



ASBESTOS INSPECTION REPORT

**NICHEWAUG INN
25 COMMON STREET
PETERSHAM, MASSACHUSETTS**

Providers of Business and Environmental Solutions

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EXECUTIVE SUMMARY

Environmental Compliance Services, Inc. (ECS) has completed a survey for asbestos containing materials (ACM) at the Former Nichewag Inn and connected Academic building at 25 Common Street in Petersham, MA. On April 30, 2007 ECS inspectors using non-destructive sampling methods collected 214 samples of suspect asbestos material. Those materials have been analyzed using the required protocols at an accredited laboratory. A review of the laboratory results indicates that ACM was detected at this location. Those materials which tested positive for asbestos include:

- Pipe Insulation
- Boiler Insulation
- Boiler Breeching Insulation
- Floor tiles
- Floor tile mastic
- Linoleum
- Textured Ceiling

Types, locations, and quantities of ACM detected are found in section 3.0 of this report.

Inspector Signature:


Douglas A. Auvine
Senior Project Manager
Inspector License # MA-AI 71861, CT-000064, RI-AAC-06991S
Management Planner #AP 71363, CT-000064

1.0 INTRODUCTION

This survey was done at the request of the Chuck Berube for the purpose of identifying ACM that may impact future renovation, demolition, or operations and maintenance of the Residence. The Occupational Safety and Health Administration (OSHA) regulations (1926.1101) requires that building owners determine the presence and location of asbestos materials, and convey that information to any individuals who will conduct work that may disturb ACM. The Scope of Work included non-destructive sampling of suspect materials at this location.

1.1 LIMITATIONS

The term "non-destructive sampling method" refers to a method of collecting samples that does not significantly impact interior or exterior finishes of the building. Evaluations for the presence of ACM are therefore limited to those materials accessible by non-destructive sampling methods. ACM may therefore be present in materials not accessible by this sampling methodology, and may be encountered during renovation or demolition of the structure. The term "destructive sampling method" refers to the method of collecting samples that would require destruction of various building surfaces (i.e. wall cavities, wood flooring, plaster ceilings) for the purpose of locating hidden heating, plumbing, or other building components that may contain ACM. Destructive methods are strongly recommended for facilities slated for demolition.

Additional limitations may exist for both destructive and non-destructive sampling methods. Certain portions of the building may be physically inaccessible, or because electrical, mechanical, structural, or other hazards exist in portions of the structure at the time of the survey.

The following areas were deemed inaccessible at the time of this survey:

- Below grade outside structure
- Entirety of floor and wall cavities
- Inside machinery or similar equipment
- The majority of the basement crawlspaces that were underwater

2.0 METHODS AND MATERIALS

2.1 ASBESTOS

Samples were collected in a statistically random manner using the Asbestos Hazard Emergency Response Act (AHERA) protocol (40CFR763.86). Samples were placed into plastic bags with an air tight seal. Labels were affixed to the sample bags with specific nomenclature. Sample number syntax rules assign two character prefix related to the site name followed by an ascending chronological value. Material location, estimated quantity, and physical assessment were recorded on field sheets included in Appendix A.

Bulk samples were analyzed by Polarized Light Microscopy (PLM) using the United States Environmental Protection Agency USEPA/600/R-93/116 method. The analysis of samples was conducted by ProScience Analytical Services, Inc., 22 Cummings Park, Woburn, Massachusetts (NVLAP Accreditation 2000090-0).

There are six minerals grouped into the term "asbestos." Chrysotile, amosite, and crocidolite are the asbestos minerals most commonly found in building materials. ACM is defined as a material containing more than one percent (1%) asbestos by weight. Materials found to be asbestos containing are listed in Section 3.0. Exact sample compositions are included in the laboratory reports or chains of custody found in Appendix A.

Polarized light microscopy (PLM) is the root method used for the identification of ACM. The USEPA Office of Research and Development (USEPA ORD) has reviewed data from performance audits of various laboratories performing PLM. The results of that review indicated an unacceptable number of false negatives and positives for visual estimation of materials containing less than 10% asbestos. On the basis of those findings the National Emissions Standards Hazardous Air Pollutants (NESHAP) regulations were amended on November 20, 1990 (Federal Register, V.55, N.224). The revisions state that if the analyst detects asbestos in the sample and estimates the amount to be less than 10% by visual estimation, the parties legally responsible (owner or operator) for the building may (1) elect to assume the amount to be greater than 1% and treat the material as ACM or (2) require verification of the amount by point counting. Point counting is a technique used to quantify the amount of asbestos present in a sample on which PLM has already been performed. ECS recommends point counting re-analysis for asbestos values less than 10%, and where applicable those results are reflected in the report.

