:17487
DATE: SEPT 2019

APPROVED BY: KA
CHECKED BY: KA
DRAWN BY: LK



APPROXIMATE LOCATION OF ASBESTOS-CONTAINING
9" RED FLOOR TILE AND MASTIC

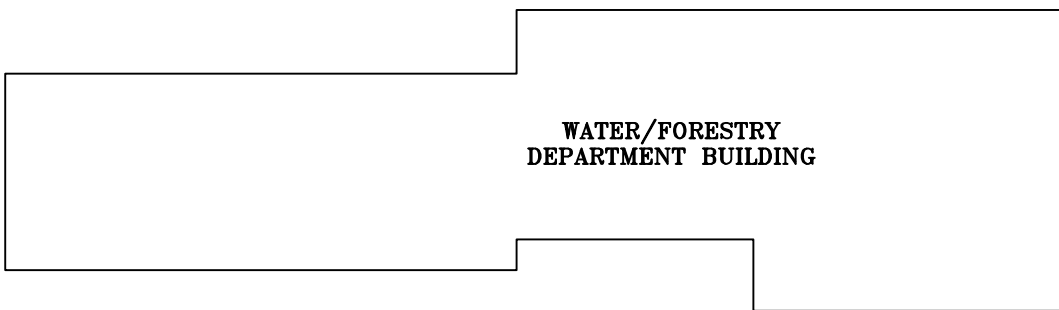
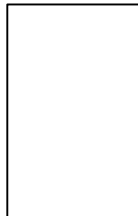
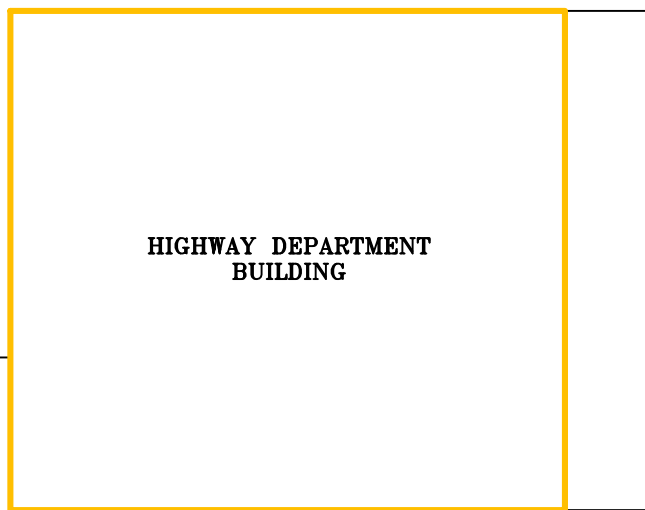
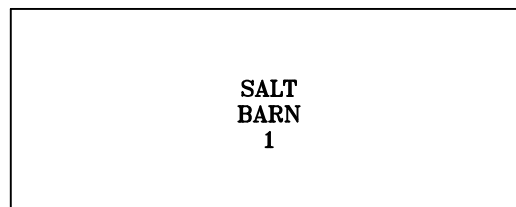
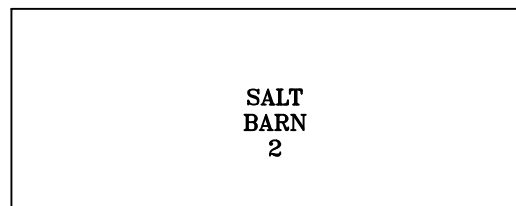
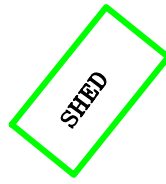
HIGHWAY DEPARTMENT BUILDING
11 LEWIS STREET - OLD DPW YARD
ANDOVER, MASSACHUSETTS

TOWN OF ANDOVER
36 BARTLET STREET
ANDOVER, MASSACHUSETTS

GREEN ENVIRONMENTAL

FIGURE: 2
PROJECT NO:17487
DATE: SEPT 2019

APPROVED BY: KA
CHECKED BY: KA
DRAWN BY: LK



ASBESTOS-CONTAINING FIELD FLASH MATERIAL



TRACE (<1%) ASBESTOS-CONTAINING BLACK COATING ON METAL DECK

NOTE: Materials containing trace amounts (less than 1%) of asbestos are not fully regulated as an ACM in Massachusetts, however, they must still be handled in accordance with OSHA 1926.1101 and per current DEP regulations, must be disposed of under an asbestos waste shipment record as asbestos-containing waste material.

OVERVIEW SITE PLAN
11 LEWIS STREET - FORMER DPW YARD
ANDOVER, MASSACHUSETTS

TOWN OF ANDOVER
36 BARTLET STREET
ANDOVER, MASSACHUSETTS

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FIGURE: 3
PROJECT NO.: 17487
DATE: SEPT. 2019

APPROVED BY: KA
CHECKED BY: KA
DRAWN BY: LK



Appendix A





A view of the western portion of the Water/Forestry Department building, facing southwest



A view of the eastern portion of the Water/Forestry Department building, facing south



A view of the Highway Department building, as viewed from the south



A view of the Highway Department building, as viewed from the southeast



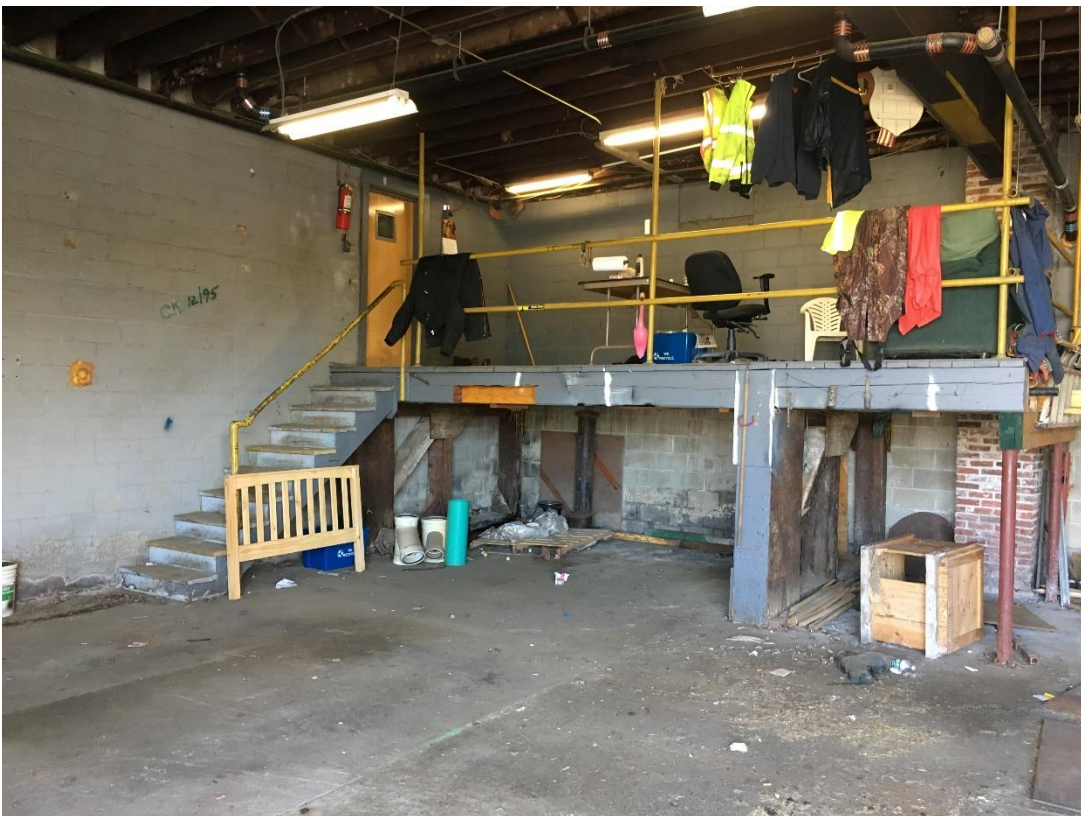
A view of the salt barn building, as viewed from the southwest



