

ASBESTOS RE-INSPECTION/MANAGEMENT PLAN UPDATE

INSPECTION SITE: Holmes School
18 Hoyt Street
Darien, CT

CLIENT: Darien Public Schools
PO Box 1167
Darien, CT 06820
Attn. Kevin Munrett

INSPECTORS: Ryan Ebenhack CT Asbestos Inspector #000418

MANAGEMENT PLANNER: James Twitchell (CT Inspector/Management Planner #000241)

INSPECTION DATE: November 8, 2022

BUILDING TYPE: School

BACKGROUND

HYGENIX Division of Pennoni, was hired by the Darien Public School Systems for its' re-inspection/update of their asbestos management plan (AMP). The goal of the asbestos management plan is to document the presence of asbestos-containing materials (ACM'S) in the above-mentioned site, and to comment on the conditions of these materials.

ASBESTOS INSPECTION PROTOCOL

The asbestos inspection and sampling were carried out in accordance with guidelines published in the CT Asbestos-Containing Materials in Schools Regulations (Section 19a-333-1 to 19a-333-13).

SAMPLING PROTOCOL

During the inspections of accessible spaces, the inspector identified "functional spaces or building systems" (e.g. dwelling spaces, storage rooms, boiler rooms, roof systems, heating systems, etc.), and categorized the construction materials within functional spaces and/or system as "homogeneous", based on uniformity in color, age, texture and use. The inspector then compiled a list of building materials suspected to contain asbestos, and recorded the condition, location and approximate quantity of homogeneous, suspect materials.

From each homogeneous area or building system, where no samples have been collected, the inspectors either assumed the materials were positive or collected representative "bulk" samples of construction materials suspected to contain asbestos. Sampling was carried out in accordance with the regulatory protocols included in the CT Asbestos-Containing Materials in Schools

Regulations. Table 1 lists the minimum number of samples of each homogeneous material required by the CT Asbestos-Containing Materials in Schools Regulations inspection protocol:

TABLE 1 - CT SAMPLING STANDARDS

<u>Homogeneous Material Type</u>	<u>Minimum Number of Samples</u>
Thermal System Insulation	3 Samples
Miscellaneous Materials	3 Samples
Surfacing Materials	< 1000 Sq Ft 3 Samples
	1000-5000 Sq Ft 5 Samples
	> 5000 Sq Ft 7 Samples

Previous samples of suspect materials were analyzed at HYGENIX, Inc. laboratory and Scientific Laboratories, now AmeriSci, by polarized light microscopy (PLM) in accordance with EPA procedure #600/M4-82-020. The National Voluntary Laboratory Approval Program (NVLAP) accredits both AmeriSci and HYGENIX, Inc. to perform bulk asbestos analysis.

No samples were collected during the re-inspection.

INTERPRETATION OF TEST RESULTS

The regulations of CT Department of Public Health and the US EPA define asbestos containing materials (ACM's) as materials containing greater than 1-% asbestos. If one or more bulk samples of a homogeneous material are found to contain greater than 1-% asbestos, then all of the homogeneous material is classified as ACM.

The US OSHA Asbestos Construction Industry Standard requires designation as ***presumed asbestos containing materials*** (PACM's), all surfacing materials and thermal system insulation which have not been tested, or for which the number of samples collected and analyzed was less than the previously listed minimums. This requirement does not apply if the building in which the material is found was constructed after 1980.

The results of the PLM laboratory testing are summarized in Appendix A.

ACBM ASSESSMENT

An essential objective of the asbestos survey is to evaluate the condition and accessibility of asbestos-containing building materials as an aid to evaluating the current and potential risk of asbestos exposure. By rating the degree and likelihood of asbestos fiber exposure on an objective, systematic basis, the building owner can prioritize response actions on a rational basis.

The CT survey guidelines offers the inspector seven categories in which to record the current condition of asbestos-containing building materials and the potential for damage:

- (1) Damaged or Significantly Damaged Friable Thermal System Insulation
- (2) Damaged Friable Surfacing Material
- (3) Significantly Damaged Friable Surfacing Material
- (4) Damaged or Significantly Damaged Friable Miscellaneous Material
- (5) ACBM with Potential for Damage
- (6) ACBM with the Potential for Significant Damage
- (7) Any Remaining Friable ACBM or Friable Suspected (Presumed) ACBM

TABLE 1 - SUMMARY OF ACM

<u>LOCATION</u>	<u>AHERA CATEGORY</u>	<u>MATERIAL DESCRIPTION</u>	<u>HAZARD ASSESSMNT</u>
Chases Between Attic & Tunnels	Thermal System Insulation	Suspected ACM in Pipe Chase	Friable/ (7)
Boiler Room	Thermal System Insulation	Boiler Insulation (Interior & Exterior)	Abated Summer 2010
Library	Miscellaneous Materials	Preformed Hard Wainscot	Non-Friable/ (5)
Two Story Roof	Miscellaneous Materials	Flashing /Cement	Non-Friable/ (5)
Room 108, 122, 216, 214, 211			
210, 207, 205 adjacent radiators	Miscellaneous Materials	Transite	Non-Friable/ (5)
Gymnasium	Miscellaneous Materials	Paper/Mastic Under Wood Floor	Non-Friable/ (5)
Gymnasium	Miscellaneous Materials	Transite Peg Board Ceiling	Non-Friable/ (5)

GENERAL DISCUSSION - ASBESTOS ABATEMENT REGULATIONS

Asbestos management and abatement activities in the State of Connecticut are governed by the following State and federal regulations:

1. US EPA National Emission Standards for Hazardous Air Pollutants (NESHAPs)

The NESHAPs regulations for asbestos prohibit the emission of airborne asbestos dust to the environment. These regulations require notification of the regional office of US EPA at least 10 days in advance of an asbestos abatement project involving more than 260 linear feet, 160 square feet, or 35 cubic feet of material containing more than 1% asbestos. The NESHAPs regulations require the asbestos-containing materials to be kept in a wet condition during handling and removal, and specify requirements for labeling, transport, and disposal of asbestos waste.