A similar situation exists for matrix bound fibers such as those found in floor tiles, mastics, and asphalt based materials. The inorganic matrix of these bulk samples may interfere with the identification and quantification of asbestos mineral content. These types of samples are generally referred to as Non-organically bound (NOB) materials. Transmission Electron Microscopy (TEM-NOB) is a method that utilizes a combination of special sample preparation techniques and high magnification to more accurately quantify asbestos content. Currently only the State of New York has regulations requiring TEM-NOB re-analysis of suspect ACM for which negative or trace determination resulted from PLM analysis. Although additional cost is involved, ECS recommends TEM-NOB analysis under certain circumstances, as a state of the art means of evaluation.

3.0 RESULTS AND FINDINGS

The results of this inspection are presented in tabular form. These tables summarize the nature, distribution, and quantity of ACM found during this survey.

Types, locations, quantities, and conditions of ACM are shown on Table 3.1. Suspect materials sampled and found not to contain ACM are found in Table 3.2.

**3.1 ASBESTOS MATERIALS DATA TABLE
 NICHEWAUG INN & ACADEMIC BUILDING**

Functional Space (s)	Material Description	Estimated Quantity
Throughout Basement of Nicheaug Building (includes Boiler room)	Pipe insulation	3500 linear ft
Throughout Basement of Academic Building (includes Boiler Room) Kitchen in Dining Wing	Pipe insulation	1800 linear ft 16 linear ft
Boiler room at Nicheaug Boiler room at Academic	Boiler insulation	2 boilers Nicheaug (320 total sq ft) 1 Boiler Academic (160 sq ft)
Boiler room at Nicheaug Boiler room at Academic	Boiler Breeching	250 sq ft Academic 150 sq ft Nicheaug

Functional Space (s)	Material Description	Estimated Quantity
3 rd floor outside East wing Stairwell and outside room #'s 73, 75, 76 (19-21), and West Wing Bathroom (a) Nichewaug	9x9 Brown/beige floor tiles and mastic	1000 sq ft
3 rd floor bathroom between rooms 67&68 (a) Nichewaug	Beige faux ceramic tile	35 SF
2 nd floor main staircase area (a) Nichewaug	Red & Black Linoleum tile	400 SF
2 nd Floor Dining Wing hallway, bathrooms, and Room #'s 33-45 (a) Nichewaug	9x9 Brown Floor tile	500 SF

Functional Space (s)	Material Description	Estimated Quantity
1 st Floor Dining Wing Ironing Room @ Nichewaung	9x9 red and White Floor tile	600 SF
1 st Floor Dining Wing stairwell off Ironing Room @ Nichewaung	Brown Stone Pattern Linoleum backing	50 SF
1 st Floor Dining Wing Kitchen & Kitchen Prep Room @ Nichewaung	9x9 green and white floor tile	1100 SF
1 st Floor Dining Wing Kitchen Freezer (Large) @ Nichewaung	Silver coating on Freezer ceiling	75 SF

Functional Space (s)	Material Description	Estimated Quantity
1 st and 2 nd floors of Auditorium Wing	9x9 brown/grey/red floor tiles	9000 SF
Basement (Auditorium), 1 st and 2nd floors of Auditorium Wing	Textured ceiling	15,500 SF
1 st and 2 nd floors of Academic Wing	9x9 red and green floor tiles	24,000 SF
1 st and 2 nd floors of Academy Wing	Textured Ceiling	24,000 SF

Functional Space (s)	Material Description	Estimated Quantity
Built up roof over Dining Wing	Roof Flashing	300 sq ft

Class: T- Thermal System, S- Surfacing Material, M=Miscellaneous
Linear Feet
Enable: Y- Yes, N-No
Condition: I=Intact, D=Damaged, SD- Significantly Damaged
Response Action: R-Remove, RP- Repair, E-Encapsulate, EN=Enclosure, O=O&M Program

LF=

SF=Square Feet

TABLE 3.2
SUSPECT MATERIALS WITH NO ASBESTOS DETECTED
Nichewaug and Academic Building