A view of the shed building as viewed from the south



A view of the garage area within the Water/Forestry Department building



A view of the garage area within the Water/Forestry Department building



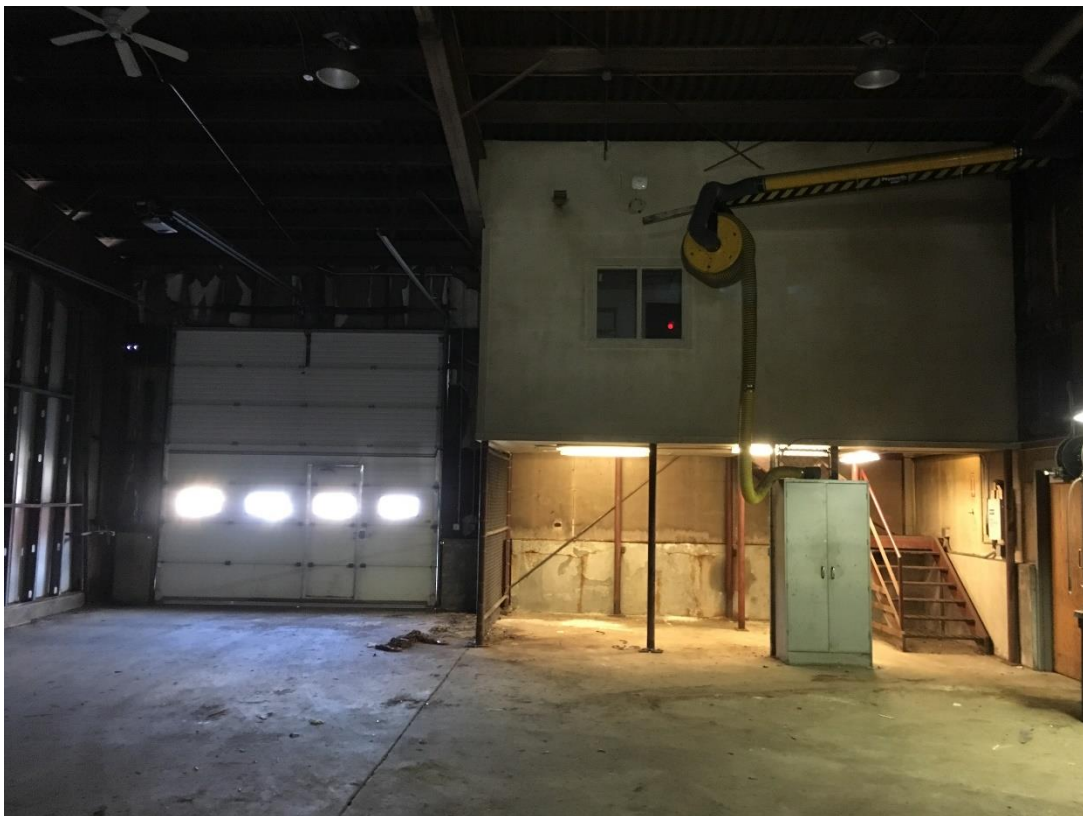
A view of the office/kitchen area within the Water/Forestry Department building



A view of the garage area within the Water/Forestry Department building



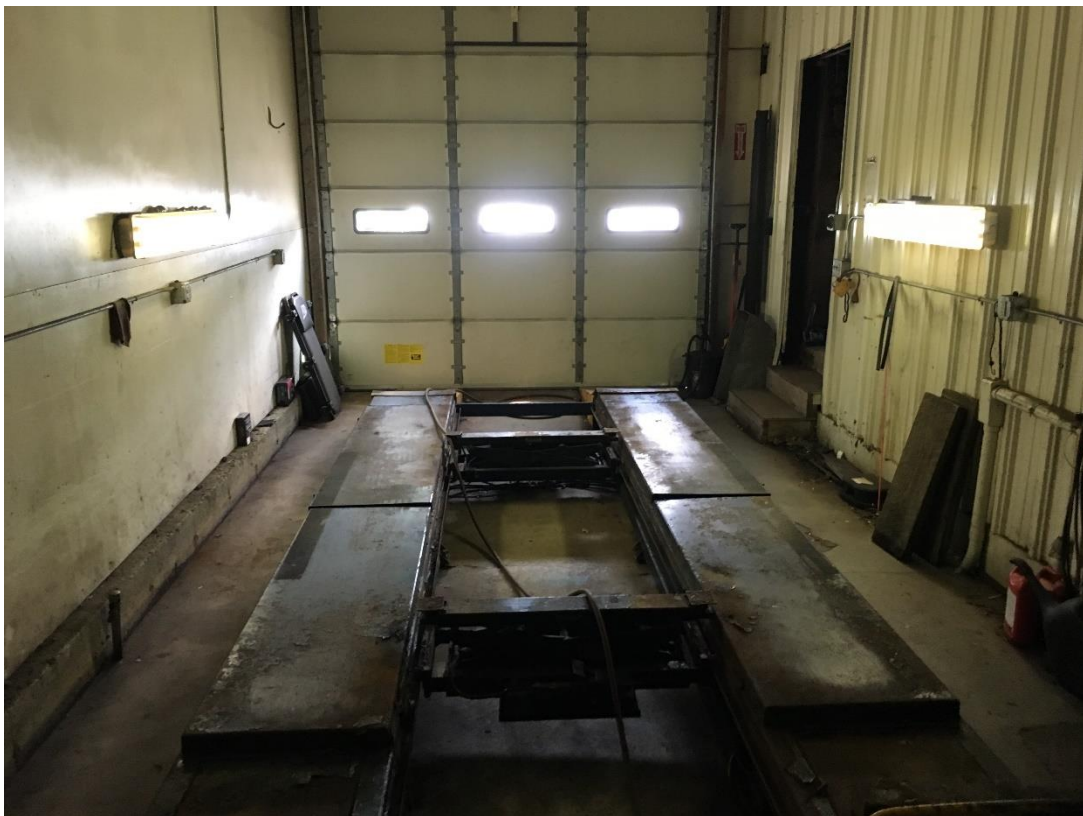
A view of the mechanic's garage within the Highway Department building



