



August 13, 2024

Whitecap Engineering, LLC
Attn: Mr. Gregory Roebuck
18 Perrywinkle Road
Wakefield, RI 02879

Re: 49 Union Street, Middleboro, MA - Roof Asbestos Bulk Sampling Report

Mr. Roebuck:

Enclosed are the analytical results of the suspect asbestos bulk samples collected by Environmental Consulting and Management (ECM) from the roof of the building located at 49 Union Street in Middleborough, MA. The inspection consisted of collecting suspect asbestos containing roofing materials that will be impacted during the upcoming roof replacement project.

Suspect materials were analyzed for asbestos content utilizing Polarized Light Microscopy (PLM) in accordance with Environmental Protection Agency (EPA) method 600/R-93/116. In addition to collection, location and quantity of identified asbestos containing materials have also been denoted within this report. Please refer to **Attachment 1** for the analytical results and **Attachment 2** for the building drawing(s). Below is a chart of the samples collected.

49 Union Street, Middleborough, MA – Asbestos Bulk Sample Results

Sample #	Material	Location	Asbestos %
1-A-E	Edge Flashing Sealant	Roof Edge	None Detected
2A-C	Pipe Penetration Sealant	Around Vent Pipes	None Detected
03	Copper Vent Hood Sealant	South Lower Roof	None Detected
04A	Roof Core	South Lower Roof Field	None Detected
04B	Roof Core	Main Roof Field	None Detected
04C	Roof Core	Central Upper Roof	None Detected
04D	Roof Core	Main Roof Field	None Detected
04E	Roof Core	North Lower Roof Field	None Detected
05A-C	HVAC Pipe Penetration Sealant	Main Roof Field	None Detected
06	Upper Roof Flashing Sealant	Central Upper Roof	None Detected
07A-C	Roof Coating	Entire Roof Field	None Detected

181 Amaral Street
Riverside, RI 02915

O: 401.438.1360
F: 401.438.1316

www.ecmne.com

Conclusion:

All materials were found to be none detected for asbestos content. Any suspect materials not sampled within this report should be tested before being impacted.

The owner/operator of the facility or facility component shall maintain a copy of the written asbestos sampling report available at the facility for review by or submittal to the Massachusetts Department of Environmental Protection (MADEP) upon request at all times and shall preserve and maintain such report at the facility for at least two years following the completion of any asbestos abatement activities. If the facility is unstaffed, or in the event that the facility is demolished, the owner/operator shall preserve and maintain the written asbestos survey report at its regular place of business.

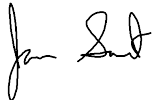
Limitations:

As the survey was limited to the roof and Environmental Consulting and Management cannot be held responsible for the identification of materials that are hidden, concealed or otherwise inaccessible. Components that could affect building operation and endanger the safety of the inspector such as active mechanical or electrical systems were not scrutinized during this inspection unless otherwise noted. Any suspect materials not sampled and tested for the presence of asbestos must be handled and disposed of as if it were unless analytical data can prove otherwise.

This report was prepared under the request of Whitecap Engineering, LLC. This report should not be represented, reproduced, or disseminated without the written approval of Environmental Consulting and Management or Whitecap Engineering, LLC. No warranties other than those stated in the contract for this project are expressed or implied.

A hard copy of this report can be provided for your records via mail upon request. If you have any further questions feel free to contact us at 401-438-1360.

Sincerely,
Environmental Consulting & Management



Jason Sweet
Project Manager
MA Asbestos Inspector Lic. #AI900551



Attachment 1

Asbestos Bulk Sample Results

181 Amaral Street
Riverside, RI 02915

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The Identification Specialists

Analysis Report
prepared for
Environmental Consulting & Management Inc

Report Date: 8/9/2024

Project Name: 49 Union Street, Middleborough, MA

Project #: 240440

SanAir ID#: 24042975



NVLAP LAB CODE 200870-0

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SanAir ID Number

24042975

FINAL REPORT

8/9/2024 7:00:36 PM

Name: Environmental Consulting & Management Inc
Address: 50 Kickemuit Ave
Bristol, RI 02809
Phone: 401-438-1360

Project Number: 240440

P.O. Number:

Project Name: 49 Union Street, Middleborough, MA

Collected Date: 7/31/2024

Received Date: 8/2/2024 10:05:00 AM

Dear Jason Sweet,

We at SanAir would like to thank you for the work you recently submitted. The 21 sample(s) were received on Friday, August 02, 2024 via UPS. The final report(s) is enclosed for the following sample(s): 01A, 01B, 01C, 01D, 01E, 02A, 02B, 02C, 03, 04A, 04B, 04C, 04D, 04E, 05A, 05B, 05C, 06, 07A, 07B, 07C.

