



Dennis-Yarmouth Regional High School
210 Station Avenue
South Yarmouth, Massachusetts

AHERA 3-YEAR RE-INSPECTION REPORT

August 2022

PREPARED FOR:

Dennis-Yarmouth Regional School District
296 Station Avenue
South Yarmouth, Massachusetts
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Introduction

The Vertex Companies, LLC. (VERTEX) conducted a 3-Year Reinspection on August 3rd, 2022 as required by the 40 CFR 763 Asbestos Hazard Emergency Response Act (AHERA) at the Dennis-Yarmouth Regional High School (D-YRHS) located at 210 Station Ave, South Dennis, Massachusetts. The AHERA regulation requires that each Local Education Agency (LEA) retain a certified/accredited Asbestos Inspector to conduct a re-inspection of all friable and non-friable known or assumed asbestos-containing building materials (ACBMs) in each school building that they lease, own, or otherwise utilize as a school building every three years since the initial inspection. The AHERA re-inspection is to be performed by an accredited inspector at least once every three years from the time of implementation of the original management plan. In addition, the LEA is required to assign a Designated Person (DP) to oversee the management of the identified ACBMs within the school which includes but not limited to conducting Six-Month Periodic Surveillance Inspections, Annual Notifications, Training, Record Keeping, etc. as required to effectively manage the identified ACBMs in place at the school.

The initial AHERA inspection was conducted by Universal Engineering Corporation (Universal) of Boston, MA in August 1988. Based on the initial inspection Universal prepared an Asbestos Management Plan (AMP) for the D-YRHS in August 1988. The following is a list of dates and consultants that have conducted the required 3-Year Reinspections. Additionally, the following list of re-inspections have been provided and maintained by the Dennis-Yarmouth Regional School District:

<u>Date</u>	<u>Consultant</u>
May 1989	Universal of Boston, MA
October 1991	Universal of Boston, MA
June 1996	Universal of Boston, MA
April 1998	Unknown
July 2000	FLI Environmental of Dedham, MA
July 2003	FLI Environmental of Dedham, MA
September 2011	FLI Environmental of Dedham, MA
June 2012(Revised 2011 Report)	FLI Environmental of Dedham, MA
July 2013	Vertex Air Quality Services, Inc., Weymouth, MA
July 2016	The VERTEX Companies, Inc., Weymouth, MA
July 2019	The VERTEX Companies, Inc., Weymouth, MA

The current AHERA 3-Year Re-inspection Report conducted by VERTEX is presented to the D-Y Regional School District as an addendum to the original Management Plan and should be incorporated into the school's Management Plan folder.

The D-Y Regional School District may use the information obtained from the AHERA re-inspection and the data compiled in the existing Management Plan to effectively manage the identified ACBMs present in the D-YRHS in South Yarmouth, Massachusetts.

SECTION 1
INSPECTION REPORT

Section 1
Inspection Report

Re-inspection Protocol

Massachusetts Department of Labor Standards (DLS) Certified Asbestos Inspector Jessica Woltemate (AI#901049) performed the AHERA Re-inspection. The updated Management Plan was developed by Massachusetts DLS Certified Asbestos Management Planner, Jason Mohre (AP#000080). The purpose of the reinspection was to identify if the hazard potential of the ACBMs, or assumed ACBMs, has changed since the last inspection as well as sample and assess any suspect materials not listed in the original management plan. As required by the AHERA regulation, the reinspection survey procedures must include a visual re-inspection and reassessment of the condition of all known locations of friable and non-friable ACBMs. The visual inspection consists of touching ACBM, which was previously considered non-friable to determine whether the ACBM has become friable since last re-inspection. It should be noted that under the AHERA regulations only ACBMs is inspected, other asbestos containing materials (ACMs) may be associated with the school that do not fall under AHERA ACBM definition. Examples of materials which have been found to contain asbestos include but are not limited to exterior window caulking, window glazing, and roofing material. Prior to school renovations any suspect materials not sampled or listed within the school's Asbestos Management Plan (AMP), must be tested prior to disturbance. Furthermore, VERTEX recommends an ACMs Survey to be conducted prior to any renovation activities to comply with the Environmental Protection Agency (EPA) Title 40 CFR Part 61, National Emissions Standards for Hazardous Air Pollutants (NESHAPs) and the Massachusetts Department of Environmental Protection Regulations. Documentation for subsequent surveys not related to AHERA should be included in the overall Management Plan.

In addition, hazard assessment of known friable materials and newly determined friable materials must be recorded and submitted to the school's Designated Person. Assessment of potential asbestos hazards is subject to each individual inspector's judgment, and as a result, hazard assessments may vary.

Furthermore, the LEA Designated Person should assume that potential asbestos-containing pipe and fitting insulation may be located behind walls and ceilings not accessible. Any renovation/demolition work that may penetrate these areas should be inspection.

All available documentation of asbestos abatement projects, which have occurred since the initial AHERA inspection should be included with the reinspection report. VERTEX was provided and reviewed the following Abatement Records maintained by the D-Y Regional School District:

<u>Date</u>	<u>Consultant</u>
May 1989	Universal of Boston, MA
April-Aug 1989	Universal of Boston, MA
May 2004	Smith and Wessel Associates, Inc. of Merrimac, MA
June 2004	Smith and Wessel Associates, Inc. of Merrimac, MA
September 2005	Smith and Wessel Associates, Inc. of Merrimac, MA
March 2006	Smith and Wessel Associates, Inc. of Merrimac, MA
March 2006	Smith and Wessel Associates, Inc. of Merrimac, MA

January 2021
July 2021

The Vertex Companies, Inc.
The Vertex Companies, Inc.

In addition, VERTEX was provided and reviewed the maintained six-month surveillance inspections conducted since the past 3-year re-inspection. No concerns were noted upon review of the six-month surveillance inspections records.

Appendix D contains Certification Page for the Inspector and Management Planner involved with the re-inspection of the school.

Locations of the identified ACBMs with quantities observed, conditions assessed, homogeneous hazard assessment and changes since the previous re-inspection report are presented in Appendix A of this report.

Section 1
Inspection Report (cont.)

Bulk Sampling Methodology

Bulk samples were not collected during the current re-inspection activities in August 2022. However, VERTEX had collected and analyzed the following bulk samples of suspect homogeneous materials within the facility during an AHERA inspection conducted in July 2013. Please refer to Table 1 below for a summary of the bulk samples collected and analyzed.

Table I - Sample Locations and Results (July 2013)

Sample Number	Sample Description	Sample Location	Asbestos Content
B-711-01A	12" Gray Spec Floor Tile	1 st Floor Room 301	None Detected
B-711-01B	12" Gray Spec Floor Tile	1 st Floor Room 209	None Detected
B-711-02A	12" Gray Spec Floor Mastic	1 st Floor Room 301	None Detected
B-711-02B	12" Gray Spec Floor Mastic	1 st Floor Room 209	None Detected
B-711-03A	12" Black Floor Tile	1 st Floor Auditorium Gym Hall	None Detected
B-711-03B	12" Black Floor Tile	1 st Floor Auditorium Gym Hall	None Detected
B-711-04A	12" Black Floor Tile Mastic	1 st Floor Auditorium Gym Hall	None Detected
B-711-04B	12" Black Floor Tile Mastic	1 st Floor Auditorium Gym Hall	None Detected
B-711-05A	12" Off-White Green Streak Floor Tile	2nd Floor Room 524	2% Chrysotile
B-711-05B	12" Off-White Green Streak Floor Tile	2nd Floor Room 524	Stop Positive
B-711-06A	12" Off-White Green Streak Floor Tile Mastic	2nd Floor Room 524	10% Chrysotile
B-711-06B	12" Off-White Green Streak Floor Tile Mastic	2nd Floor Room 524	Stop Positive
B-711-07A	12" Off-White Tan Streak Floor Tile	1st Floor Room 207	2% Chrysotile
B-711-07B	12" Off-White Tan Streak Floor Tile	1st Floor Room 413	Stop Positive
B-711-08A	12" Off-White Tan Streak Floor Tile Mastic	1st Floor Room 207	10% Chrysotile
B-711-08B	12" Off-White Tan Streak Floor Tile Mastic	1st Floor Room 413	Stop Positive
B-711-09A	12" Gray Red Streak Floor Tile	1st Floor Room 77-400 Hall	5% Chrysotile
B-711-09B	12" Gray Red Streak Floor Tile	1st Floor Room 415	Stop Positive
B-711-10A	12" Gray Red Streak Floor Tile Mastic	1st Floor Room 77-400 Hall	10% Chrysotile
B-711-10B	12" Gray Red Streak Floor Tile Mastic	1st Floor Room 415	Stop Positive
B-711-11A	12" Green Gray Pattern Floor Tile	1 st Floor Room 408	None Detected
B-711-11B	12" Green Gray Pattern Floor Tile	1 st Floor Room 408	None Detected
B-711-12A	12" Green Gray Pattern Floor Tile Mastic	1 st Floor Room 408	None Detected
B-711-12B	12" Green Gray Pattern Floor Tile Mastic	1 st Floor Room 408	None Detected
B-711-13A	12" Multi-Colored Spec Floor Tile	LL Room 04	None Detected
B-711-13B	12" Multi-Colored Spec Floor Tile	LL Room 04	None Detected
B-711-14A	12" Multi-Colored Spec Floor Tile Mastic	LL Room 04	None Detected
B-711-14B	12" Multi-Colored Spec Floor Tile Mastic	LL Room 04	None Detected
B-711-15A	Wood Floor Adhesive	1 st Floor Upper Gymnasium	None Detected
B-711-15B	Wood Floor Adhesive	1 st Floor Upper Gymnasium	None Detected
B-711-16A	Carpet Adhesive	Guidance Office	None Detected
B-711-16B	Carpet Adhesive	Guidance Office	None Detected
B-711-17A	Gray Cove Base	Room 105	None Detected

Section 1
Inspection Report (cont.)