A view of the loft office area within the Highway Department building



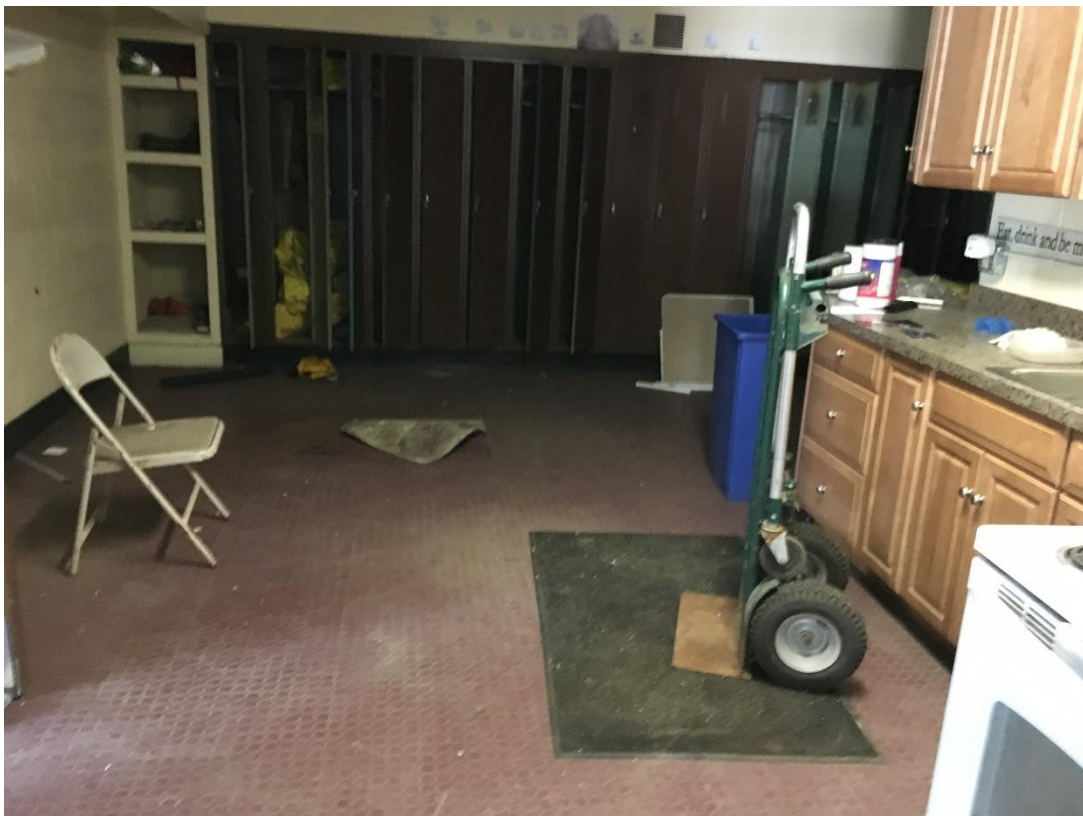
A view of the garage area within the Highway Department building



A view of the auto repair area within the Highway Department building



A view of the office area within the Highway Department building



A view of the kitchen area within the Highway Department building



A view of the interior portion of the salt barn building



A representative view of the asbestos-containing roof material on the shed



A view of the used tires located east of the Highway Department building



Appendix B



GREEN ENVIRONMENTAL, INC.

Personnel Accreditation

Accredited Inspector & Management Planner

Name: Luke Krzyzewski

Asbestos Inspector Accreditation Number: AI900665

Asbestos Management Planner Accreditation Number: AP900477

Signature: 

Licensure:





Appendix C





Asbestos Identification Laboratory

165 New Boston St., Ste 227
Woburn, MA 01801
781-932-9600

Web: www.asbestosidentificationlab.com
Email: mikemanning@asbestosidentificationlab.com

Batch: 46154



September 04, 2019

Luke Krzyzewski
Green Environmental Inc.
296 C Weymouth St.
Rockland, MA 02370

Project Name: 11 Lewis Street, Andover- DPW Yard
Project Number: #17487
Date Sampled: 2019-08-28
Work Received: 2019-08-29
Work Analyzed: 2019-09-03

Analysis Method: BULK PLM ANALYSIS EPA/600/R-93/116

Dear Luke Krzyzewski,

Asbestos Identification Laboratory has completed the analysis of the samples from your office for the above referenced project. The information and analysis contained in this report have been generated using the EPA /600/R-93/116 Method for the Determination of Asbestos in Bulk Building Materials. Materials or products that contain more than 1% of any kind or combination of asbestos are considered an asbestos containing building material as determined by the EPA. This Polarized Light Microscope (PLM) technique may be performed either by visual estimation or point counting. Point counting provides a determination of the area percentage of asbestos in a sample. If the asbestos is estimated to be less than 10% by visual estimation of friable material, the determination may be repeated using the point counting technique. The results of the point counting supersede visual PLM results. Results in this report only relate to the items tested. This report may not be used by the customer to claim product endorsement by NVLAP or any other U.S. Government Agency.

Laboratory results represent the analysis of samples as submitted by the customer. Information regarding sample location, description, area, volume, etc., was provided by the customer. Asbestos Identification Laboratory is not responsible for sample collection activities or analytical method limitations. Unless notified in writing to return samples, Asbestos Identification Laboratory discards customer samples after 30 days. Samples containing subsamples or layers will be analyzed separately when applicable. Reports are kept at Asbestos Identification Laboratory for three years. This report shall not be reproduced, except in full, without the written consent of Asbestos Identification Laboratory.

- NVLAP Lab Code: 200919-0
- Massachusetts Certification License: AA000208
- State of Connecticut, Department of Public Health Approved Environmental Laboratory Registration Number: PH-0142
- State of Maine, Department of Environmental Protection Asbestos Analytical Laboratory License Number: LB-0078(Bulk) LA-0087(Air)
- State of Rhode Island and Providence Plantations. Department of Health Certification: AAL-121
- State of Vermont, Department of Health Environmental Health License AL934461

Thank you Luke Krzyzewski for your business.

Michael Manning
Owner/Director

Luke Krzyzewski
Green Environmental Inc.
296 C Weymouth St.
Rockland, MA 02370

Project Name: 11 Lewis Street, Andover- DPW Yard
Project Number: #17487
Date Sampled: 2019-08-28
Work Received: 2019-08-29
Work Analyzed: 2019-09-03

Analysis Method: BULK PLM ANALYSIS EPA/600/R-93/116

FieldID LabID	Material	Location	Color	Non-Asbestos %	Asbestos %
B-0828-1A 511952	Square Pattern Sheet Floor	1st, Water Dept Bath	multi	Non-Fibrous 100	None Detected
B-0828-1B 511953	Square Pattern Sheet Floor	1st, Water Dept Bath	multi	Non-Fibrous 100	None Detected
B-0828-2A 511954	Square Pattern Sheet Floor Adhesive	1st, Water Dept Bath	tan	Non-Fibrous 100	None Detected
B-0828-2B 511955	NO SAMPLE	NO SAMPLE	tan		Not Analyzed
B-0828-3A 511956	Rectangle Pattern Sheet Floor	1st, Forestry Dept Shower	multi	Non-Fibrous 80	Detected Chrysotile 20
B-0828-3B 511957	Rectangle Pattern Sheet Floor	1st, Forestry Dept Shower			Not Analyzed
B-0828-4A 511958	Rectangle Pattern Sheet Floor Adhesive	1st, Forestry Dept Shower	gray	Non-Fibrous 100	None Detected
B-0828-4B 511959	Rectangle Pattern Sheet Floor Adhesive	1st, Forestry Dept Shower	gray	Non-Fibrous 100	None Detected
B-0828-5A 511960	Drywall	1st, Water Dept Bath	multi	Cellulose 10 Non-Fibrous 90	None Detected
B-0828-5B 511961	Drywall	1st, Forestry Dept Bath	multi	Cellulose 10 Non-Fibrous 90	None Detected
B-0828-6A 511962	Red Duct Sealant	1st, Water Dept Bath	red	Non-Fibrous 100	None Detected
B-0828-6B 511963	Red Duct Sealant	1st, Water Dept Bath	red	Non-Fibrous 100	None Detected
B-0828-7A 511964	Gray Window Caulking	1st, Water Dept Garage 1	gray	Non-Fibrous 100	None Detected
B-0828-7B 511965	Gray Window Caulking	1st, Forestry Dept Garage 1	gray	Non-Fibrous 100	None Detected