These results only pertain to this job and should not be used in the interpretation of any other job. This report is only complete in its entirety. Refer to the listing below of the pages included in a complete final report.

Sincerely,

A handwritten signature in black ink that reads "Sandra Sobrino". The signature is fluid and cursive.

Sandra Sobrino
Asbestos & Materials Laboratory Manager
SanAir Technologies Laboratory

Final Report Includes:

- Cover Letter
- Analysis Pages
- Disclaimers and Additional Information

Sample conditions:

- 21 samples in Good condition.



SanAir ID Number

24042975

FINAL REPORT

8/9/2024 7:00:36 PM

Name: Environmental Consulting & Management Inc
Address: 50 Kickemuit Ave
Bristol, RI 02809
Phone: 401-438-1360

Project Number: 240440**P.O. Number:****Project Name:** 49 Union Street, Middleborough, MA**Collected Date:** 7/31/2024**Received Date:** 8/2/2024 10:05:00 AM

Analyst: Williams, Darien

Asbestos Bulk PLM EPA 600/R-93/116

SanAir ID / Description	Stereoscopic	Components		Asbestos Fibers
	Appearance	% Fibrous	% Non-fibrous	
01A / 24042975-001 Edge Flashing Sealant	White Non-Fibrous Homogeneous		100% Other	None Detected
01B / 24042975-002 Edge Flashing Sealant	White Non-Fibrous Homogeneous		100% Other	None Detected
01C / 24042975-003 Edge Flashing Sealant	White Non-Fibrous Homogeneous		100% Other	None Detected
01D / 24042975-004 Edge Flashing Sealant	Various Non-Fibrous Heterogeneous		100% Other	None Detected
01E / 24042975-005 Edge Flashing Sealant	White Non-Fibrous Homogeneous		100% Other	None Detected
02A / 24042975-006 Pipe Penetration Sealant	Various Non-Fibrous Heterogeneous		100% Other	None Detected
02B / 24042975-007 Pipe Penetration Sealant	Various Non-Fibrous Heterogeneous		100% Other	None Detected
02C / 24042975-008 Pipe Penetration Sealant	Various Non-Fibrous Heterogeneous		100% Other	None Detected
03 / 24042975-009 Copper Vent Hood Sealant	Grey Non-Fibrous Homogeneous		100% Other	None Detected
04A / 24042975-010 Roof Core 1	Black Non-Fibrous Heterogeneous	15% Cellulose	85% Other	None Detected

Analyst:

Approved Signatory:

Analysis Date: 8/9/2024

Date: 8/9/2024



SanAir ID Number

24042975

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8/9/2024 7:00:36 PM

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Bristol, RI 02809
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Project Number: 240440**P.O. Number:****Project Name:** 49 Union Street, Middleborough, MA**Collected Date:** 7/31/2024**Received Date:** 8/2/2024 10:05:00 AM

Analyst: Williams, Darien

Asbestos Bulk PLM EPA 600/R-93/116

SanAir ID / Description	Stereoscopic	Components		Asbestos Fibers
	Appearance	% Fibrous	% Non-fibrous	
04B / 24042975-011 Roof Core 2	Black Non-Fibrous Heterogeneous	25% Cellulose	75% Other	None Detected
04C / 24042975-012 Roof Core 3	Black Non-Fibrous Heterogeneous	15% Cellulose	85% Other	None Detected
04D / 24042975-013 Roof Core 4	Black Non-Fibrous Heterogeneous	20% Cellulose	80% Other	None Detected
04E / 24042975-014 Roof Core 5, Roofing	Black Non-Fibrous Heterogeneous	20% Cellulose	80% Other	None Detected
04E / 24042975-014 Roof Core 5, Tar Paper	Black Fibrous Homogeneous	65% Cellulose	35% Other	None Detected
04E / 24042975-014 Roof Core 5, Felt	Brown Fibrous Homogeneous	85% Cellulose	15% Other	None Detected
05A / 24042975-015 HVAC Pipe Penetration	Various Non-Fibrous Heterogeneous		100% Other	None Detected
05B / 24042975-016 HVAC Pipe Penetration	Various Non-Fibrous Heterogeneous		100% Other	None Detected
05C / 24042975-017 HVAC Pipe Penetration	Various Non-Fibrous Heterogeneous		100% Other	None Detected
06 / 24042975-018 Upper Roof Flashing Sealant	Various Non-Fibrous Heterogeneous		100% Other	None Detected