Throughout both building	Ceiling Tiles
Throughout both buildings	Sheetrock
Throughout both buildings	Joint Compound
Throughout both buildings	Cove Molding Mastic
Throughout both buildings	9x9, 12x12 tiles and mastic not identified in Table 3.1 above
Throughout both buildings	Linoleum of various colors and patterns not identified in Table 3.1 above
Roof of Dining wing at Nichewaug	Roof felts

4.0 DISCUSSION AND INTERPRETATION

4.1 ASBESTOS

Response actions are based in-part upon our current understanding of area usage or future usage at the time of the survey. Intact materials should be maintained on an Operations and Maintenance (O&M) program until it is feasible to remove ACM's using a qualified licensed abatement contractor. Removal is always indicated where pending renovation or demolition would disturb ACM's. Bidders for abatement of asbestos materials should confirm quantities and conditions prior to submitting quotes. Any material discovered in the course of renovation or demolition activities which is not identified in this report should be presumed to contain asbestos until sampling shows otherwise.

It should be noted that some areas of mold colonization were observed on basement wall surfaces in the area of flooding. It is expected that this area of colonization will continue to increase as long as significant moisture is present.

5.0 CONCLUSION

Asbestos abatement of items listed in Table 3.1 will be required prior to any renovation work that would disturb these locations. ECS recommends that an asbestos abatement design be prepared to direct the safe and efficient removal of ACM materials from this facility.

Standing water in the basement should be removed and surfaces dried to prevent further mold and infrastructure damage.

P/EM Add v Chain of Custody Record

ProScience Analytical Services, Inc.
22 Cummings Park
Woburn, MA 01801
(781) 935-3212 FAX (781) 932-4957

Turn Around Time Requested

Same day 24 Hrs 48 Hrs 72 Hour 4-5 Days

Client: ECS- Agawam

Address: 588 Silver Street Agawam, MA.

Project Site & Number: N. L. Wing, Room 49 Tel: 208 534 00

Phone / FAX Number: 413-789-3530 / 413-789-2778

Contact: Douglas Avvine

For Lab Use: Batch Number: B47373

Analyzed By/Date: Michael

QC By/Date: VS 5/2/07

Relinquished By: [Signature]

Received By and Date: [Signature] 5/2/07

Quantity Received: 5098

Accepted By and Date: VS 5/2/07

Non Asbestos Properties: see the back of the data sheet

Lab ID	Field ID	Description / Location	Visual	Color	Homogeneity	Texture	Morphology	Extension	Sign of Conglomer	Shear/Integrity	Pleochroism	Oil	Refractive Indices	Asbestos Percentage (%)	Circle Type	Amosite	Crocidolite	Tremolite	Anthrophyllite	Actinolite	Fiberglass	Mineral Wool	Cellulose	Hair	Synthetic	Other	Non Fiberous
498507	501	Ft Lm Cm Cv Pls Plb Sh Jc Pi Br Ck GI Other: old wing Amt: 200 SF Floor 3rd Rm 47 (Beige/Gold pack)	Handwritten notes	Handwritten notes																							45
508	502	Ft Lm Cm Cv Pls Plb Sh Jc Pi Br Ck GI Other: 1st Ceiling tile Amt: 200 SF Floor 3rd Rm 47 (Beige/Gold pack)	Handwritten notes	Handwritten notes																							5
509	503	Ft Lm Cm Cv Pls Plb Sh Jc Pi Br Ck GI Other: Amt: (Ground) Floor 3rd Rm 47	Handwritten notes	Handwritten notes																							100
510	504	Ft Lm Cm Cv Pls Plb Sh Jc Pi Br Ck GI Other: old wing Amt: 200 Floor 3rd Rm 49 (Beige/Gold pack)	Handwritten notes	Handwritten notes																							50
511	505	Ft Lm Cm Cv Pls Plb Sh Jc Pi Br Ck GI Other: old wing Amt: 200 Floor 3rd Rm 49	Handwritten notes	Handwritten notes																							100
512	506	Ft Lm Cm Cv Pls Plb Sh Jc Pi Br Ck GI Other: old wing Amt: 200 Floor 3rd Rm 49	Handwritten notes	Handwritten notes																							100

Comments: Sample Description Key: Ft= Floor tile, Lm=Linoeum, Cm=Carpet Mastic, Cv= Cove molding mastic, Pls=Plaster skim Plb=Plaster base
Sh= Steelrock, Jc= Joint compound, Pi= Pipe insulation, Br= breaching insulation, Ck= Caulking, Gl= Glazing