Table I -Sample Locations and Results (July 2013)

Sample Number	Sample Description	Sample Location	Asbestos Content
B-711-17B	Gray Cove Base	Room 301	None Detected
B-711-18A	Gray Cove Base Adhesive	Room 105	None Detected
B-711-18B	Gray Cove Base Adhesive	Room 301	None Detected
B-711-19A	Brown Cove Base	1 st Floor Custodial Office	None Detected
B-711-19B	Brown Cove Base	2 nd Floor Room 524	None Detected
B-711-20A	Brown Cove Base Adhesive	1 st Floor Custodial Office	None Detected
B-711-20B	Brown Cove Base Adhesive	2 nd Floor Room 524	None Detected
B-711-21A	Black Cove Base	LL Former Bout Shop	None Detected
B-711-21B	Black Cove Base	Former Observatory	None Detected
B-711-22A	Black Cove Base Adhesive	LL Former Bout Shop	None Detected
B-711-22B	Black Cove Base Adhesive	Former Observatory	None Detected
B-711-23A	2'x2' Ceiling Tile (rough)	1 st Floor Room 301	None Detected
B-711-23B	2'x2' Ceiling Tile (rough)	2 nd Floor Room 522	None Detected
B-711-24A	2'x2' Ceiling Tile (fiber)	LL Room 001-011 Hall	None Detected
B-711-24B	2'x2' Ceiling Tile (fiber)	2 nd Floor Room 500-Original Hall	None Detected
B-711-25A	2'x2' Ceiling Tile (flat)	1 st Floor Room 77 Girls Locker room	None Detected
B-711-25B	2'x2' Ceiling Tile (flat)	1 st Floor Kitchen	None Detected
B-711-26A	2'x4' Ceiling Tile (fissure/dot)	1 st Floor Room 343	None Detected
B-711-26B	2'x4' Ceiling Tile (fissure/dot)	1 st Floor Room 343	None Detected
B-711-27A	1'x1' Wall Tile (pegboard)	1 st Floor Room 301	None Detected
B-711-27B	1'x1' Wall Tile (pegboard)	UL Girls Locker Room	None Detected
B-711-28A	1'x1' Wall Tile (pegboard glue daubs)	UL Girls Locker Room	None Detected
B-711-28B	1'x1' Wall Tile (pegboard glue daubs)	UL Girls Locker Room	None Detected
B-711-29A	Gray Duct Mastic	1 st Floor Room 301	None Detected
B-711-29B	Gray Duct Mastic	1 st Floor Room 100- Hall	None Detected
B-711-30A	Red Fire Stop	1 st Floor Room 202	None Detected
B-711-30B	Red Fire Stop	1 st Floor Room 342	None Detected
B-711-31A	Black Sink Mastic	1 st Floor Room 210	None Detected
B-711-31B	Black Sink Mastic	1 st Floor Room 210	None Detected
B-711-32A	Gray Sink Mastic	1 st Floor Room 212	None Detected
B-711-32B	Gray Sink Mastic	1 st Floor Room 520	None Detected
B-711-33A	Black Water-Proofing Mastic	Former Observatory	None Detected
B-711-33B	Black Water-Proofing Mastic	Former Observatory	None Detected
B-711-34A	Black Paper Jacket on Fiberglass Pipe	Crawl Space	None Detected
B-711-34B	Black Paper Jacket on Fiberglass Pipe	Crawl Space	None Detected
B-711-34C	Black Paper Jacket on Fiberglass Pipe	Crawl Space	None Detected
B-711-35A	Drywall	1 st Floor Room 103	None Detected
B-711-35B	Drywall	1 st Floor Room 218	None Detected
B-711-36A	Joint Compound #1	1 st Floor Gate	None Detected
B-711-36B	Joint Compound #1	1 st Floor Custodial Office	None Detected
B-711-36C	Joint Compound #1	1 st Floor Room 105	None Detected

Section 1
Inspection Report (cont.)

Table I -Sample Locations and Results (July 2013)

Sample Number	Sample Description	Sample Location	Asbestos Content
B-711-36D	Joint Compound #1	1 st Floor Room 108	None Detected
B-711-36E	Joint Compound #1	1 st Floor Room 113	None Detected
B-711-36F	Joint Compound #1	1 st Floor Room 206	None Detected
B-711-36G	Joint Compound #1	1 st Floor Room 210	None Detected
B-711-37A	Joint Compound #2	1 st Floor Room 77- Boys Locker Room	None Detected
B-711-37B	Joint Compound #2	1 st Floor Room 77- Girls locker Room	None Detected
B-711-37C	Joint Compound #2	1st Floor Room 77-400 Hall	None Detected
B-711-37D	Joint Compound #2	1st Floor Room 404	None Detected
B-711-37E	Joint Compound #2	1st Floor Room 411	None Detected
B-711-37F	Joint Compound #2	2 nd Floor Room 77-400 Hall	None Detected
B-711-37G	Joint Compound #2	2 nd Floor Room 517	None Detected
B-711-38A	Plaster Skim Coat (white)	LL Rooms 001-011 Hall	None Detected
B-711-38B	Plaster Skim Coat (white)	1 st Floor Room 100 Hall	None Detected
B-711-38C	Plaster Skim Coat (white)	1 st Floor Kitchen	None Detected
B-711-38D	Plaster Skim Coat (white)	1 st Floor Room 400 Hall	None Detected
B-711-38E	Plaster Skim Coat	2 nd Floor 500 Hall	None Detected
B-711-38F	Plaster Skim Coat	2 nd Floor room 509	None Detected
B-711-38G	Plaster Skim Coat	Former Observatory	None Detected
B-711-39A	Plaster Base Coat	LL Rooms 001-011 Hall	None Detected
B-711-39B	Plaster Base Coat	1 st Floor Room 100 Hall	None Detected
B-711-39C	Plaster Base Coat	1 st Floor Kitchen	None Detected
B-711-39D	Plaster Base Coat	1 st Floor Kitchen	None Detected
B-711-39E	Plaster Base Coat	2 nd Floor Room 500 Hall	None Detected
B-711-39F	Plaster Base Coat	2 nd Floor Room 509	None Detected
B-711-39G	Plaster Base Coat	Former Observatory	None Detected
B-711-40A	Plaster Skim Coat (textured)	LL Former Body Shop	None Detected
B-711-40B	Plaster Skim Coat (textured)	LL Former Body Shop	None Detected
B-711-40C	Plaster Skim Coat (textured)	LL Former Body Shop	None Detected
B-711-41A	Plaster Base Coat	LL Former Body Shop	None Detected
B-711-41B	Plaster Base Coat	LL Former Body Shop	None Detected
B-711-41C	Plaster Base Coat	LL Former Body Shop	None Detected
B-711-42A	Plaster Skim Coat (textured)	1 st Floor Elevator Room	None Detected
B-711-42B	Plaster Skim Coat (textured)	1 st Floor Elevator Room	None Detected
B-711-42C	Plaster Skim Coat (textured)	1 st Floor Elevator Room	None Detected
B-711-43A	Plaster Base Coat (gray)	1 st Floor Elevator Room	None Detected
B-711-43B	Plaster Base Coat (gray)	1 st Floor Elevator Room	None Detected
B-711-43C	Plaster Base Coat (gray)	1 st Floor Elevator Room	None Detected
B-711-44A	Plaster Skim Coat (textured white)	Former Boiler Room	None Detected
B-711-44B	Plaster Skim Coat (textured white)	Former Boiler Room	None Detected
B-711-44C	Plaster Skim Coat (textured white)	Former Boiler Room	None Detected

Section 1
Inspection Report (cont.)

Table I -Sample Locations and Results (July 2013)

Sample Number	Sample Description	Sample Location	Asbestos Content
B-711-45A	Plaster Base Coat (gray)	Former Boiler Room	None Detected
B-711-45B	Plaster Base Coat (gray)	Former Boiler Room	None Detected
B-711-45C	Plaster Base Coat (gray)	Former Boiler Room	None Detected

Based on sampling of homogenous suspect ACMs identified by VERTEX within the facility, VERTEX has determined the following:

The following is a list of homogenous materials that were determined or assumed to be ASBESTOS-CONTAINING:

12" Off-White Green Streak Floor Tile	12" Off-White Green Streak FT Mastic
12" Off-White Tan Streak Floor Tile	12" Off-White Tan Streak Floor Tile Mastic
12" Gray Red Streak Floor Tile	12" Gray Red Streak Floor Tile Mastic
9"x 9" Tan Floor Tile	9"x 9" Tan Floor Tile Mastic
9"x 9" Gray Floor Tile	9"x 9" Gray Floor Tile Mastic
9"x 9" Green Floor Tile	9"x 9" Green Floor Tile Mastic
9"x 9" Salmon Floor Tile	9"x 9" Salmon Floor Tile Mastic

The following is a list of materials that were found and determined to be NON-ASBESTOS-CONTAINING:

12" Gray Spec Floor Tile	12" Gray Spec Floor Tile Mastic
12" Black Floor Tile	12" Black Floor Tile Mastic
12" Green Gray Pattern Floor Tile	12" Green Gray Pattern Floor Tile Mastic
12" Multi-Colored Spec Floor Tile	12" Multi-Colored Spec Floor Tile Mastic
Wood Floor Adhesive	Carpet Adhesive
Gray Cove Base	Gray Cove Base Adhesive
Brown Cove Base	Brown Cove Base Adhesive
Black Cove Base	Black Cove Base Adhesive
2'x2' Ceiling Tile (rough)	2'x2' Ceiling Tile (fiber)
2'x2' Ceiling Tile (flat)	2'x4' Ceiling Tile (fissure/dot)
1'x1' Wall Tile (pegboard)	1'x1' Wall Tile (pegboard glue daubs)
Gray Duct Mastic	Red Fire Stop
Black Sink Mastic	Gray Sink Mastic
Black Water-Proofing Mastic	Black Paper Jacket on Fiberglass Pipe
Drywall	Joint Compound #1
Plaster Skim Coat	Plaster Base Coat
Plaster Skim Coat (textured)	Plaster Skim Coat (textured white)

Section 1
Inspection Report (continued)
Updated Hazard Assessment

All known locations of friable and non-friable ACBM were re-inspected to determine whether a change in the ACBM's condition has occurred since the initial AHERA inspection. From the reinspection, an asbestos hazard assessment was performed. Factors considered when assessing asbestos hazard include;

1. The friability of the material;
2. The condition of material including type, severity and extent of damage;
3. The material's potential for disturbance including accessibility and air flow;
4. The material's potential for damage.