FieldID LabID	Material	Location	Color	Non-Asbestos %	Asbestos %
B-0828-8A 511966	Door Caulking	1st, Water Dept Garage 1	tan	Non-Fibrous 98	Detected Chrysotile 2
B-0828-8B 511967	Door Caulking	1st, Water Dept Garage 1			Not Analyzed
B-0828-9A 511968	2x2 Fissure Dot Ceiling Tile	1st, Water Dept Storage	gray	Mineral Wool 40 Cellulose 40 Non-Fibrous 20	None Detected
B-0828-9B 511969	2x2 Fissure Dot Ceiling Tile	1st, Water Dept Storage	gray	Mineral Wool 40 Cellulose 40 Non-Fibrous 20	None Detected
B-0828-10A 511970	Fiberboard Ceiling	1st, Forestry Dept Office 1	brown	Cellulose 100	None Detected
B-0828-10B 511971	Fiberboard Ceiling	1st, Forestry Dept Office 1	brown	Cellulose 100	None Detected
B-0828-11A 511972	Black Water Proofing	Exterior, South Side	black	Non-Fibrous 100	None Detected
B-0828-11B 511973	Black Water Proofing	Exterior, South Side	black	Non-Fibrous 100	None Detected
B-0828-12A 511974	Garage Door Caulking	Exterior, North Side	white	Other 2 Non-Fibrous 98	None Detected
B-0828-12B 511975	Garage Door Caulking	Exterior, North Side	white	Other 2 Non-Fibrous 98	None Detected
B-0828-13A 511976	Gray Window Caulking	Exterior, East Side	gray	Non-Fibrous 100	None Detected
B-0828-13B 511977	Gray Window Caulking	Exterior, South Side	gray	Non-Fibrous 100	None Detected
B-0828-14A 511978	Asphalt Shingle	Exterior, South Side	black	Cellulose 20 Non-Fibrous 80	None Detected
B-0828-14B 511979	Asphalt Shingle	Exterior, South Side	black	Cellulose 20 Non-Fibrous 80	None Detected
B-0828-15A 511980	Chimney Caulking	Exterior, Roof	black	Non-Fibrous 100	None Detected
B-0828-15B 511981	Chimney Caulking	Exterior, Roof	black	Non-Fibrous 100	None Detected
B-0828-16A 511982	Field/Flash Material	Exterior, Roof	multi	Fiberglass 3 Non-Fibrous 97	None Detected
B-0828-16B 511983	Field/Flash Material	Exterior, Roof	multi	Fiberglass 3 Non-Fibrous 97	None Detected

FieldID LabID	Material	Location	Color	Non-Asbestos %	Asbestos %
B-0828-17A 511984	Black Coating on Deck	Exterior, Roof	black	Cellulose 30 Non-Fibrous 70	None Detected
B-0828-17B 511985	Black Coating on Deck	Exterior, Roof	black	Cellulose 30 Non-Fibrous 70	None Detected
B-0828-18A 511986	9" Floor Tile	1st, Office	red	Non-Fibrous 98	Detected Chrysotile 2
B-0828-18B 511987	9" Floor Tile	1st, Office			Not Analyzed
B-0828-19A 511988	9" Red Floor Tile Black Mastic	1st, Office	black	Non-Fibrous 90	Detected Chrysotile 10
B-0828-19B 511989	9" Red Floor Tile Black Mastic	1st, Office			Not Analyzed
B-0828-20A 511990	12" Tan Floor Tile	1st, Kitchen	gray	Non-Fibrous 100	None Detected
B-0828-20B 511991	12" Tan Floor Tile	1st, Kitchen	gray	Non-Fibrous 100	None Detected
B-0828-21A 511992	12" Tan Floor Tile Black Mastic	1st, Kitchen	black	Non-Fibrous 100	None Detected
B-0828-21B 511993	12" Tan Floor Tile Black Mastic	1st, Kitchen	black	Non-Fibrous 100	None Detected
B-0828-22A 511994	12" Beige Floor Tile	1st, Loft	tan	Non-Fibrous 100	None Detected
B-0828-22B 511995	12" Beige Floor Tile	1st, Loft	tan	Non-Fibrous 100	None Detected
B-0828-23A 511996	12" Beige Floor Tile Black Mastic	1st, Loft	black	Non-Fibrous 100	None Detected
B-0828-23B 511997	12" Beige Floor Tile Black Mastic	1st, Loft	black	Non-Fibrous 100	None Detected
B-0828-24A 511998	Rubber Sheet Floor Adhesive	1st, Office	tan	Non-Fibrous 100	None Detected
B-0828-24B 511999	Rubber Sheet Floor Adhesive	1st, Kitchen	tan	Non-Fibrous 100	None Detected
B-0828-25A 512000	Black Cove Base	1st, Office	black	Non-Fibrous 100	None Detected
B-0828-25B 512001	Black Cove Base	1st, Kitchen	black	Non-Fibrous 100	None Detected

FieldID LabID	Material	Location	Color	Non-Asbestos %	Asbestos %
B-0828-26A 512002	Black Cove Base Adhesive	1st, Office	tan	Non-Fibrous 100	None Detected
B-0828-26B 512003	Black Cove Base Adhesive	1st, Kitchen	tan	Non-Fibrous 100	None Detected
B-0828-27A 512004	Brown Cove Base	1st, Loft	brown	Non-Fibrous 100	None Detected
B-0828-27B 512005	Brown Cove Base	1st, Loft	brown	Non-Fibrous 100	None Detected
B-0828-28A 512006	Brown Cove Base Adhesive	1st, Loft	yellow	Non-Fibrous 100	None Detected
B-0828-28B 512007	Brown Cove Base Adhesive	1st, Loft	yellow	Non-Fibrous 100	None Detected
B-0828-29A 512008	Ceramic Floor Tile Adhesive	1st, Bath	brown	Non-Fibrous 100	None Detected
B-0828-29B 512009	Ceramic Floor Tile Adhesive	1st, Bath	tan	Non-Fibrous 100	None Detected
B-0828-30A 512010	Ceramic Floor Tile Grout	1st, Bath	gray	Non-Fibrous 100	None Detected
B-0828-30B 512011	Ceramic Floor Tile Grout	1st, Bath	gray	Non-Fibrous 100	None Detected
B-0828-31A 512012	Ceramic Wall Tile Adhesive	1st, Bath	tan	Non-Fibrous 100	None Detected
B-0828-31B 512013	Ceramic Wall Tile Adhesive	1st, Bath	tan	Non-Fibrous 100	None Detected
B-0828-32A 512014	Ceramic Wall Tile Grout	1st, Bath	white	Non-Fibrous 100	None Detected
B-0828-32B 512015	Ceramic Wall Tile Grout	1st, Bath	white	Non-Fibrous 100	None Detected
B-0828-33A 512016	Drywall	1st, Kitchen	multi	Cellulose 20 Non-Fibrous 80	None Detected
B-0828-33B 512017	Drywall	1st, Kitchen	multi	Cellulose 20 Non-Fibrous 80	None Detected
B-0828-34A 512018	Joint Compound	1st, Kitchen	white	Non-Fibrous 100	None Detected
B-0828-34B 512019	Joint Compound	1st, Kitchen	white	Non-Fibrous 100	None Detected