Analyst: 

Approved Signatory:



Analysis Date: 8/9/2024

Date: 8/9/2024



SanAir ID Number
24042975
FINAL REPORT
8/9/2024 7:00:36 PM

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Project Number: 240440
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Project Name: 49 Union Street, Middleborough, MA
Collected Date: 7/31/2024
Received Date: 8/2/2024 10:05:00 AM

Analyst: Williams, Darien

Asbestos Bulk PLM EPA 600/R-93/116

SanAir ID / Description	Stereoscopic	Components		Asbestos Fibers
	Appearance	% Fibrous	% Non-fibrous	
07A / 24042975-019 Roof Coating	White Non-Fibrous Homogeneous		100% Other	None Detected
07B / 24042975-020 Roof Coating	White Non-Fibrous Homogeneous		100% Other	None Detected
07C / 24042975-021 Roof Coating	White Non-Fibrous Homogeneous		100% Other	None Detected

Analyst:

Approved Signatory:

Analysis Date: 8/9/2024

Date: 8/9/2024

Disclaimer

This report is the sole property of the client named on the SanAir Technologies Laboratory chain-of-custody (COC). Results in the report are confidential information intended only for the use by the customer listed on the COC. Neither results nor reports will be discussed with or released to any third party without our client's written permission. The final report shall not be reproduced except in full without written approval of the laboratory to assure that parts of the report are not taken out of context. This report and any information contained within shall not be edited, altered, or modified in any way by any persons or agencies receiving, viewing, distributing, or otherwise possessing a copy of this final report. The laboratory reserves the right to perform amendments to any finalized report, of which shall supersede and make obsolete any previous editions. Such changes, modifications, additions, or deletions shall be effective immediately upon notice thereof, which may be given by means including but not limited to posting on the SanAir client portal website, electronic or conventional mail, or by any other means. The information provided in this report applies only to the samples submitted and is relevant only for the date, time, and location of sampling. The accuracy of the results is dependent upon the client's sampling procedure and information provided to the laboratory by the client on the COC. SanAir assumes no responsibility for the sampling procedure and will provide evaluation reports based solely on the sample(s) in the condition in which they arrived at the laboratory and information provided by the client on the COC, such as: project number, project name, collection dates, po number, special instructions, samples collected by, sample numbers, sample identifications, sample type, selected analysis type, flow rate, total volume or area, and start stop times that may affect the validity of the results in this report. Samples were received in good condition unless otherwise noted on the report. SanAir assumes no responsibility or liability for the manner in which the results are used or interpreted. This report does not constitute nor shall not be used by the client to claim product, process, system, or person certification, approval, or endorsement by NVLAP, NIST, NELAC, AIHA LAP, LLC or any other U.S. governmental agencies and may not be accredited by every local, state, and federal regulatory agencies. Samples are held for a period of 60 days. Fibers smaller than 5 microns cannot be seen with this method due to scope limitations. For NY state samples, method EPA 600/M4-82-020 is performed.

NYELAP Disclaimer:

Polarized- light microscopy is not consistently reliable in detecting asbestos in floor covering and similar non-friable organically bound materials. Quantitative transmission electron microscopy is currently the only method that can be used to determine if this material can be considered or treated as non-asbestos containing.