The location, estimated quantities, condition and Homogenous Area Hazard Assessment Category for the identified ACBMs are presented in Appendix A. The following is an updated homogenous area assessment for each homogeneous area as well as new homogenous areas identified during the current re-inspection.

Homogeneous Area Assessment

Homogeneous Area #1- 9" x 9" Gray Floor Tile and Mastic, Various locations

Classification: Non-Friable Miscellaneous ACBM

Asbestos-containing 9"x 9" Gray Floor Tile and Mastic is located within the Former Boat Shop, Rooms 003, 007, 011, 301, and Former Observatory Area at the school. The 9"x 9" Gray Floor and mastic is non-friable and was observed damaged in the areas in noted above.

Homogeneous Area #2- 9" x 9" Green Floor Tile and Mastic, Rooms 005, 009, & 306B

Classification: Non-Friable Miscellaneous ACBM

Asbestos-containing 9"x 9" Green Floor Tile and Mastic is located in Rooms 005, 009 and 306B (Gym Storage at the school. The 9"x 9" Green Floor and mastic is non-friable displays minor to severe damage within the areas noted above.

Homogeneous Area #3- 9"x 9" Tan Floor Tile and Mastic, Rooms 511, 505, & 501C

Classification: Non -Friable surfacing or miscellaneous ACBM

Asbestos-containing 9"x 9" Tan Floor Tile and Mastic is located on the second floor in Rooms 511, 505, and 501C at the school. The 9"x 9" Tan Floor Tile and Mastic is in generally good condition, non-friable and presents the potential for damage with the exception for room 511 where the floor tile displays minor-moderate damage.

Section 1
Inspection Report (continued)
Updated Hazard Assessment

Homogeneous Area #4- 9"x 9" Salmon Floor Tile and Mastic, Rooms 343, 503, & 501B

Classification: Non -Friable surfacing or miscellaneous ACBM

Asbestos-containing 9"x 9" Salmon Floor Tile and Mastic is located on the second floor in rooms 503 and 501, and room 343 of the first floor of the school. The 9"x 9" Salmon Floor Tile and Mastic is in generally good condition, is non-friable and presents the potential for damage with the exception for room 501B where the floor tile displays minor-moderate damage.

Homogeneous Area #5- 12"x 12" Off-White Tan Streak Floor Tile and Mastic, Various locations

Classification: Non -Friable surfacing or miscellaneous ACBM

Asbestos-containing 12"x 12" Off-White Tan Streak Floor Tile and Mastic is located within Rooms 207, 205, 407, 411, 413, 417, 519, 522, 524, Storage across from Room 521A and Gym Storage #1 and # 2 at the school. The 12"x 12" Off-White Tan Floor Tile and Mastic is in generally good condition, is non-friable and presents the potential for damage except for the Gymnasium storage rooms and room 407 where there is already moderate damage present.

Homogeneous Area #6- 12"x 12" Off-White Red Streak Floor Tile and Mastic, Various locations

Classification: Non -Friable surfacing or miscellaneous ACBM

Asbestos-containing 12"x 12" Off-White Red Streak Floor Tile and Mastic is located within the 500-Hall (77-Addition), 400-500 Elevator, AV Room and Rooms 415, 418B, at the 418C at the school. The 12"x 12" Off-White Red Streak Floor Tile and Mastic is in is non-friable and displays minor to moderate damage.

Homogeneous Area #7- 12"x 12" Off-White Green Streak Floor Tile and Mastic, Room 524

Classification: Non -Friable surfacing or miscellaneous ACBM

Asbestos-containing 12"x 12" Off-White Green Streak Floor Tile and Mastic is located in Room 524 of the school. The 12"x 12" Off-White Green Streak Floor Tile and Mastic is non-friable and displays minor damaged.

Section 1
Inspection Report (continued)
Updated Hazard Assessment

Homogeneous Area #8- Stage Curtain, Auditorium/Stage

Classification: Assumed Non-Friable Miscellaneous ACM

An assumed asbestos-containing Stage Curtain not previously identified is located within the Stage Area at the school. The Stage Curtain is assumed to asbestos-containing, non-friable, in generally good condition, and has a potential for damage.

SECTION 2

RESPONSE ACTION DETERMINATION

Section 2

Response Action Determination

The following is based on the Decision Tree for Surfacing and Miscellaneous ACM. The recommended response actions are determined utilizing the “decision tree” approach for Response Action Determination as outlined in EPA’s “Asbestos Hazard Emergency Response Act,” (AHERA) 40 CFR 763. Because of defined friability factors associated with surfacing and miscellaneous materials versus thermal system insulation, separate decision trees are utilized for each group of materials.

Decision Trees are used to estimate the risk associated with exposure to asbestos in a given homogeneous area, and to recommend certain response actions, which are consistent with regulatory requirements. Ten response actions are recommended for surfacing/miscellaneous materials. The response section number given to each homogeneous area indicates a priority for action, the lower the number, the more serious the hazard. Most response actions call for an operations and maintenance program, assuming that this is the least burdensome method which still protects human health and environment. This does not prohibit the building owner from removal of ACM at any time, if that is the preferred response action.

Recommended response actions are based upon friability, material condition, disturbance, air flow and the potential for damage. Potential response actions include the following:

1. Friable Surfacing or Miscellaneous ACM with Significant Damage: **Response Action 1:** Isolate the area and restrict access to the area. Remove the ACM as soon as possible.
2. Friable Surfacing or Miscellaneous ACM with Damage and a High Disturbance: **Response Action 2:** Continue with O&M Program and remove ACM as soon as possible or reduce the potential for disturbance.
3. Friable Surfacing or Miscellaneous ACM with Damage, Moderate Disturbance and in the Presence of an Air Stream: **Response Action 2:** Continue with O&M Program and remove ACM as soon as possible or reduce the potential for disturbance.
4. Friable Surfacing or Miscellaneous ACM with Damage and Moderate Disturbance: **Response Action 3:** Continue with O&M Program and schedule removal when practical and cost-effective
5. Friable Surfacing or Miscellaneous ACM with Damage, Low Disturbance and in the Presence of an Air Stream: **Response Action 4:** Continue with O&M Program and schedule removal when practical and cost-effective
6. Friable Surfacing or Miscellaneous ACM with Damage and Low Disturbance: **Response Action 5.** Continue with O&M Program and schedule removal when practical and cost-effective
7. Friable Surfacing or Miscellaneous ACM with No Damage and High Disturbance: **Response Action 6.** Take preventative measures to reduce the disturbance.
8. Friable Surfacing or Miscellaneous ACM with No Damage and Moderate Disturbance: **Response Action 7.** Take preventative measure to reduce the disturbance.
9. Friable Surfacing or Miscellaneous ACM with No Damage and Low Disturbance: **Response Action 8.** Take preventative measure to reduce the disturbance.
10. Non-Friable Surfacing or Miscellaneous ACM: **Response Action 8:** Continue with O&M until major renovation or demolition requires removal under the EPA NESHAPS, or until hazard assessment factors change.

Section 2 **Response Action Determination (continued)**

Advantages and Disadvantage to Abatement Alternatives

The decision trees outlined in AHERA 40 CFR 763 are used to provide the “best” alternative for the specific conditions in each homogeneous area.

Below is a discussion of the alternative approaches to asbestos management in a building.

Long Term Operation & Maintenance Program

Advantages:

- *Low initial cost for implementation
- *Good interim plan
- *An O&M program may be implemented and carried out by in house trained personnel.

Disadvantages:

- *Asbestos remains in the building
- *Condition of the asbestos must be monitored
- *Cost of training and special work procedures may be significant
- *Effectiveness may be limited where control of the building occupants is difficult

Encapsulation

Advantages:

- *Reduces the risk of release of asbestos fibers
- *Initial cost is lower than the cost of asbestos removal
- *ACM may still serve its initial purpose
- *Quick temporary means of repair

Disadvantages:

- *Asbestos remains in the building and encapsulant makes removal more difficult
- *Improper encapsulation may cause the material to delaminate or pull away from substrate
- *ACM must have an O&M program
- *Similar preparation for asbestos removal is required for encapsulation
- *Long term cost may be greater than asbestos removal is periodic reapplication of the encapsulant is required

Section 2
Response Action Determination (continued)

Enclosure

Advantages:

- *Enclosure reduces immediate exposure
- *Initial cost of enclosure is lower than the cost of asbestos removal
- *ACM may still serve its initial purpose
- *Quick temporary means of repair

Disadvantages:

- *Asbestos remains in place and later removal is more difficult
- *If maintenance is required of the systems insulated with asbestos, the asbestos will be exposed
- *An O&M program will have to be implemented for the ACM
- *Similar preparation for asbestos removal is required for enclosure

Removal

Advantages

- *ACM is eliminated from the building
- *There is no need for an O&M plan
- *Initial cost is great, but the future costs are eliminated

Disadvantages:

- *Re-insulation, re-fireproofing, or replacement of materials may be required
- *Improper removal may raise levels of airborne fibers higher than background levels
- *The initial cost of removal is very high
- *Areas of the building involved in asbestos removal may not be occupied during removal

SECTION 3

UPDATED RECOMMENDED RESPONSE ACTIONS

Section 3

Updated Recommended Response Actions

The updated recommended response actions are for all the homogenous areas found within the school. The response actions are determined utilizing the decision tree approach for Response Action Determination as described in Section 2.

Homogeneous Area #1- 9" x 9" Gray Floor Tile and Mastic, Various locations

Response Action 8: The 9"x 9" Gray Floor Tile and Mastic located within Former Boat Shop, Rooms 003, 011, 301, and Former Observatory Area the school display minor to severe damage. Retain an Asbestos Project Designer to prepare a Work Plan for the repair or remove the damaged floor tile and retain a Massachusetts certified Abatement Contractor to complete the response action following the Work Plan. Recommended completion date of the work activities: February 2023.

Response Action 8: The 9"x 9" Gray Floor Tile and Mastic located within the remainder of the school are in generally good condition or covered by carpet. Continue the Operations and Maintenance (O&M) Program until major renovations or demolition requires the removal of this material, or until the hazard assessment factors change. Prior to renovation/demolition the material must be removed if it will be disturbed.