FieldID LabID	Material	Location	Color	Non-Asbestos %	Asbestos %
B-0828-34C 512020	Joint Compound	1st, Kitchen	white	Non-Fibrous 100	None Detected
B-0828-35A 512021	Joint Compound	1st, Loft	white	Non-Fibrous 100	None Detected
B-0828-35B 512022	Joint Compound	1st, Loft	white	Non-Fibrous 100	None Detected
B-0828-35C 512023	Joint Compound	1st, Loft	white	Non-Fibrous 100	None Detected
B-0828-36A 512024	Drywall	1st, Loft	multi	Cellulose 15 Non-Fibrous 85	None Detected
B-0828-36B 512025	Drywall	1st, Loft	multi	Cellulose 20 Non-Fibrous 80	None Detected
B-0828-37A 512026	Drywall	1st, Auto Repair	multi	Cellulose 25 Non-Fibrous 75	None Detected
B-0828-37B 512027	Drywall	1st, Auto Repair	multi	Cellulose 20 Non-Fibrous 80	None Detected
B-0828-38A 512028	Joint Compound	1st, Auto Repair	white	Non-Fibrous 100	None Detected
B-0828-38B 512029	Joint Compound	1st, Auto Repair	white	Non-Fibrous 100	None Detected
B-0828-38C 512030	Joint Compound	1st, Auto Repair	white	Non-Fibrous 100	None Detected
B-0828-38D 512031	Joint Compound	1st, Auto Repair	white	Non-Fibrous 100	None Detected
B-0828-38E 512032	Joint Compound	1st, Auto Repair	white	Non-Fibrous 100	None Detected
B-0828-39A 512033	Textured Ceiling	1st, Auto Repair	white	Non-Fibrous 100	None Detected
B-0828-39B 512034	Textured Ceiling	1st, Auto Repair	white	Non-Fibrous 100	None Detected
B-0828-39C 512035	Textured Ceiling	1st, Auto Repair	white	Non-Fibrous 100	None Detected
B-0828-39D 512036	Textured Ceiling	1st, Auto Repair	white	Non-Fibrous 100	None Detected
B-0828-39E 512037	Textured Ceiling	1st, Auto Repair	white	Non-Fibrous 100	None Detected

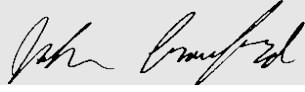
FieldID LabID	Material	Location	Color	Non-Asbestos %	Asbestos %
B-0828-40A 512038	Brown Window Caulking	1st, Office	brown	Non-Fibrous 100	None Detected
B-0828-40B 512039	Brown Window Caulking	1st, Office	brown	Non-Fibrous 100	None Detected
B-0828-41A 512040	Gray Duct Sealant	1st, Mechanics Garage	gray	Non-Fibrous 100	None Detected
B-0828-41B 512041	Gray Duct Sealant	1st, Mechanics Garage	gray	Non-Fibrous 100	None Detected
B-0828-42A 512042	2x2 Fissure Dot Ceiling Tile	1st, Loft	brown	Mineral Wool 30 Cellulose 60 Non-Fibrous 10	None Detected
B-0828-42B 512043	2x2 Fissure Dot Ceiling Tile	1st, Loft	brown	Mineral Wool 30 Cellulose 60 Non-Fibrous 10	None Detected
B-0828-43A 512044	2x2 Fissure Dot Ceiling Tile	1st, Office	gray	Mineral Wool 30 Cellulose 60 Non-Fibrous 10	None Detected
B-0828-43B 512045	2x2 Fissure Dot Ceiling Tile	1st, Kitchen	gray	Mineral Wool 30 Cellulose 60 Non-Fibrous 10	None Detected
B-0828-44A 512046	Gray Building Caulking	Exterior, South Side	gray	Non-Fibrous 100	None Detected
B-0828-44B 512047	Gray Building Caulking	Exterior, South Side	gray	Non-Fibrous 100	None Detected
B-0828-45A 512048	Gray Building Caulking	Exterior, North Side	gray	Non-Fibrous 100	None Detected
B-0828-45B 512049	Gray Building Caulking	Exterior, North Side	gray	Non-Fibrous 100	None Detected
B-0828-46A 512050	Brown Window Caulking	Exterior, West Side	brown	Non-Fibrous 100	None Detected
B-0828-46B 512051	Brown Window Caulking	Exterior, West Side	brown	Non-Fibrous 100	None Detected
B-0828-47A 512052	Brown Vent Caulking	Exterior, East Side	brown	Non-Fibrous 100	None Detected
B-0828-47B 512053	Brown Vent Caulking	Exterior, East Side	brown	Non-Fibrous 100	None Detected
B-0828-48A 512054	Gray Roof Caulking	Exterior, Auto Repair Roof	gray	Non-Fibrous 100	None Detected
B-0828-48B 512055	Gray Roof Caulking	Exterior, Auto Repair Roof	gray	Non-Fibrous 100	None Detected

FieldID LabID	Material	Location	Color	Non-Asbestos %	Asbestos %
B-0828-49A 512056	Field/Fash Material	Exterior, Auto Repair Roof	multi	Cellulose 90 Non-Fibrous 10	None Detected
B-0828-49B 512057	Field/Fash Material	Exterior, Auto Repair Roof	multi	Cellulose 90 Non-Fibrous 10	None Detected
B-0828-50A 512058	Black Vent Caulking	1st, Office Roof	black	Other 5 Non-Fibrous 95	None Detected
B-0828-50B 512059	Black Vent Caulking	1st, Office Roof	black	Other 5 Non-Fibrous 95	None Detected
B-0828-51A 512060	Field/Fash Material	Exterior, Office Roof	black	Fiberglass 20 Non-Fibrous 80	None Detected
B-0828-51B 512061	Field/Fash Material	Exterior, Office Roof	black	Fiberglass 20 Non-Fibrous 80	None Detected
B-0828-52A 512062	Black Coating on Deck	Exterior, Office Roof	black	Cellulose 30 Non-Fibrous 70	None Detected
B-0828-52B 512063	Black Coating on Deck	Exterior, Office Roof	black	Cellulose 30 Non-Fibrous 70	None Detected
B-0828-53A 512064	White Vent Caulking	Exterior, Garage Bay Roof	white	Non-Fibrous 100	None Detected
B-0828-53B 512065	White Vent Caulking	Exterior, Garage Bay Roof	white	Non-Fibrous 100	None Detected
B-0828-54A 512066	Black Vent Caulking	Exterior, Garage Bay Roof	gray	Non-Fibrous 100	None Detected
B-0828-54B 512067	Black Vent Caulking	Exterior, Garage Bay Roof	gray	Non-Fibrous 100	None Detected
B-0828-55A 512068	Field/Fash Material	Exterior, Garage Bay Roof	multi	Fiberglass 20 Non-Fibrous 80	None Detected
B-0828-55B 512069	Field/Fash Material	Exterior, Garage Bay Roof	multi	Fiberglass 20 Non-Fibrous 80	None Detected
B-0828-56A 512070	Black Coating on Deck	Exterior, Garage Bay Roof	black	Cellulose 30 Non-Fibrous 70	None Detected
B-0828-56B 512071	Black Coating on Deck	Exterior, Garage Bay Roof	black	Cellulose 30 Non-Fibrous 70	Detected Chrysotile < 1
B-0828-57A 512072	Siding Paper	Exterior, North Side	black	Cellulose 70 Non-Fibrous 30	None Detected
B-0828-57B 512073	Siding Paper	Exterior, East Side	black	Cellulose 70 Non-Fibrous 30	None Detected