Asbestos Accreditations

National Voluntary Laboratory Accreditation Program (NVLAP) Lab Code 200870-0
City of Philadelphia Department of Public Health Air Management Services, Certification#ALL-460
Commonwealth of Pennsylvania Department of Environmental Protection Number 68-05397
California State Environmental Laboratory Accreditation Program Certificate Number 2915
Colorado Department of Public Health and Environment Registration Number AL-23143
Connecticut Department of Public Health Environmental Laboratory Registration Number PH-0105
Massachusetts Department of Labor Standards Asbestos Analytical Services License Number: AA000222
State of Maine Department of Environmental Protection License Number: LB-0075, LA-0084
New York State Department of Health Laboratory ID: 11983
State of Rhode Island Department of Health Certification No.: PCM00126, PLM00126, TEM00126
Texas Department of State Health Services License Number: 300440
Commonwealth of Virginia Department of Professional and Occupational Regulation Number: 3333000323
State of Washington Department of Ecology Laboratory ID: C989
State of West Virginia Bureau for Public Health Analytical Laboratory Number: LT000616
Vermont Department of Health License Number: Asb-Co-An-000006
Louisiana Department of Environmental Quality AI Number 212253, Certificate #05088



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Asbestos
Chain of Custody
Form 140, Rev 1, 1/20/2017

SanAir ID Number

24042975

Company: ECM Inc	Project #: 240440	Collect by: J. Sweet
Address: 181 Amaral St	Project Name: 49 Union Street, Middleborough, MA	Phone #: 401-374-4350
City, St., Zip: Riverside, RI 02915	Date Collected: 7/31/24	Fax #:
State of Collection: MA Account#: 2667	P.O. Number:	Email: jsweet@ecmne.com

Bulk			Air			Soil		
ABB	PLM EPA 600/R-93/116	☒	ABA	PCM NIOSH 7400	☐	ABSE	PLM EPA 600/R-93/116 (Qual.)	☐
	Positive Stop ☐		ABA-2	OSHA w/ TWA*	☐	Vermiculite & Soil		
ABEPA	PLM EPA 400 Point Count	☐	ABTEM	TEM AHERA	☐	ABSP	PLM CARB 435 (LOD <1%)	☐
ABBIK	PLM EPA 1000 Point Count	☐	ABATN	TEM NIOSH 7402	☐	ABSP1	PLM CARB 435 (LOD 0.25%)	☐
ABBEN	PLM EPA NOB**	☐	ABT2	TEM Level II	☐	ABSP2	PLM CARB 435 (LOD 0.1%)	☐
ABBCH	TEM Chatfield**	☐	Other:		☐	Dust		
ABBTM	TEM EPA NOB**	☐	New York ELAP			ABWA	TEM Wipe ASTM D-6480	☐
ABQ	PLM Qualitative	☐	PLM NY	PLM EPA 600/M4-82-020	☐	ABDMV	TEM Microvac ASTM D-5755	☐
			ABEPA2	NY ELAP 198.1	☐			
			ABENY	NY ELAP 198.6 PLM NOB	☐	Matrix	Other	
			ABBNY	NY ELAP 198.4 TEM NOB	☐			☐

** Available on 24-hr. to 5-day TAT

Turn Around Times	3 HR (4 HR TEM) ☐	6 HR (8HR TEM) ☐	12 HR ☐	24 HR ☐
	☐ 2 Days	☐ 3 Days	☐ 4 Days	☒ 5 Days

Special Instructions	
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Sample #	Sample Identification/Location	Volume or Area	Sample Date	Flow Rate*	Start - Stop Time*
01A	Edge Flashing Sealant	Bulk	7/31/24		
01B					
01C					
01D					
01E					
02A	Pipe Penetration Sealant				
02B					
02C					
03	Copper Vent Hood Sealant				
04A	Roof Core 1				
04B	Roof Core 2				
04C	Roof Core 3				

Relinquished by	Date	Time	Received by	Date	Time
<i>Jan 24</i>	3/29/24	3:45 pm	<i>ESC</i>	8-2-24	10:05 AM

If no technician is provided, then the primary contact for your account will be selected. Unless scheduled, the turnaround time for all samples received after 3 pm EST Friday will begin at 8 am Monday morning. Weekend or holiday work must be scheduled ahead of time and is charged for rush turnaround time. SanAir covers Standard Overnight FedEx shipping. Shipments billed to SanAir with a faster shipping rate will result in additional charges.

Form 140, Revision 1, 1/20/2017



Attachment 2

Site Photographs

181 Amaral Street
Riverside, RI 02915

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O: 401.438.1360
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Site Photographs



Roof Field



Edge Flashing Sealant



Pipe Penetration Sealant



HVAC Pipe Penetration Sealant



Cooper HVAC Hood Sealant



Upper Roof Flashing Sealant

181 Amaral Street
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Attachment 3

Building Drawing(s)

181 Amaral Street
Riverside, RI 02915

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