Homogeneous Area #2- 9" x 9" Green Floor Tile and Mastic, Rooms 005,009, & 306B

Response Action 8: The 9"x 9" Green Floor Tile and Mastic located in rooms 005, 009 of the lower level and room 306B, gym storage of the first floor of the school display minor to severe damage. Retain an Asbestos Project Designer to prepare a Work Plan for the repair or remove the damaged floor tile and retain a Massachusetts certified Abatement Contractor to complete the response action following the Work Plan. Recommended completion date of the work activities: February 2023.

Response Action 8: The 9"x 9" Green Floor Tile and Mastic located within the remainder of the school are in generally good condition or covered by carpet. Continue the O&M Program until major renovations or demolition requires the removal of this material, or until the hazard assessment factors change. Prior to renovation/demolition the material must be removed if it will be disturbed.

Homogeneous Area #3- 9"x 9" Tan Floor Tile and Mastic, Rooms 511, 505, & 501C

Response Action 8: The 9"x 9" Tan Floor Tile and Mastic located in Room 511 displays moderate damage. Retain an Asbestos Project Designer to prepare a Work Plan for the repair or remove the damaged floor tile and retain a Massachusetts certified Abatement Contractor to complete the response action following the Work Plan. Recommended completion date of the work activities: February 2023.

Section 3
Updated Recommended Response Actions (Continued)

Homogeneous Area #3- 9"x 9" Tan Floor Tile and Mastic, Rooms 511, 505, & 501C

Response Action 8: The 9"x 9" Tan Floor Tile and Mastic located in Room 505 and 501C are in generally good condition. Continue the O&M Program until major renovations or demolition requires the removal of this material, or until the hazard assessment factors change. Prior to renovation/demolition the material must be removed if it will be disturbed.

Homogeneous Area #4- 9"x 9" Salmon Floor Tile and Mastic, Rooms 343, 503, & 501B

Response Action 8: The 9"x 9" Salmon Floor Tile and Mastic located in Rooms 501B displays minor damage. Retain an Asbestos Project Designer to prepare a Work Plan for the repair or remove the damaged floor tile and retain a Massachusetts certified Abatement Contractor to complete the response action following the Work Plan. Recommended completion date of the work activities: February 2023.

Response Action 8: The 9"x 9" Salmon Floor Tile and Mastic located in rooms 343 and 503 are in generally good condition. Continue the O&M Program until major renovations or demolition requires the removal of this material, or until the hazard assessment factors change. Prior to renovation/demolition the material must be removed if it will be disturbed.

Homogeneous Area #5- 12"x 12" Off-White Tan Streak Floor Tile and Mastic, Various locations

Response Action 8: The 12"x 12" Off-White Tan Streak Floor Tile and Mastic located within the Gym Storage #1 and # 2 as well as Rooms 205, 207(Offices), 407, 411, 413, 519, and 524 display minor to moderate damage. Retain an Asbestos Project Designer to prepare a Work Plan for the repair or remove the damaged floor tile and retain a Massachusetts certified Abatement Contractor to complete the response action following the Work Plan. Recommended completion date of the work activities: February 2023.

Response Action 8: The 12"x 12" Off-White Tan Streak Floor Tile and Mastic located within the remainder of the school are in generally good condition. Continue the O&M Program until major renovations or demolition requires the removal of this material, or until the hazard assessment factors change. Prior to renovation/demolition the material must be removed if it will be disturbed.

Homogeneous Area #6- 12"x 12" Gray Red Streak Floor Tile and Mastic, Various locations

Response Action 8: The 12"x 12" Gray Red Streak Floor Tile and Mastic located in the 500-Hall (77-Addition), and 400-500 Elevator, display minor to severe damage. Retain an Asbestos Project Designer to prepare a Work Plan for the repair or remove the damaged floor tile and retain a Massachusetts certified Abatement Contractor to complete the response action following the Work Plan. Recommended completion date of the work activities: February 2023.

Section 3

Updated Recommended Response Actions (continued)

Homogeneous Area #7- 12"x 12" Off-White Green Streak Floor Tile and Mastic, Room 524

Response Action 8: The 12"x 12" Off-White Green Streak Floor Tile and Mastic located in Room 524 displays minor damage. Continue the O&M Program until major renovations or demolition requires the removal of this material, or until the hazard assessment factors change. Prior to renovation/demolition the material must be removed if it will be disturbed.

Homogeneous Area #8- Stage Curtain

Response Action 8: The assumed asbestos-containing Stage Curtain located within the Stage Area is in generally good condition, non-friable and has a potential for damage. Implement an O&M Program until major renovations or demolition requires the removal of this material, or until the hazard assessment factors change. The Stage Curtain is assumed to be asbestos-containing and should be tested prior to any activities that may disturb this material.

SECTION 4

RECORDKEEPING REQUIREMENTS AND RECOMMENDATIONS

Section 4

Recordkeeping Requirements and Recommendations

The AHERA regulations have very specific requirement for the maintenance of records associated with the management of asbestos in the school. The following is a list of some of the key items that the LEA Designated Person must maintain as part of the package:

- Initial AHERA inspection report and Asbestos Management Plan
- Subsequent 3-year reinspection reports.
- 6-month surveillance reports.
- Documentation for minor and major fiber release episodes. This includes abatement work performed by outside contractors as well as work performed by 16 hour trained maintenance personnel no matter how small.
- Documentation for completion of response actions (i.e. clearance testing). This should always include applicable training & licensure documentation for whomever performs the work.
- Labeling of ACBM (friable)
- Yearly notice to parents, teachers and staff.
- Training and medical exams for 16-hour trained personnel. Although training does not require renewal. Medicals are to be performed every year. In addition, 16-hour personnel should be fit tested every six months.
- Two hour awareness training for staff. Any new workers are required to receive this training at start of employment. Training should include specific review of ACBM in building their working in.

The above items are some of the key items, which need to be incorporated into the plan. The following are some recommendations are how best to maintain for easy access and review by outside parties:

- Maintain an update the three- ring binder for the school. Have a duplicated copy, one for administration office and one for the facilities office.
- Create tab sections in the binder. Each section should contain the information above. This will allow for easy review and update.
- Ensure that for every major and minor fiber release episode, that all documentation is received.
- As you updated your file, ensure the school's is updated.

Section 4
Recordkeeping Requirements and Recommendations (cont.)

In addition, it is also required that if outside contractors enter building perform work that they review areas where asbestos may be present that will be near their work. Have a log at the school for them to sign that they have read and understand. This will protect the school from liability and ensure outside contractors will not disturb asbestos. Finally, periodically review program internally and with your 16-hour persons to ensure compliance.

Retain an Asbestos Project Designer to prepare a Work Plan for the repair or removal of the identified damaged floor tile and retain a Massachusetts certified Abatement Contractor to complete the response action following the Work Plan. Recommended completion date of the work activities: February 2023.

Continue the periodic cleaning schedule. Properly trained staff (i.e. 2-Hour Asbestos Awareness) should conduct the cleaning activities utilizing HEPA-vacuums and/or wet wiping and floor tile maintenance as outlined in the recommended Operations and Maintenance procedures.

A required six-month periodic surveillance inspection should be scheduled for February 2023.

VERTEX recommends an ACMs Survey be conducted prior to any renovation activities to comply with the EPA Title 40 CFR Part 61, NESHAPs and the Massachusetts Department of Environmental Protection Regulations.

SECTION 5

ESTIMATED RESOURCES REQUIRED TO COMPLETE THE RESPONSE ACTIONS

Section 5

Estimated Resources Required to Complete the Response Actions

This section contains the estimated resources required to complete the abatement activities of the identified damaged ACBMs. These estimates will vary according to competitive bidding, accessibility, location, and condition of ACMs, phasing of work, etc. The cost estimate below does not include abatement contactor mobilization, abatement design and/or project monitoring services.

Estimated Cost to complete the Response Actions at the Dennis-Yarmouth Regional High School located in South Yarmouth, Massachusetts:

Cost Estimate Worksheet can be found in Appendix B. \$2,421.00

*The estimated cost provided above does not include costs that may be associated with abatement consulting, contractor mobilization, two-hour asbestos awareness training, OSHA 16-hr Operations and Maintenance Training and/or the labor to conduct the required six-month surveillance re-inspections. Please refer below for estimated costs associated costs mentioned above:

2-Hour Asbestos Awareness Training= \$75/person
OSHA 16-hr Operations and Maintenance Training = \$300/person
Six-Month Periodic Surveillance Inspection = \$300/inspection
Abatement Work Plan/Design Specification = \$500-\$2,500.00
Mobilization = \$1,500.00-\$2,500.00
Project Monitoring/Clearance Testing = \$520.00-\$600.00/per shift
Transmission Electron Microcopy (TEM) Analysis = \$75.00-\$100.00/sample
Phase Contrast Microscopy (PCM) Analysis = No Charge -\$15.00/sample
Clearance Report Preparation = \$350.00-\$800.00

SECTION 6

ESTIMATED RESOURCES REQUIRED FOR THE ABATEMENT OF THE IDENTIFIED ACBMs

Section 6
Estimated Resources Required For Abatement of the Identified ACBMs

This section contains the estimated resources required to perform the removal of identified ACBMs, however EPA recommends the ACBMs to be managed in place if they are not damaged. Alternative abatement costs are estimated using current Abatement Contractor Estimates. These estimates will vary according to competitive bidding, accessibility, location, and condition of ACBs, phasing of work, etc. The cost estimate below is a worst case scenario if all identified ACBMs were to be removed. The cost estimate below does not include abatement contractor mobilization, abatement design and/or project monitoring services.