FieldID LabID	Material	Location	Color	Non-Asbestos %	Asbestos %
B-0828-58A 512074	Field/Flash Material	Exterior, Roof	black	Cellulose 30 Non-Fibrous 67	Detected Chrysotile 3
B-0828-58B 512075	Field/Flash Material	Exterior, Roof			Not Analyzed

Wednesday 04

Analyzed by:



End of Report

Batch: 46154

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Lab ID# (Lab Use Only)	Field ID/ (Client Reference)	Temp in Celcius = _____	Stereo Scope					Optical Properties							Non-Asbestos Percentage (%)									
			Material / Location	% of Asbestos	Color	Homogeneity	Texture	Friable	Asbestos Minerals	Asbestos %	Morphology	Extinction	Sign of Elongation	Birefringence	Pleochroism	RI	Fiberglass	Mineral Wool	Cellulose	Hair	Synthetic	Other	Non-Fibrous	
55	7B		Material																					
			Location																					
60	8A		Material																					
			Location																					
69	8B		Material																					
			Location																					
89	9A		Material																					
			Location																					
89	9B		Material																					
			Location																					

DNA

Lab ID# (Lab Use Only)		Field ID/ (Client Reference)	Temp in Celcius = <u>21</u>	Stereo Scope					Asbestos Minerals	Optical Properties						Non-Asbestos Percentage (%)								
				Material / Location	% of Asbestos	Color	Homogeneity	Texture		Friable	Asbestos %	Morphology	Extinction	Sign of Elongation	Birefringence	Pleochroism	RI	Fiberglass	Mineral Wool	Cellulose	Hair	Synthetic	Other	Non-Fibrous
5120 25		58B	Material						Chrysotile															
			Location							Amosite														
			Material						Crocidolite															
			Location						Tremolite															
			Material						Anthophyllite															
			Location						Actinolite															
			Material						Chrysotile															
			Location						Amosite															
			Material						Crocidolite															
			Location						Tremolite															
			Material						Anthophyllite															
			Location						Actinolite															
			Material						Chrysotile															
			Location						Amosite															
			Material						Crocidolite															
			Location						Tremolite															
			Material						Anthophyllite															
			Location						Actinolite															

DNA

GREEN ENVIRONMENTAL
Bulk Sampling Chain-of-Custody

Client: Town of Andover Date: 8/28/2019 Page: 1 of 11

Project Address: 11 Lewis Street, Andover - DPW Yard Project #: 17487 Inspector: Luke Krzyzewski

Contact: Luke K Analysis: PLM - Positive Stop TAT: 72 Hr

Email: lkrzyzewski@greenenvironmental.com

Building	Floor	Room	Description	Field #	Comments	Fri / Non-Fri	
Water Forestry	1st	Water Dept. Bath	Square Pattern Sheet Floor	B-0828- 1A		-	
↓	↓	↓	↓	B-0828- 1B		-	
			Square Pattern Sheet Floor Adhesive	B-0828- 2A		-	
			↓	B-0828- 2B		-	
			Forestry Dept. Shower	Rectangle Pattern Sheet Floor	B-0828- 3A		-
			↓	B-0828- 3B		-	
			Rectangle Pattern Sheet Floor Adhesive	B-0828- 4A		-	
			↓	B-0828- 4B		-	
			Water Dept. Bath	Drywell	B-0828- 5A		-
			Forestry Dept. Bath	↓	B-0828- 5B		-
			Water Dept. Bath	Red Duct Sealant	B-0828- 6A		-
			↓	B-0828- 6B		-	

Relinquish By	Date	#Samples	Received By	Date	Time	# Samples
<i>[Signature]</i>	8/28/19	124	<i>[Signature]</i>	8/29/19		


GREEN ENVIRONMENTAL
Bulk Sampling Chain-of-Custody

Client: Town of Andover Date: 8/28/2019

Page: 2 of 11

Project Address: 11 Lewis Street, Andover - DPW Yard Project #: 17487

Inspector: Luke Krzyzewski

Contact: Luke K Analysis: PLM - Positive Stop

TAT: 72 Hr

Email: lkrzyzewski@greenenvironmental.com

Building	Floor	Room	Description	Field #	Comments	Fri / Non-Fri		
Water / Forestry	1st	Water Dept Garage 1	Gray Window Caulking	B-0828- 7A		-		
		Forestry Dept. Garage 1	↓	B-0828- 7B		-		
		Water Dept. Garage 1	Door Caulking	B-0828- 8A		-		
		↓	↓	B-0828- 8B		-		
		Water Dept. Storage	2x2 Fissure Pot Ceiling Tile	B-0828- 9A		-		
		↓	↓	B-0828- 9B		-		
		Forestry Dept. Office 1	Fiberboard Ceiling	B-0828- 10A		-		
		↓	↓	B-0828- 10B		-		
		Exterior	South Side	Black water Proofing	B-0828- 11A		-	
		↓	↓	↓	B-0828- 11B		-	
		↓	↓	North Side	Garage Door Caulking	B-0828- 12A		-
		↓	↓	↓	↓	B-0828- 12B		-

Relinquish By	Date	#Samples	Received By	Date	Time	# Samples


GREEN ENVIRONMENTAL
Bulk Sampling Chain-of-Custody

Client: Town of Andover Date: 8/28/2019

Page: 3 of 11

Project Address: 11 Lewis Street, Andover - DPW Yard Project #: 17487

Inspector: Luke Krzyzewski

Contact: Luke K Analysis: PLM - Positive Stop

TAT: 72 Hr

Email: lkrzyzewski@greenenvironmental.com

Building	Floor	Room	Description	Field #	Comments	Fri / Non-Fri
Water / Forestry	Exterior	East side	Gray Window Caulking	B-0828- 13A		-
↓	↓	South side	↓	B-0828- 13B		-
		↓	Asphalt Shingle	B-0828- 14A		-
		↓	↓	B-0828- 14B		-
		Roof	Chimney Caulking	B-0828- 15A		-
		↓	↓	B-0828- 15B		-
		↓	Field / Flash material	B-0828- 16A		-
		↓	↓	B-0828- 16B		-
		↓	Black Coating on Deck	B-0828- 17A		-
		↓	↓	B-0828- 17B		-
		Highway Dept.	1st	office	9" Red Floor Tile	B-0828- 18A
↓	↓	↓	↓	B-0828- 18B		-