PEM Hub - a Chain of Community Bonds

ProScience And -al Services, Inc.
22 Cummings Park
Woburn, MA 01801
(781) 935-3242 FAX (781) 932-4857

Client: ECS- Agavan
Address: 588 Silver Street Agawam, MA
Project Site & Number: Milwaukee Junction 01-20854106
Phone / FAX Number: 413-789-3530/413-789-2776
Contact: Douglas Aquino

Turn Around Time Requested
 Same Day 24 Hour 48 Hour 72 Hour 4-5 Days

Refr. Requested By:

Received By and Date: _____

Quantity Received: _____

Faxed By and Date: _____

Analyzed: _____

Non-Asbestos Properties: see the back of the data sheet

For Lab Use> Before Number: 647373 Analyzed By / Date: MM

Lab ID	Field ID	Description / Location	Color	Homogeneity	Texture	Visible	Flakiness	Morphology	Extinction	Sign of Elongation	Birefringence	Pleochroism	Oil	Relative Tristimulus	Asbestos Percentage (%)	Asbestos Type	Min. Asbestos Percentage (%)	Fiberglass	Mineral Wool	Cellulose	Hair	Synthetic	Other	Non-Fibrous
499513	S07	F(LM) Cm Cv Pls Plb Sh Jc Pi Br Ck GI Other: Gold Bag, made Amt: 200 Floor 5 th L Rm 50 (some on 501)	Milky		granular										50	H	50		H				50	
514	S08	F(LM) Cm Cv Pls Plb Sh Jc Pi Br Ck GI Other: Pink (Bag) Amt: 200 SF Floor 3 rd Rm 48	Milky		granular										55	H	55		SS				45	
515	S09	F(LM) Cm Cv Pls Plb Sh Jc Pi Br Ck GI Other: Hallway (no amt) Floor 2 nd Rm	Milky		granular										H		H		H				98	
516	S10	F(LM) Cm Cv Pls Plb Sh Jc Pi Br Ck GI Other: Bag-15mm (Tox) Amt: 200 SF Floor 3 rd Rm 52	Milky		granular										60	H	60		60				60	
517	S11	F(LM) Cm Cv Pls Plb Sh Jc Pi Br Ck GI Other: Fax X Carpet Amt: 200 SF Floor 1 st Rm 53	Milky		granular										50	H	50		H				50	
518	S12	F(LM) Cm Cv Pls Plb Sh Jc Pi Br Ck GI Other: Bag-10mm (Tox) Amt: 200 SF Floor 3 rd Rm 55	Milky		granular										50	H	50		H				50	

Comments: Sample Description Key: Ft= Floor tile, Lm=Linoileum, Cm=Cove Molding Mastic, Cv= Cove molding mastic, Pls=Plaster skim Plb=Plaster base Sh= Sheetrock, Jc= joint compound, Pi= Pipe insulation, Br= breaching insulation, Ck= Caulking, GI= Glazing

ProScience Analytical Services, Inc.

22 Cummings Park
Woburn, MA 01891

(781) 935-3212 FAX (781) 932-4857

Client: ECS- Agawam

Address: 588 Silver Street Agawam, MA

Project Site & Number: Milwaukee Inn / 01-206 576-00

Phone / FAX Number: 413-789-3530/413-789-2776

Contact: Douglas Avigne

For Lab Use > Batch Number: 647373

Analyzed By / Date: MM

QC By / Date:

Turn Around Time Requested

Same day 24 Hour 48 Hour 72 Hour 4-5 Days

Relinquished By: J.S.M.

Received By and Date:

Quantity Received: 5 Analyzed:

Faxed By and Date

Non Asbestos Properties: see the back of the data sheet

Lab ID	Field ID	Description / Location	Visual			Optical Properties				Refractive Indices	Asbestos Percentage (%)							Non Asbestos Percentage (%)										
			Color	Homogeneity	Texture	Fracture	Morphology	Fracture	Etching		Sign of Elongation	Birefringence	Pleochroism	Oil	Chrysotile	Amosite	Crocidolite	Tremolite	Anthrophyllite	Actinolite	Fiberglass	Mineral Wool	Cellulose	Fiber	Synthetic	Other	Non Fiberous	
498519	S13	Ft (M) Cm Cv Pls Plb Sh Jc Pi Br Ck GI Other: Green / 8 (w/ Silver) Amt: 200 SF Floor 3rd Rim 57	MULTI								Oil											H						45
520	S14	Ft (M) Cm Cv Pls Plb Sh Jc Pi Br Ck GI Other: Green / 8 (w/ Silver) Amt: 200 SF Floor 3rd Rim 57	MULTI																			H						40
521	S15	Ft (M) Cm Cv Pls Plb Sh Jc Pi Br Ck GI Other: Grey / 8 (w/ Silver) Amt: 75 SF Floor 3rd Rim 57	MULTI																			H						95
522	S16	Ft (M) Cm Cv Pls Plb Sh Jc Pi Br Ck GI Other: Green / 8 (w/ Silver) Amt: 200 SF Floor 3rd Rim 57	MULTI																				H					45
523	S17	Ft (M) Cm Cv Pls Plb Sh Jc Pi Br Ck GI Other: Green / 8 (w/ Silver) Amt: 200 SF Floor 3rd Rim 57	MULTI																				H					40
524	S18	Ft (M) Cm Cv Pls Plb Sh Jc Pi Br Ck GI Other: Green / 8 (w/ Silver) Amt: 200 SF Floor 3rd Rim 57	MULTI																				H					100

Comments:

Sample Description Key: Ft= Floor tile, Lm=Linoctum, Cr=Carpet Mastic, Cv= Cove molding mastic, Pls=Plaster skim Plb=Plaster base

Sh= Sheetrock, Jc= Joint compound, Pi= Pipe insulation, Br= breaching insulation, Ck= Caulking, GI= Glazing

PCM And Chain of Custody Record

ProScience Analytical Services, Inc.
 22 Cummings Park
 Woburn, MA 01801
 (781) 935-3212 FAX (781) 932-4857

Client: ECS - Agawam
 Address: 588 Silver Street Agawam, MA.
 Project Site & Number: Micha Way Pmn / 01-208-511-00
 Phone / FAX Number: 413-789-3530/413-789-2776
 Contact: Douglas Auvinne

Turn Around Time Requested

Same day 24 hour 48 Hour 72 Hour 4-5 Days

Requested By: [Signature]
 Received By and Date: [Signature]
 Quantity Received: Analyzed:
 Faxed By and Date:
 Note: Asbestos Properties: see the back of the data sheet

For Lab Use > Batch Number: B47373 Analyzed By/Date: MM QC By/Date: MM

Lab ID	Field ID	Description / Location	Color	Homogeneity	Texture	Fracture	Optical Properties	Refractive Indices	Asbestos Percentage (%)	Asbestos Type	Fiberless	Mineral Wool	Cellulose	Plas	Synthetic	Other	Non-Fibrous
							Extinction	Sign of Elongation	Birefringence	Pleochroism	Oil	II	I				
498525	S19	Fl Lm Cm Cv Pls Plb Sh Jc Pi Br Ck GI Other: Orange like 1 1/2 Amt: 200 Floor 3 rd Rm 51	Grey/Fl														2
526	S20	Fl Lm Cm Cv Pls Plb Sh Jc Pi Br Ck GI Other: Red/Black Amt: 200 SF In Floor 3 rd Rm → Main stair case area	Black/Grey														100
527	S21	Fl Lm Cm Cv Pls Plb Sh Jc Pi Br Ck GI Other: Green/Blue/Grey Amt: 200 SF Floor 3 rd Rm 62	Green/Blue														40
528	* S22	Fl Lm Cm Cv Pls Plb Sh Jc Pi Br Ck GI Other: 9" x 9" Blue Amt: 100 SF Floor 3 rd Rm South wing	Blue														100
529	S23	Fl Lm Cm Cv Pls Plb Sh Jc Pi Br Ck GI Other: Green/Blue Amt: 200 SF Floor 3 rd Rm 63	Green/Blue														45
530	S24	Fl Lm Cm Cv Pls Plb Sh Jc Pi Br Ck GI Other: Brown/Green amt Amt: 200 SF Floor 3 rd Rm 64	Brown/Green														40

Comments: * Please separate mastic
 Sample Description Key: Fl= Floor tile, Lm=Linoleum, Cm=Carpet Mastic, Cv= Cove molding mastic, Pls=Plaster skim Plb=Plaster base
 Sh= Sheetrock, Jc= Joint compound, Pi= Pipe insulation, Br= breaching insulation, Ck= Caulking, GI= Glazing