Estimated Cost for the Removal of ACBMs from the Dennis-Yarmouth Regional High School located in South Yarmouth, Massachusetts:

Cost Estimate Worksheet can be found in Appendix C. \$205,868.00**

** The estimated cost provided above is developed from current Abatement Contractor Unit pricing. These estimates will vary according to competitive bidding, accessibility, location, and condition of ACBs, phasing of work, etc. In addition, the costs above do not include mobilization of the Abatement Contractor, Abatement Work Plan/Design, Project Monitoring and/or Clearance Testing Services for the completion of the response actions. Please refer for below unit pricing regarding costs for the Contractor Mobilization and Clearance Testing Services:

Abatement Work Plan/Design Specification = \$500-\$2,500.00
Mobilization = \$1,500.00-\$2,500.00
Project Monitoring/Clearance Testing = \$520.00-\$600.00/per shift
Transmission Electron Microcopy (TEM) Analysis = \$75.00-\$100.00/sample
Phase Contrast Microscopy (PCM) Analysis = No Charge -\$15.00/sample
Clearance Report Preparation = \$350.00-\$800.00

SECTION 7

OPERATIONS AND MAINTENANCE

Section 7 **Operations and Maintenance Program**

INTRODUCTION

The DYRSD has established an overall asbestos control program that is designed to minimize exposure of all occupants of the facility to asbestos fibers located at 210 Station Ave in South Yarmouth, Massachusetts. This Operations and Maintenance (O&M) Plan is an integral part of the overall program. It sets guidelines for the proper in-place management of all assumed and identified asbestos-containing building materials (ACBM) located in the building. This O&M plan contains the following sections:

- A. A description of the **duties of the LEA Designated Person (DP)**.
- B. A procedure for **notifying** workers, tenants, and other visitors where ACBM are located, and stressing the importance of avoiding disturbing the ACBM in any way.
- C. The detailed description of **O&M Activities**, including:
 - 1. **Emergency procedures** for both major and minor episodes of fiber release;
 - 2. **Periodic surveillance** of ACBM, so that any changes in the condition of ACBM can be noted, assessed, and documented; and
 - 3. Detailed descriptions of **work procedures** for both general maintenance and Asbestos Associated Project Workers, which must be used so that workers can avoid or minimize fiber release when performing activities that may disturb ACBM.
- D. A list of **records** that must be kept to document O&M and abatement activities.
- E. **Training requirements** for the DP, and custodial and maintenance staff.

In general, asbestos represents a health hazard **only** if fibers are breathed into the lungs or, in rare cases, are swallowed. Asbestos-containing materials that are non-friable (i.e. cannot be easily broken or crumbled by hand pressure) are not hazardous as long as they are intact and in good condition. Because friable materials can be easily crumbled or crushed, they are more susceptible to airborne fiber release than are non-friable materials.

It is a policy of the DYRSD that untrained employees and outside contractors **DO NOT** handle, touch or otherwise disturb any material that is asbestos or suspected of containing asbestos. A properly qualified and trained individual must handle any material that is, or may contain asbestos. Non-asbestos materials have been and may be identified by the asbestos coordinator using one or more of the following criteria: (1) lab analysis, (2) results of previous lab analysis, (3) product composition labels, (4) receipts, and so forth. At no time will any employee, student, or outside contractor assume a material to be asbestos-free. An inventory of Asbestos Containing Building Materials identified from the inspections are presented in Appendix A.

Section 7
Operations and Maintenance Program (Continued)

1. DUTIES OF THE ASBESTOS MANAGEMENT PLAN DESIGNATED PERSON

The DP oversees the implementation and management of the O&M plan. Duties of the DP include (1) notifying building staff, workers, and outside contractors where ACBM is located in the building, (2) assigning workers to tasks involving work that may disturb ACBM, (3) ensuring that abatement and O&M activities are conducted by trained qualified personnel, and (4) keeping records of all asbestos-related activities at the property.

The DP must receive training related to asbestos issues (see “Training Requirements” of this plan).

2. NOTIFICATION

The DP shall ensure that building workers, outside contractors, and tenants are notified of the location, quantity, and physical condition of identified and assumed ACBM that they might disturb. Such notification shall be accomplished by written notice, by personal communication, by posting signs at entrances to mechanical areas, and/or by labeling ACBM. By informing occupants of potential hazards in their vicinity, the notification reduces the possibility that occupants will accidentally disturb ACBM. The notification must stress that persons who disturb ACBM may accidentally release asbestos fibers into the air, and that therefore everyone must avoid disturbing ACBM. This notification will assure compliance with Occupational Health and Safety Administration (OSHA) Regulation 29 CFR Part 1926.1101, which regulates asbestos exposure as it relates to construction work (including building maintenance) and with 29 CFR 1910.1001, which regulates asbestos exposure in general industry (including normal housekeeping). If asbestos-related construction, abatement, or O&M activities is conducted, the DP shall also notify the following persons about the presence, location, and quantity of ACBM:

- A. Employees of the building, such as maintenance and custodial personnel who will work in or adjacent to areas containing ACBM:
- B. Staff who will occupy areas containing ACBM.
- C. Prospective employers applying for or bidding for work if their employees will be expected to work in or adjacent to areas containing ACBM.
- D. Multiple employers occupying a work-site in the building, any of whose employees will be performing work within or adjacent to areas containing ACBM.

Before conducting any work in the building that has the potential to impact ACBM, contractors will be required to sign the Contractor’s Asbestos Notification and Acknowledgment Form. In addition, all contractors and contractor’s employees who work on the site will be required to notify the DP of the presence, location, and quantity of newly discovered ACBM within 24 hours.

Section 7
Operations and Maintenance Program (Continued)

(or sooner if ACBM is disturbed) of the discovery. If any building materials are discovered, the asbestos content of which is unknown, the material shall be presumed to contain

asbestos, until the results of sampling and analysis prove otherwise. Appropriate sampling of the material shall be conducted by a Massachusetts Department of Labor and Work Force Development Division of Labor Standards accredited asbestos inspector and analyzed at an appropriately licensed asbestos analytical laboratory.

The DP shall ensure that all required warning signs are posted during abatement and O&M activities during which the release of asbestos fibers into the air is possible. Warning signs shall demarcate all regulated areas and shall bear the following information:

DANGER
ASBESTOS
CANCER AND LUNG DISEASE HAZARD
AUTHORIZED PERSONNEL ONLY
RESPIRATORS AND PROTECTIVE
CLOTHING ARE REQUIRED IN THIS AREA

Contractors and in-house personnel who remove ACBM within the site shall label all waste containers that contain ACBM waste in accordance with OSHA and EPA guidelines.

The Massachusetts Department of Environmental Protection (DEP) and the Massachusetts Division of Labor Standards (DLS) will be notified anytime work will impact any quantity of ACBM at the school.

The DP shall ensure that all previously installed ACBM that have been identified in the facility are labeled or identified by signs, as feasible. All ACBM that are friable and accessible, such as TSI located in mechanical areas or below suspended ceilings, will be labeled. Labels shall be attached to or posted in areas where employees, residents, and outside contractors who are likely to be exposed will clearly notice (such as at the entrance to mechanical rooms).

The labels shall bear the following information:

DANGER
CONTAINS ASBESTOS FIBERS
AVOID CREATING DUST
CANCER AND LUNG DISEASE HAZARD

Posted signs may be used in lieu of labels to indicate the type and location of each ACBM.

Section 7
Operations and Maintenance Program (Continued)

3. OPERATIONS AND MAINTENANCE ACTIVITIES

Operations and maintenance activities include:

- A. Emergency procedures to be followed in the event of a major or minor episode of fiber release;
- B. Periodic surveillance of ACBM within at the school building;
- C. Work procedures associated with planned maintenance activities that may disturb ACBM. Only properly trained personnel under the control and direction of the DP shall conduct operations and maintenance activities.
- D. Periodic Cleaning Activities

A. Emergency Procedures for Fiber Release Episodes

Fiber release episodes are categorized as *major* (the falling or dislodging of more than 3 square feet or 3 linear feet of friable ACBM), or *minor* (the falling or dislodging of fewer than 3 square feet or 3 linear feet of friable ACBM)

PROCEDURE FOR MAJOR EPISODE

- 1. Restrict entry into the area.
- 2. Immediately contact the DP
- 3. Post sign to prevent anyone from entering the area except persons necessary to perform the response action.
- 4. Shut off or temporarily modify the air-handling system to prevent the fibers from being distributed to other areas in the building.
- 5. The DP shall contact an accredited designer of abatement to prepare an abatement plan that specifies the appropriate response actions.
- 6. The DP shall ensure that only a Massachusetts Certified Asbestos Abatement Contractor conducts the response actions.

Section 7
Operations and Maintenance Program (Continued)

PROCEDURE FOR MINOR EPISODE

1. Thoroughly saturate the debris using all wetting methods necessary.
2. Clean the area using wet wiping techniques followed by vacuuming with a specially equipped High Efficiency Particulate Air (HEPA) vacuum.
3. Place all debris and all contaminated cleaning supplies (mop heads, rags, etc.) into a leak tight container, such as a 6-mil thick polyethylene waste bag, and seal the container. Place the sealed container into a second 6-mil thick polyethylene bag. If labeled waste bags are not used, apply warning label to outside of each bag used.
4. Repair the area of damaged ACBM, as follows:
 - a. Use materials such as asbestos-free spackling, plaster, cement, or insulation; or
 - b. Seal the area with latex paint or an encapsulate; or
 - c. Immediately implement other appropriate response action.

B. Periodic Surveillance

Periodic surveillance of all known and assumed ACBM shall be conducted once every six months. The purpose of the regularly scheduled surveillance is to ensure that any ACBM that are damaged or that have deteriorated are detected in a timely manner. The DP shall use the information from the periodic surveillance in conjunction with ongoing reports from the periodic surveillance in conjunction with ongoing reports from service workers of changes in the condition of the ACBM to take corrective action.

The periodic surveillance consists of a visual inspection of all known and assumed ACBM. Periodic surveillance shall also include a visual and physical evaluation of ACBM in order to determine the degree of damage and to assess the likelihood of future fiber release. The area in the immediate vicinity shall also be examined for potential loose ACBM debris. The DP shall record the cause of the damage.

Only persons who have received at least the minimum asbestos-awareness training (see "Training Requirements", of this plan) shall conduct the periodic surveillance. The results of the surveillance shall be recorded on the periodic surveillance inspection form.

Section 7
Operations and Maintenance Program (Continued)

C. Work Procedures for General Maintenance Personnel

The following work practices shall be prohibited in all circumstances:

- Drilling holes in ACBM;
- Damaging ACBM while moving furniture or other objects;
- Sweeping or dusting floors, ceilings, moldings, or other surfaces in asbestos-contaminated environments;
- Using an ordinary vacuum to clean up asbestos-containing or asbestos contaminated debris (only vacuums equipped with a HEPA filter should be used);
- Removing potentially contaminated ventilation system filters without thoroughly wetting them; and
- Shaking potentially contaminated ventilation system filters.