Relinquish By	Date	#Samples	Received By	Date	Time	# Samples


GREEN ENVIRONMENTAL
Bulk Sampling Chain-of-Custody

Client: Town of Andover Date: 8/28/2019

Page: 4 of 11

Project Address: 11 Lewis Street, Andover - DPW Yard Project #: 17487

Inspector: Luke Krzyzewski

Contact: Luke K Analysis: PLM - Positive Stop

TAT: 72 Hr

Email: lkrzyzewski@greenenvironmental.com

Building	Floor	Room	Description	Field #	Comments	Fri / Non-Fri
Highway Dept.	1st	Office	9" Red Floor Tile Black mastic	B-0828- 19A		-
		↓	↓	B-0828- 19B		-
		Kitchen	12" Tan Floor Tile	B-0828- 20A		-
		↓	↓	B-0828- 20B		-
			12" Tan floor Tile Black mastic	B-0828- 21A		-
		↓	↓	B-0828- 21B		-
		Loft	12" Beige Floor Tile	B-0828- 22A		-
		↓	↓	B-0828- 22B		-
			12" Beige Floor Tile Black mastic	B-0828- 23A		-
		↓	↓	B-0828- 23B		-
		Office	Rubber sheet Floor Adhesive	B-0828- 24A		-
		Kitchen	↓	B-0828- 24B		-

Relinquish By	Date	#Samples	Received By	Date	Time	# Samples


GREEN ENVIRONMENTAL
Bulk Sampling Chain-of-Custody

Client: Town of Andover Date: 8/28/2019

Page: 5 of 11

Project Address: 11 Lewis Street, Andover - DPW Yard Project #: 17487

Inspector: Luke Krzyzewski

Contact: Luke K Analysis: PLM - Positive Stop

TAT: 72 Hr

Email: lkrzyzewski@greenenvironmental.com

Building	Floor	Room	Description	Field #	Comments	Fri / Non-Fri
Highway Dept.	1st	office	Black Cove Base	B-0828- 25A		-
↓	↓	Kitchen	↓	B-0828- 25B		-
		office	Black Cove Base Adhesive	B-0828- 26A		-
		Kitchen	↓	B-0828- 26B		-
		Loft	Brown Cove Base	B-0828- 27A		-
		↓	↓	B-0828- 27B		-
		↓	Brown Cove Base Adhesive	B-0828- 28A		-
		↓	↓	B-0828- 28B		-
		Bath	Ceramic Floor Tile Adhesive	B-0828- 29A		-
		↓	↓	B-0828- 29B		-
		↓	Ceramic Floor Tile Grout	B-0828- 30A		-
↓	↓	B-0828- 30B		-		

Relinquish By	Date	#Samples	Received By	Date	Time	# Samples

GREEN ENVIRONMENTAL
Bulk Sampling Chain-of-Custody

Client: Town of Andover Date: 8/28/2019

Page: 6 of 11

Project Address: 11 Lewis Street, Andover - DPW Yard Project #: 17487

Inspector: Luke Krzyzewski

Contact: Luke K Analysis: PLM - Positive Stop

TAT: 72 Hr

Email: lkrzyzewski@greenenvironmental.com

Building	Floor	Room	Description	Field #	Comments	Fri / Non-Fri
Highway Dept.	1st	Bath	Ceramic wall Tile Adhesive	B-0828- 31A		-
			↓	B-0828- 31B		-
			Ceramic wall Tile Grout	B-0828- 32A		-
		↓	B-0828- 32B		-	
		Kitchen	Dry wall	B-0828- 33A		-
			↓	B-0828- 33B		-
			Joint Compound	B-0828- 34A		-
		↓	B-0828- 34B		-	
		↓	B-0828- 34C		-	
		Hcft	Joint Compound	B-0828- 35A		-
			↓	B-0828- 35B		-
			↓	B-0828- 35C		-

Relinquish By	Date	#Samples	Received By	Date	Time	# Samples


GREEN ENVIRONMENTAL
Bulk Sampling Chain-of-Custody

Client: Town of Andover Date: 8/28/2019

Page: 7 of 11

Project Address: 11 Lewis Street, Andover - DPW Yard Project #: 17487

Inspector: Luke Krzyzewski

Contact: Luke K Analysis: PLM - Positive Stop

TAT: 72 Hr

Email: lkrzyzewski@greenenvironmental.com

Building	Floor	Room	Description	Field #	Comments	Fri / Non-Fri					
Highway Dept.	1st	Loft	Drywall	B-0828- 36A		-					
↓	↓	↓	↓	B-0828- 36B		-					
				Auto Repair	Dry wall	B-0828- 37A		-			
				↓	↓	↓	↓	B-0828- 37B		-	
								Joint compound	B-0828- 38A		-
								B-0828- 38B		-	
								B-0828- 38C		-	
								B-0828- 38D		-	
								B-0828- 38E		-	
								Textured Ceiling	B-0828- 39A		-
								B-0828- 39B		-	
								B-0828- 39C		-	

Relinquish By	Date	#Samples	Received By	Date	Time	# Samples


GREEN ENVIRONMENTAL
Bulk Sampling Chain-of-Custody

Client: Town of Andover Date: 8/28/2019

Page: 8 of 11

Project Address: 11 Lewis Street, Andover - DPW Yard Project #: 17487

Inspector: Luke Krzyzewski

Contact: Luke K Analysis: PLM - Positive Stop

TAT: 72 Hr

Email: lkrzyzewski@greenenvironmental.com

Building	Floor	Room	Description	Field #	Comments	Fri / Non-Fri
Highway Dept.	1st	Auto Repair	Textured Ceiling	B-0828-39D		-
↓	↓	↓	↓	B-0828-39E		-
		office	Brown window caulking	B-0828-40A		-
		↓	↓	B-0828-40B		-
		Mechanics Garage	Gray Duct Sealant	B-0828-41A		-
		↓	↓	B-0828-41B		-
		left	2x2 Fissure Dot Ceiling Tile	B-0828-42A		-
		↓	↓	B-0828-42B		-
		office	2x2 Fissure Dot Ceiling Tile	B-0828-43A		-
		Kitchen	↓	B-0828-43B		-
		Exterior	South side	Gray building caulking	B-0828-44A	
↓	↓	↓	↓	B-0828-44B		-

Relinquish By	Date	#Samples	Received By	Date	Time	# Samples


GREEN ENVIRONMENTAL
Bulk Sampling Chain-of-Custody

Client: Town of Andover Date: 8/28/2019 Page: 9 of 11
 Project Address: 11 Lewis Street, Andover - DPW Yard Project #: 17487 Inspector: Luke Krzyzewski
 Contact: Luke K Analysis: PLM - Positive Stop TAT: 72 Hr
 Email: lkrzyzewski@greenenvironmental.com

Building	Floor	Room	Description	Field #	Comments	Fri / Non-Fri
Highway Dept.	Exterior	North Side	Gray Building Caulking	B-0828- 45A		-
		↓	↓	B-0828- 45B		-
		West side	Brown window Caulking	B-0828- 46A		-
		↓	↓	B-0828- 46B		-
		East side	Brown vent Caulking	B-0828- 47A		-
		↓	↓	B-0828- 47B		-
		Auto Repair Roof	gray vent Caulking	B-0828- 48A		-
		↓	↓	B-0828- 48B		-
		↓	Field / Flash material	B-0828- 49A		-
		↓	↓	B-0828- 49B		-
		office Roof	Black vent Caulking	B-0828- 50A		-
		↓	↓	B-0828- 50B		-