D. Periodic Cleaning

The following is a general outline to be utilized for the properly trained personnel to conduct the periodic cleaning activities:

- Utilization of disposable rags to wet wipe of all non-porous horizontal surfaces followed by the use of a HEPA-equipped vacuum. Dry sweeping and/or dusting is not permitted to be used to clean the surfaces.
- The collected debris within the lined HEPA-equipped vacuum and disposal rags should be properly disposed of in a labeled asbestos-waste bag accompanied by a Waste Shipment Record for future disposal at a permitted facility that accepts asbestos waste.
- Document the Name of the individual conducting the work activities, location date and time of cleaning for proper recordkeeping. These records should be included within the AMP for the school.

Floor Tile Maintenance

Pursuant to the Occupational Safety and Health Administration (OSHA) Asbestos Standard 29 CFR 1910.1001, properly trained staff (i.e. 2-Hour Asbestos Awareness) should adhere to the OSHA's guidance for care of asbestos-containing flooring materials outlined below:

- Do not sand asbestos-containing flooring material;
- Use only low-abrasion buffing pads;
- Operate buffers only at speeds lower than 300 rpm;
- Use wet methods;
- Document the Name of the individual conducting the work activities, location date and time of cleaning for proper recordkeeping. These records should be included within the AMP for the facility.

Section 7
Operations and Maintenance Program (Continued)

4. RECORDKEEPING REQUIREMENTS

The building owner shall maintain the following documentation pertaining to ACBM in the facility:

- A. All data that are relied upon to demonstrate that suspect ACBM do not in fact contain asbestos.
- B. All data communicated and received that identify the locations and quantities of ACBM.
- C. All records associated with abatement projects and O&M activities.
- D. These documents shall be maintained during the term of ownership. They shall then be transferred to successive owners, in accordance with OSHA Regulation 1926.1101 (n).
- E. If the owner's employees conduct activities that may potentially cause them to be exposed to asbestos fibers, the owner shall keep the following additional records:
- F. All employee exposure-monitoring records pursuant to OSHA Regulation 1926.1101(f).
- G. All information relative to medical surveillance of employees pursuant to OSHA Regulation 1926.1101(m). Medical surveillance shall be required only if:
 - 1. Employees are required to conduct tasks that would result in their exposure to airborne concentrations of asbestos above the OSHA permissible exposure limit (PEL); or
 - 2. If employees conduct asbestos abatement tasks for more than 30 days per year.
- H. The owner shall maintain all employee-training records for one year beyond the employee's last date of employment.

Section 7
Operations and Maintenance Program (Continued)

1. TRAINING REQUIREMENTS

The extent of asbestos training for facility employees depends on the type of asbestos-related activities they will conduct. For most employees who will require training, a two-hour **awareness course** will be sufficient but necessary. For employees who are involved in activities where exposure to airborne asbestos fibers is likely, a more **comprehensive** 16 hour **training course** is necessary.

AWARENESS TRAINING

The curriculum shall include instruction in the following:

- A. The location, quantity, and physical condition of all ACBM located in the facility.
- B. Recognition of damage, deterioration, and delaminating of ACBM.
- C. The health effects associated with asbestos exposure, including the relationship between smoking and asbestos in producing lung cancer.
- D. Procedures to be implemented in the event of a minor or major episode of fiber release.
- E. The requirements for posting signs and affixing labels, and the meaning of the required legends for such signs and labels.

COMPREHENSIVE WORKER TRAINING

The curriculum shall include instruction in the following:

- A. All awareness training information described above.
- B. The nature of operations that could result in exposure to asbestos, and the importance of necessary protective controls and of procedures for minimizing exposure, including:
 - engineering controls
 - work practices,
 - respirators,
 - housekeeping procedures,
 - hygiene facilities,
 - protective clothing,
 - decontamination procedures,
 - emergency procedures,
 - waste disposal procedures and any necessary instruction in the use of these controls and procedures.

Section 7
Operations and Maintenance Program (Continued)

- C. The purpose, proper use, fitting instructions, and limitations of respirators.
- D. Medical surveillance program requirements
- E. The contents of the OSHA standard (1926.1101) regarding asbestos in construction.
- F. Hands-on-training in the use of respiratory protection, other personal protection measures, and work practices.

Detailed procedures for conducting small-scale, short duration abatement activities, as defined in Appendix A to Subpart E to EPA Regulation 40 CFR Part 763.

APPENDIX A

**LOCATIONS OF THE ASBESTOS CONTAINING BUILDING MATERIALS AND
UPDATED CONDITONS**

Appendix A 3-Year AHERA Re-Inspection August 2022 Locations of the Identified Asbestos-Containing Building Materials Dennis-Yarmouth Regional High School, S. Yarmouth Massachusetts						
Location	ACBM Description	Estimated Quantity	VERTEX 2019 Cond.	VERTEX 2022 Updated Cond.	Fri.	HAHAC #
Lower Level						
Former Boat Shop	9"x 9" Gray Floor Tile and Mastic	132 ft ²	MD (6 ft ²)	MD (6 ft ²)	N	6
Room 003	9"x 9" Gray Floor Tile and Mastic	900 ft ²	MD (4 ft ²)	MD (6 ft ²)	N	6
Room 005	9"x 9" Green Floor Tile and Mastic	900 ft ²	MD (10 ft ²)	MD (10 ft ²)	N	6
Room 007	9"x 9" Gray Floor Tile and Mastic	900 ft ²	MD (3 ft ²)	MD (6 ft ²)	N	5
Room 009	9"x 9" Green Floor Tile and Mastic	900 ft ²	MD (2 ft ²)	MD (6 ft ²)	N	5
Room 011	9"x 9" Gray Floor Tile and Mastic	900 ft ²	MD (4ft ²)	MD (10 ft ²)	N	6
First Floor						
Room 205	12"x 12" Off-White Tan Streak FT and Mastic	2,288 ft ²	MD (40 ft ²)	MD (40 ft ²)	N	5
Room 207	12"x 12" Off-White Tan Streak FT and Mastic	1,512 ft ²	G	MD (1 ft ²)	N	5
Room 207(offices)	12"x 12" Off-White Tan Streak FT and Mastic	1,408 ft ²	MD (2 ft ²)	MD (10 ft ²)	N	5
Auditorium/Stage	Stage Curtain (assumed)	1 Unit			N	5
Maintenance Office Computer Room 301	9"x 9" Gray Floor Tile and Mastic	50 ft ²	SD (12 ft ²)	SD (12 ft ²)	N	6
Room 306B (gym storage)	9"x 9" Green Floor Tile and Mastic	80 ft ²	SD (20 ft ²)	SD (20 ft ²)	N	6
Room 343 (electric)	9"x 9" Salmon Floor Tile and Mastic	110 ft ²	G	G	N	5
Gymnasium Storage #1 (1977)	12"x 12" Off-White Tan Streak FT and Mastic	300 ft ²	MD (4 ft ²)	MD (4 ft ²)	N	6
Gymnasium Storage #2 (1977)	12"x 12" Off-White Tan Streak FT and Mastic	300 ft ²	MD (8 ft ²)	MD (8 ft ²)	N	6
400-Hall (1977)	12"x 12" Gray Red Streak FT and Mastic	1,680 ft ²	MD (6 ft ²)	Abated	N	6
Room 409 (offices)	12"x 12" Off-White Tan Streak FT and Mastic	576 ft ²	MD (4 ft ²)	MD (4 ft ²)	N	6
Room 411	12"x 12" Off-White Tan Streak FT and Mastic	820 ft ²	MD (3 ft ²)	MD (3 ft ²)	N	5
Room 413	12"x 12" Off-White Tan Streak FT and Mastic	820 ft ²	MD (2 ft ²)	MD (2 ft ²)	N	5

Appendix A 3-Year AHERA Re-Inspection August 2022 Locations of the Identified Asbestos-Containing Building Materials Dennis-Yarmouth Regional High School, S. Yarmouth Massachusetts						
Location	ACBM Description	Estimated Quantity	VERTEX 2019 Cond.	VERTEX 2022 Updated Cond.	Fri.	HAHAC #
<i>First Floor (Continued)</i>						
Room 415	12"x 12" Gray Red Streak Floor FT and Mastic	820 ft ²	G	G	N	5
Room 417	12"x 12" Off-White Tan Streak FT and Mastic	820 ft ²	G	G	N	5
AV Room	12"x 12" Gray Red Streak FT and Mastic	2,560 ft ²	G	MD (24 ft ²)	N	5
Room 418B	12"x 12" Gray Red Streak FT and Mastic	448 ft ²	G	G	N	5
Room 418C	12"x 12" Gray Red Streak FT and Mastic	400 ft ²	G	G	N	5

Appendix A 3-Year AHERA Re-Inspection August 2022 Locations of the Identified Asbestos-Containing Building Materials Dennis-Yarmouth Regional High School, S. Yarmouth Massachusetts						
Location	ACBM Description	Estimated Quantity	VERTEX 2019 Cond.	VERTEX 2022 Updated Cond.	Fri.	HAHAC #
Second Floor						
400-500 Elevator	12"x 12" Gray Red Streak FT and Mastic	36 ft ²	MD (3 ft ²)	MD (3 ft ²)	N	6
500-Hall (1977-Addition)	12"x 12" Gray Red Streak FT and Mastic	1,240 ft ²	MD (6 ft ²)	MD (12 ft ²)	N	6
Room 519	12"x 12" Off-White Tan Streak FT and Mastic	900 ft ²	MD (1 ft ²)	MD (1 ft ²)	N	5
Room 524	12"x 12" Off-White Tan Streak FT and Mastic	900 ft ²	MD (2 ft ²)	MD (6 ft ²)	N	6
Room 522	12"x 12" Off-White Tan Streak FT and Mastic	900 ft ²	G	MD (2 ft ²)	N	5
Storage Room Across Room 521A	12"x 12" Off-White Tan Streak FT and Mastic	300 ft ²	G	G	N	5
Room 511	9" x 9" Tan Floor Tile and Mastic	200 ft ²	MD (10 ft ²)	MD (10 ft ²)	N	6
Book Storage by Room 505	9" x 9" Tan Floor Tile and Mastic	144 ft ²	G	G	N	5
Room 503-Closet	9" x 9" Salmon Floor Tile and Mastic	80 ft ²	G	G	N	5
Room 501B	9" x 9" Salmon Floor Tile and Mastic	64 ft ²	MD (3 ft ²)	MD (5 ft ²)	N	6
Room 501C-Storage	9" x 9" Tan Floor Tile and Mastic	64 ft ²	MD (3 ft ²)	MD (3 ft ²)	N	5
Mechanical Penthouse						
Former Observatory Area	9" x 9" Gray Floor Tile and Mastic	80 ft ²	MD (80 ft ²)	MD (80 ft ²)	N	6

Notes:

ft² = Square Foot

lf = Linear Foot

Unit = Each

Y= Yes

N = No

Cond. = Condition

G = Good

MD = Minor Damage

SD = Significantly Damaged

U = Unknown

C = Covered

Fri. = Friable

NPI = Not Previously Identified

HAHAC # = Homogenous Area Hazard Assessment Category

1 = Damaged/Significantly Damaged Thermal System Insulation

2 = Damaged Friable Surfacing ACBM

3 = Significantly Damaged Friable Surfacing ACBM

4 = Damaged or Significantly Damaged Friable Miscellaneous ACBM

5 = ACBM with Potential for Damage

6 = ACBM with Potential for Significant Damage

7 = Any Remaining Friable ACBM or Friable Suspected ACBM

NA = Not Applicable

APPENDIX B

ESTIMATED RESOURCES REQUIRED TO COMPLETE THE RESPONSE ACTIONS

Appendix B 3-Year AHERA Re-Inspection August 2022 Estimated Resources to Complete the Response Actions Dennis-Yarmouth Regional High School, Massachusetts						
Location	ACBM Description	Estimated Quantity	Recommend Response Action	Estimated Cost	Recommended Date of Completed Response Action	Date of Completed Response Action
Lower Level						
Former Boat Shop	9" x 9" Gray Floor Tile and Mastic	6 ft ²	Remove/Repair	\$54.00	February 2023	
Room 003	9" x 9" Gray Floor Tile and Mastic	6 ft ²	Remove/Repair	\$54.00	February 2023	
Room 005	9" x 9" Green Floor Tile and Mastic	10 ft ²	Remove/Repair	\$90.00	February 2023	
Room 007	9" x 9" Green Floor Tile and Mastic	6 ft ²	Remove/Repair	\$54.00	February 2023	
Room 009	9" x 9" Green Floor Tile and Mastic	6 ft ²	Remove/Repair	\$54.00	February 2023	
Room 011	9" x 9" Gray Floor Tile and Mastic	10 ft ²	Remove/Repair	\$90.00	February 2023	
First Floor						
Room 205	12"x 12" Off-White Tan Streak FT and Mastic	40 ft ²	Remove/Repair	\$360.00	February 2023	
Room 207	12"x 12" Off-White Tan Streak FT and Mastic	1 ft ²	Remove/Repair	\$9.00	February 2023	
Room 207 (Offices)	12"x 12" Off-White Tan Streak FT and Mastic	10 ft ²	Remove/Repair	\$90.00	February 2023	
Maintenance Office Computer Room 301	9"x 9" Gray Floor Tile and Mastic	12 ft ²	Remove/Repair	\$108.00	February 2023	
Room 306B (gym storage)	9"x 9" Green Floor Tile and Mastic	20 ft ²	Remove/Repair	\$180.00	February 2023	
Gymnasium Storage #1 (1977)	12"x 12" Off-White Tan Streak FT and Mastic	4 ft ²	Remove/Repair	\$36.00	February 2023	
Gymnasium Storage #2 (1977)	12"x 12" Off-White Tan Streak FT and Mastic	8 ft ²	Remove/Repair	\$72.00	February 2023	
Room 409 (offices)	12"x 12" Off-White Tan Streak FT and Mastic	4 ft ²	Remove/Repair	\$36.00	February 2023	
Room 411	12"x 12" Off-White Tan Streak FT and Mastic	3 ft ²	Remove/Repair	\$27.00	February 2023	
Room 413	12"x 12" Off-White Tan Streak FT and Mastic	2 ft ²	Remove/Repair	\$18.00	February 2023	
Second Floor						
400-500 Elevator	12"x 12" Gray Red Streak Floor Tile and Mastic	3 ft ²	Remove/Repair	\$18.00	February 2023	
500-Hall (1977)	12"x 12" Gray Red Streak Floor Tile and Mastic	12 ft ²	Remove/Repair	\$108.00	February 2023	

Appendix B 3-Year AHERA Re-Inspection August 2022 Estimated Resources to Complete the Response Actions Dennis-Yarmouth Regional High School, Massachusetts						
Location	ACBM Description	Estimated Quantity	Recommend Response Action	Estimated Cost	Recommended Date of Completed Response Action	Date of Completed Response Action
Second Floor						
Room 519	12"x 12" Off-White Tan Streak FT and Mastic	1 ft ²	Remove/Repair	\$9.00	February 2023	
Room 524	12"x 12" Off-White Tan Streak FT and Mastic	6 ft ²	Remove/Repair	\$54.00	February 2023	
Room 522	12"x 12" Off-White Tan Streak FT and Mastic	2 ft ²	Remove/Repair	\$18.00	February 2023	
Room 511	9"x 9" Tan Floor Tile and Mastic	10 ft ²	Remove/Repair	\$90.00	February 2023	
Room 501B	9"x 9" Salmon Floor Tile and Mastic	5 ft ²	Remove/Repair	\$45.00	February 2023	
Room 501C	9"x 9" Tan Floor Tile and Mastic	3 ft ²	Remove/Repair	\$27.00	February 2023	
Former Observatory Area	9"x 9" Gray Floor Tile and Mastic	80 ft ²	Remove	\$720.00	February 2023	

Notes:

ft² = Square Foot

* The estimated cost provided above is developed from current Abatement Contractor Unit pricing. These estimates will vary according to competitive bidding, accessibility, location, and condition of ACMs, phasing of work, etc. In addition, the costs above do not include mobilization of the Abatement Contractor, Abatement Work Plan/Design, Project Monitoring and/or Clearance Testing Services for the completion of the response actions. Please refer for below unit pricing regarding costs for the Contractor Mobilization and Clearance Testing Services:

Abatement Work Plan/Design Specification = \$500-\$2,500.00

Abatement Contactor Mobilization = \$1,500.00-\$2,500.00

Project Monitoring/Clearance Testing = \$520.00-\$600.00/per shift

Dennis-Yarmouth Regional High School
210 Station Avenue, S. Yarmouth Massachusetts
Project # 80960

Estimated Resources to Complete Response Actions

Page 3

Transmission Electron Microcopy (TEM) Analysis = \$75.00-\$100.00/sample
Phase Contrast Microscopy (PCM) Analysis = No Charge -\$15.00/sample
Clearance Report Preparation = \$350.00-\$800.00

**The estimated cost provided above does not include costs that may be associated with two-hour asbestos awareness training, OSHA 16-hr Operations and Maintenance Training, and/or the labor to conduct the required six-month surveillance re-inspections. Please refer below for estimated costs that may be associated with the mentioned above:

2-Hour Asbestos Awareness Training = \$75/person
OSHA 16-hr Operations and Maintenance Training = \$300/person
Six-Month Periodic Surveillance Inspection = \$400/inspection

APPENDIX C

ESTIMATED RESOURCES REQUIRED FOR THE ABATEMENT OF THE IDENTIFIED ACBMs

Appendix C 3-Year AHERA Re-Inspection August 2022 Estimated Costs for Removal of the Identified Asbestos-Containing Building Materials Dennis-Yarmouth Regional High School, S. Yarmouth Massachusetts			
Location	ACBM Description	Estimated Quantity	Estimated Cost
<i>Lower Level</i>			
Former Boat Shop	9"x 9" Gray Floor Tile and Mastic	132 ft ²	\$1,188.00
Room 003	9"x 9" Gray Floor Tile and Mastic	900 ft ²	\$8,100.00
Room 005	9"x 9" Green Floor Tile and Mastic	900 ft ²	\$8,100.00
Room 007	9"x 9" Gray Floor Tile and Mastic	900 ft ²	\$8,100.00
Room 009	9"x 9" Green Floor Tile and Mastic	900 ft ²	\$8,100.00
Room 011	9"x 9" Gray Floor Tile and Mastic	900 ft ²	\$8,100.00
<i>First Floor</i>			
Room 205	12"x 12" Off-White Tan Streak Floor Tile and Mastic	2,288 ft ²	\$20,592.00
Room 207	12"x 12" Off-White Tan Streak Floor Tile and Mastic	1,512 ft ²	\$13,608.00
Room 207(offices)	12"x 12" Off-White Tan Streak Floor Tile and Mastic	1,408 ft ²	\$12,672.00
Auditorium/Stage	Stage Curtain (assumed)	1 Unit	\$200.00
Maintenance Office Computer Room 301	9"x 9" Gray Floor Tile and Mastic	50 ft ²	\$450.00
Room 306B (gym storage)	9"x 9" Green Floor Tile and Mastic	80 ft ²	\$720.00
Room 343 (electric)	9"x 9" Salmon Floor Tile and Mastic	110 ft ²	\$990.00
Gymnasium Storage #1 (1977)	12"x 12" Off-White Tan Streak Floor Tile and Mastic	300 ft ²	\$2,700.00
Gymnasium Storage #2 (1977)	12"x 12" Off-White Tan Streak Floor Tile and Mastic	300 ft ²	\$2,700.00
Room 409 (offices)	12"x 12" Off-White Tan Streak Floor Tile and Mastic	576 ft ²	\$5,184.00
Room 411	12"x 12" Off-White Tan Streak Floor Tile and Mastic	820 ft ²	\$7,380.00
Room 413	12"x 12" Off-White Tan Streak Floor Tile and Mastic	820 ft ²	\$7,380.00
Room 415	12"x 12" Gray Red Streak Floor Tile and Mastic	820 ft ²	\$7,380.00
Room 417	12"x 12" Off-White Tan Streak Floor Tile and Mastic	820 ft ²	\$7,380.00
AV Room	12"x 12" Gray Red Streak Floor Tile and Mastic	2,560 ft ²	\$23,040.00
Room 418B	12" x 12" Gray Red Streak Floor Tile and Mastic	448 ft ²	\$4,032.00
Room 418C	12" x 12" Gray Red Streak Floor Tile and Mastic	400 ft ²	\$3,600.00