Relinquish By	Date	#Samples	Received By	Date	Time	# Samples


GREEN ENVIRONMENTAL
Bulk Sampling Chain-of-Custody

Client: Town of Andover Date: 8/28/2019 Page: 10 of 11
 Project Address: 11 Lewis Street, Andover - DPW Yard Project #: 17487 Inspector: Luke Krzyzewski
 Contact: Luke K Analysis: PLM - Positive Stop TAT: 72 Hr
 Email: lkrzyzewski@greenenvironmental.com

Building	Floor	Room	Description	Field #	Comments	Fri / Non-Fri	
Highway Dept	Exterior	Office Roof	Field / Flash material	B-0828-51A		-	
↓	↓	↓	↓	B-0828-51B		-	
			Black Coating on Deck	B-0828-52A	(metal)	-	
			↓	B-0828-52B		-	
			Garage Bay Roof	white vent caulking	B-0828-53A		-
			↓	B-0828-53B		-	
			Black Vent Caulking	B-0828-54A		-	
			↓	B-0828-54B		-	
			Field / Flash material	B-0828-55A		-	
			↓	B-0828-55B		-	
			Black Coating on Deck	B-0828-56A	Metal	-	
			↓	B-0828-56B		-	

Relinquish By	Date	#Samples	Received By	Date	Time	# Samples


GREEN ENVIRONMENTAL
Bulk Sampling Chain-of-Custody

Client: Town of Andover Date: 8/28/2019

Page: 11 of 11

Project Address: 11 Lewis Street, Andover - DPW Yard Project #: 17487

Inspector: Luke Krzyzewski

Contact: Luke K Analysis: PLM - Positive Stop

TAT: 72 Hr

Email: lkrzyzewski@greenenvironmental.com

Building	Floor	Room	Description	Field #	Comments	Fri / Non-Fri
Shed	Exterior	North Side	Siding Paper	B-0828- 57A		/
↓	↓	East side	↓	B-0828- 57B		/
↓	↓	Roof	Field / Flash material	B-0828- 58A		/
↓	↓	↓	↓	B-0828- 58B		/
				B-0828-		/
				B-0828-		/
				B-0828-		/
				B-0828-		/
				B-0828-		/
				B-0828-		/
				B-0828-		/
				B-0828-		/

Relinquish By	Date	#Samples	Received By	Date	Time	# Samples



Appendix D



Appendix D			
Locations of the Identified Asbestos-Containing Materials			
Former DPW Yard - 11 Lewis Street			
Andover, MA			
Location	Material Description	Estimated Quantity	Estimated Quantity
<i>Water/Forestry Department Building</i>			
Forestry Department Shower	Rectangle Pattern Sheet Floor	20% Chrysotile	25 SF
Water Department Garage 1	Interior Door Caulking	2% Chrysotile	80 LF
<i>Highway Department Building</i>			
Office Area	9" Red Floor Tile and Black Mastic (below rubber flooring)	2% Chrysotile	350 SF
	9" Red Floor Tile Black Mastic (below rubber flooring)	10% Chrysotile	
Garage Bay Roof	Black Coating on Metal Deck (below white TPO roofing)	< 1% Chrysotile	10,500 SF
<i>Shed</i>			
Roof	Field/Flash Material	3% Chrysotile	600 SF
Notes:	<ol style="list-style-type: none"> 1. SF = Square Feet 2. LF = Linear Feet 3. Materials containing trace amounts (less than 1%) of asbestos are not fully regulated as an ACM in Massachusetts, however, they must still be handled in accordance with OSHA 1926.1101 and per current DEP regulations, must be disposed of under an asbestos waste shipment record as asbestos-containing waste material. 		



Appendix E



Appendix E		
Locations of the Regulated Materials		
11 Lewis Street - Former DPW Yard		
Andover, MA		
Location	Material Description	Quantity
<i>Water/Forestry Department Building</i>		
Water Department - Garage 1	4' Fluorescent Tubes	4
	8' Fluorescent Tubes	2
	PCB/Non-PCB Containing Ballasts	3
	Fire Extinguishers	1
	Water Bubbler	1
	Beer Cooler (Refrigerant)	1
	30-Gallon Drum - Cleaning Concentrate	1
	50-Gallon Drum - Cleaning Concentrate	1
Water Department - Kitchen	4' Fluorescent Tubes	2
	8' Fluorescent Tubes	2
	PCB/Non-PCB Containing Ballasts	2
	Refrigerator	1
	Mini-Split Unit	1
Water Department - Bath	4' Fluorescent Tubes	4
	PCB/Non-PCB Containing Ballasts	1
Water Department - Garage 2	1' Fluorescent Tubes	2
	4' Fluorescent Tubes	6
	8' Fluorescent Tubes	4
	PCB/Non-PCB Containing Ballasts	6
	Refrigerator	1
Water Department - Work Shop	4' Fluorescent Tubes	10
	PCB/Non-PCB Containing Ballasts	5
	Fire Extinguishers	1
Water Department - Storage	4' Fluorescent Tubes	12
	PCB/Non-PCB Containing Ballasts	4
	Mini-Split Unit	1
Water Department - Garage 3	4' Fluorescent Tubes	8
	8' Fluorescent Tubes	4
	PCB/Non-PCB Containing Ballasts	6
	Fire Extinguishers	1
	5-Gallon Bucket (air tool oil)	1
Forestry Department - Office 1	4' Fluorescent Tubes	2
	PCB/Non-PCB Containing Ballasts	1
Forestry Department - Office 2	4' Fluorescent Tubes	2
	PCB/Non-PCB Containing Ballasts	1
Forestry Department - Shower	4' Fluorescent Tubes (stored)	8

Appendix E Locations of the Regulated Materials 11 Lewis Street - Former DPW Yard Andover, MA		
Location	Material Description	Quantity
<i>Water/Forestry Department Building (continued)</i>		
Forestry Department - Kitchen	4' Fluorescent Tubes	4
	8' Fluorescent Tubes	1
	PCB/Non-PCB Containing Ballasts	2
	Fire Extinguishers	1
	Refrigerator	1
Forestry Department - Garage 1	4' Fluorescent Tubes	16
	8' Fluorescent Tubes	4
	PCB/Non-PCB Containing Ballasts	6
	Fire Extinguishers	2
Forestry Department - Garage 2	Fire Extinguishers	1
<i>Highway Department Building</i>		
Auto Repair	4' Fluorescent Tubes	4
	PCB/Non-PCB Containing Ballasts	2
	15-Gallon Hydraulic Oil Tank	1
Compressor Room	Emergency Light Battery	1
Mechanic's Garage	4' Fluorescent Tubes	12
	8' Fluorescent Tubes	6
	PCB/Non-PCB Containing Ballasts	9
Loft Office	Fluorescent U-Tubes	6
	PCB/Non-PCB Containing Ballasts	3
	A/C Unit	1
	Refrigerator	1
Garage 2	4' Fluorescent Tubes	10
	PCB/Non-PCB Containing Ballasts	5
	Refrigerator	1
	Fire Extinguishers	3
	5-Gallon Bucket (oil)	2
	1-Gallon Can (paint)	10
Office	4' Fluorescent Tubes	12
	PCB/Non-PCB Containing Ballasts	6
	Fire Extinguishers	3
Kitchen	4' Fluorescent Tubes	12
	PCB/Non-PCB Containing Ballasts	6
	Fire Extinguishers	3
Bath	Fluorescent U-Tubes	8
	PCB/Non-PCB Containing Ballasts	4
Exterior - East Side	Used Tires	50