Appendix C 3-Year AHERA Re-Inspection August 2022 Estimated Costs for Removal of the Identified Asbestos-Containing Building Materials Dennis-Yarmouth Regional High School, S. Yarmouth Massachusetts			
Location	ACBM Description	Estimated Quantity	Estimated Cost
<i>Second Floor</i>			
400-500 Elevator	12" x 12" Gray Red Streak Floor Tile and Mastic	36 ft ²	\$324.00
500-Hall (1977-Addition)	12" x 12" Gray Red Streak Floor Tile and Mastic	1,240 ft ²	\$11,160.00
Room 519	12" x 12" Off-White Tan Streak Floor Tile and Mastic	900 ft ²	\$8,100.00
Room 524	12" x 12" Off-White Green Streak Floor Tile and Mastic	900 ft ²	\$8,100.00
Room 522	12" x 12" Off-White Tan Streak Floor Tile and Mastic	900 ft ²	\$8,100.00
Storage Room Across Room 521A	12" x 12" Off-White Tan Streak Floor Tile and Mastic	300 ft ²	\$2,700.00
Room 511	9" x 9" Tan Floor Tile and Mastic	200 ft ²	\$1,800.00
Book Storage by Room 505	9" x 9" Tan Floor Tile and Mastic	144 ft ²	\$1,296.00
Room 503-Closet	9" x 9" Salmon Floor Tile and Mastic	80 ft ²	\$720.00
Room 501B	9" x 9" Salmon Floor Tile and Mastic	64 ft ²	\$576.00
Room 501C-Storage	9" x 9" Tan Floor Tile and Mastic	64 ft ²	\$576.00
<i>Mechanical Penthouse</i>			
Former Observatory Area	9" x 9" Gray Floor Tile and Mastic	80 ft ²	\$720.00

Notes:

ft² = Square Foot

lf = Linear Foot

Unit = Each

APPENDIX D
PERSONNEL CERTIFICATIONS

The Vertex Companies, LLC

ACCREDITATION PAGE

Accredited Inspector

Name: Jessica Woltemate

Accreditation Number: AI901049



Signature: _____

Date: 8/23/22

Accredited Management Planner

Name: Jason Mohre

Accreditation Number: AP000080



Signature: _____

Date: 8/23/22

APPENDIX E

DESIGNATED PERSON ASSURANCES SIGN-OFF

DESIGNATED PERSON ASSURANCES

In accordance with 40 CFR ' 763.93(i) of the Environmental Protection Agency Asbestos-Containing Material in Schools regulation, the undersigned Local Education Agency (LEA) Designated Person (DP) hereby certifies that the following general responsibilities of the LEA under 40 CFR ' 763.84 have been or will be met:

1. Ensure that the activities of any persons who perform inspections, reinspections, and periodic surveillance, develop and update management plans, and develop and implement response actions, including operations and maintenance, are carried out in accordance with Part 763, Subpart E.
2. Ensure that all custodial and maintenance employees are properly trained as required by Part 763, Subpart E and other applicable Federal and/or State regulations (e.g., the Occupational Safety and Health Administration asbestos standard for construction, the EPA worker protection rule, or applicable State regulations).
3. Ensure that workers and building occupants, or their legal guardians, are informed at least once each school year about inspections, response actions, and post-response action activities, including periodic reinspection and surveillance activities that are planned or in progress.
4. Ensure that short-term workers (e.g., telephone repair workers, utility workers, or exterminators) who may come in contact with asbestos in a school are provided information regarding the locations for Asbestos-Containing Building Materials (ACBM) and suspected ACBM assumed to be Asbestos-Containing Materials (ACM).
5. Ensure that warning labels are posted in accordance with ' 40 CFR 763.95.
6. Ensure that management plans are available for inspection and notification of such availability has been provided as specified in the management plan under ' 40 CFR 763.93(g).
7. Designate a person to ensure that requirements under ' 763.84 are properly implemented and ensure that the designated person receives adequate training to perform duties assigned under ' 763.84. Such training shall provide, as necessary, basic knowledge of: health effects of asbestos; detection, identification, and assessment of ACM; options for controlling ACBM; asbestos management programs; relevant Federal and State regulations concerning asbestos, including those in Part 763, Subpart E and those of the Occupational Safety and Health Administration, U.S. Department of Transportation and the U.S. Environmental Protection Agency.
8. Consider whether any conflict of interest may arise from the inter-relationship among accredited personnel and whether that should influence the selection of accredited personnel to perform activities under Part 763, Subpart E.

Name of Designated Person:

Designated Person's Signature:

Date:

APPENDIX F
SIX-MONTH SURVEILLANCE

AHERA Six-Month Surveillance Inspection Date: _____

Inspector (Print Name): _____

Inspector Signature: _____

Dennis-Yarmouth Regional High School, 210 Station Ave. S. Yarmouth Massachusetts

Location	ACBM Description	Estimated Quantity	VERTEX 2022 Cond.	Feb 2023 Cond.	Aug 2023 Cond.	Feb 2024 Cond.	Aug 2024 Cond.	Feb 2025 Cond.
Lower Level								
Former Boat Shop	9"x 9" Gray Floor Tile and Mastic	132 ft ²	MD (6 ft ²)					
Room 003	9"x 9" Gray Floor Tile and Mastic	900 ft ²	MD (6 ft ²)					
Room 005	9"x 9" Green Floor Tile and Mastic	900 ft ²	MD (10 ft ²)					
Room 007	9"x 9" Gray Floor Tile and Mastic	900 ft ²	MD (3 ft ²)					
Room 009	9"x 9" Green Floor Tile and Mastic	900 ft ²	MD (2 ft ²)					
Room 011	9"x 9" Gray Floor Tile and Mastic	900 ft ²	MD (4ft ²)					
First Floor								
Room 205	12"x 12" Off-White Tan Streak FT and Mastic	2,288 ft ²	MD (40 ft ²)					
Room 207	12"x 12" Off-White Tan Streak FT and Mastic	1,512 ft ²	MD (1 ft ²)					
Room 207(offices)	12"x 12" Off-White Tan Streak FT and Mastic	1,408 ft ²	MD (10 ft ²)					
Auditorium/Stage	Stage Curtain (assumed)	1 Unit						
Maintenance Office Computer Room 301	9"x 9" Gray Floor Tile and Mastic	50 ft ²	SD (12 ft ²)					
Room 306B (gym storage)	9"x 9" Green Floor Tile and Mastic	80 ft ²	SD (20 ft ²)					
Room 343 (electric)	9"x 9" Salmon Floor Tile and Mastic	110 ft ²	G					
Gymnasium Storage #1 (1977)	12"x 12" Off-White Tan Streak FT and Mastic	300 ft ²	MD (4 ft ²)					
Gymnasium Storage #2 (1977)	12"x 12" Off-White Tan Streak FT and Mastic	300 ft ²	MD (8 ft ²)					
Room 409 (offices)	12"x 12" Off-White Tan Streak FT and Mastic	576 ft ²	MD (4 ft ²)					
Room 411	12"x 12" Off-White Tan Streak FT and Mastic	820 ft ²	MD (3 ft ²)					
Room 413	12"x 12" Off-White Tan Streak FT and Mastic	820 ft ²	MD (2 ft ²)					

AHERA Six-Month Surveillance Inspection Date: _____

Inspector (Print Name): _____

Inspector Signature: _____

Dennis-Yarmouth Regional High School, 210 Station Ave. S. Yarmouth Massachusetts

Location	ACBM Description	Estimated Quantity	VERTEX 2022 Cond.	Feb 2023 Cond.	Aug 2023 Cond.	Feb 2024 Cond.	Aug 2024 Cond.	Feb 2025 Cond.
<i>First Floor (Continued)</i>								
Room 415	12"x 12" Gray Red Streak Floor FT and Mastic	820 ft ²	G					
Room 417	12"x 12" Off-White Tan Streak FT and Mastic	820 ft ²	G					
AV Room	12"x 12" Gray Red Streak FT and Mastic	2,560 ft ²	MD (24 ft ²)					
Room 418B	12"x 12" Gray Red Streak FT and Mastic	448 ft ²	G					
Room 418C	12"x 12" Gray Red Streak FT and Mastic	400 ft ²	G					

AHERA Six-Month Surveillance Inspection Date: _____

Inspector (Print Name): _____

Inspector Signature: _____

Dennis-Yarmouth Regional High School, 210 Station Ave. S. Yarmouth Massachusetts

Location	ACBM Description	Estimated Quantity	VERTEX 2022 Cond.	Feb 2023 Cond.	Aug 2023 Cond.	Feb 2024 Cond.	Aug 2024 Cond.	Feb 2025 Cond.
Second Floor								
400-500 Elevator	12"x 12" Gray Red Streak FT and Mastic	36 ft ²	MD (3 ft ²)					
500-Hall (1977-Addition)	12"x 12" Gray Red Streak FT and Mastic	1,240 ft ²	MD (6 ft ²)					
Room 519	12"x 12" Off-White Tan Streak FT and Mastic	900 ft ²	MD (1 ft ²)					
Room 524	12"x 12" Off-White Tan Streak FT and Mastic	900 ft ²	MD (2 ft ²)					
Room 522	12"x 12" Off-White Tan Streak FT and Mastic	900 ft ²	G					
Storage Room Across Room 521A	12"x 12" Off-White Tan Streak FT and Mastic	300 ft ²	G					
Room 511	9" x 9" Tan Floor Tile and Mastic	200 ft ²	MD (10 ft ²)					
Book Storage by Room 505	9" x 9" Tan Floor Tile and Mastic	144 ft ²	G					
Room 503-Closet	9" x 9" Salmon Floor Tile and Mastic	80 ft ²	G					
Room 501C-Storage	9" x 9" Tan Floor Tile and Mastic	64 ft ²	MD (3 ft ²)					
Room 501B	9" x 9" Salmon Floor Tile and Mastic	64 ft ²	MD (3 ft ²)					
Mechanical Penthouse								
Former Observatory Area	9" x 9" Gray Floor Tile and Mastic	80 ft ²	MD (80 ft ²)					

Notes:

ft² = Square Foot

lf = Linear Foot

APPENDIX G

SCHEMATICS

D-Y High School Floor Plan