2. US OSHA Asbestos Construction Industry Standard

The OSHA Asbestos Construction Industry Standard protects workers who may be exposed to asbestos in construction. The OSHA standard specifies permissible exposure limits, and procedures for handling various forms and quantities of asbestos containing building materials. The standard describes regulated areas, exposure monitoring, respiratory protection and protective clothing, hygiene facilities, hazard communication, housekeeping, medical surveillance, record keeping, and worker training requirements.

3. CT DPH CT Standards for Asbestos Abatement

The CT regulations describe the allowable procedures for asbestos abatement, licensing of personnel involved in asbestos abatement, and reoccupancy testing requirements. A 10-day advance notification of the agency is required for asbestos removal projects involving more than 25 square feet or 10 linear feet of friable asbestos containing material.

INVENTORY OF ASBESTOS CONTAINING BUILDING MATERIALS:

All the following asbestos containing materials are present in the building. Prior to any building renovations or demolition, that will affect these items, a Connecticut licensed asbestos abatement contractor employing appropriate engineering controls and worker protection measures must remove the materials.

Inside Chases Between Attic & Tunnels – Pipe Insulation (Unknown linear feet)
Boiler Room – Interior & Exterior Boiler Insulation (**Abated Summer 2010**)
Library – Preformed Hard Wainscot (567 square feet)
Two Story Roof – Flashing/Cement (275 square feet)
Room 108, 122, 205, 207, 210, 211, 214 & 216 – Transite Panels (6 square feet/radiator)
Gymnasium – Floor/Mastic under wood floor (2,500 square feet)
Gymnasium – Transite Peg Board Ceiling (2,500 square feet)

GENERAL ASSESSMENT DISCUSSION - ASBESTOS CONTAINING BUILDING MATERIALS:

Transite Panels

Transite is found as preformed hard wainscot in the library, behind radiators in some classrooms and is assumed to be present as the ceiling in the gymnasium. The transite has been tested and was found to be asbestos containing. The transite is undamaged and has a low potential for disturbance.

In general, transite is non-friable and unlikely to release asbestos dust unless severely damaged or subject to extreme physical force. Accordingly, transite, in its present condition, does not appear to present an asbestos hazard. However, if the transite must be removed, cut, or sanded, or if they deteriorate over time, a Connecticut licensed asbestos contractor employing appropriate engineering controls and worker protection measures must remove them.

Asbestos Thermal System Insulation

Asbestos thermal system insulation is assumed to be present on the heating system lines in some pipe chases within the building.

Asbestos thermal system insulation is friable and likely to release asbestos dust with relatively minor disturbances. Prior to any renovation work in areas where asbestos insulation is known or suspected to be present, the insulation should be removed by a qualified asbestos contractor. Renovation contractors should also be advised that additional pipe insulation might be present on pipes hidden behind walls and above ceilings and directed to avoid any contact with asbestos-containing materials in general. If any hidden pipe insulation is uncovered during building renovations, the newly exposed thermal system insulation should be checked for asbestos content

and handled appropriately. Removal of asbestos thermal insulation must be removed by a qualified asbestos contractor employing engineering controls and worker protection measures.

Asbestos Roofing

Asbestos roofing cement is found on the two-story roof of the buildings. This material was sampled in the past and identified as asbestos containing.

Roofing is non-friable and unlikely to release asbestos dust unless severely damaged or subject to extreme physical force. Accordingly, the roofing in its present condition and location does not appear to present an asbestos hazard. However, if the asbestos roofing must be removed or cut, it must be removed by a Connecticut licensed asbestos contractor employing appropriate engineering controls and worker protection measures.

RESPONSE ACTION TABLE:

LOCATION	MATERIAL	RESPOSNE ACTION	TIME FRAME
Chase Between Attic & Tunnels	Pipe Insulation	O&M Program	2025
Boiler Room	Boiler Insulation	Abated Summer 2010	
Library	Hard Wainscot	O&M Program	2025
2 Story Roof	Cement/Flashing	O&M Program	2025
Room 108, 122, 205, 207, 210, 211, 214 & 216	Transite Panels	O&M Program	2025
Gymnasium	Floor/Mastic	O&M Program	2025
Gymnasium	Transite Peg Board	O&M Program	2025

LIMITATIONS

HYGENIX Division of Pennoni (HDP) has performed its services, within the limits prescribed by our clients, with the usual thoroughness and competence of the industrial hygiene profession.

The findings in this report are based upon observations and information available to the inspector during the time of the rendering of the services as described in this report and are based on procedures currently required by applicable laws, regulations, and ordinances. HDP cannot be responsible for conditions or materials the inspector did not observe due to lack of access or was not otherwise reasonably observable. The conclusions in this report are professional opinions based solely upon these findings. The findings and conclusions are intended exclusively for the purpose outlined herein within the scope of work and at the site location and project indicated.

This report is for the sole use of the client. The scope of work performed in execution of this inspection may not be appropriate to satisfy the needs of other users and any reuse of this document or the findings, conclusions, or recommendations presented herein is at the sole risk of said user.

Ryan Ebenhack

11/16/22

Ryan Ebenhack – Asbestos Inspector

Date



James Twitchell - Management planner

01/05/2023

Date

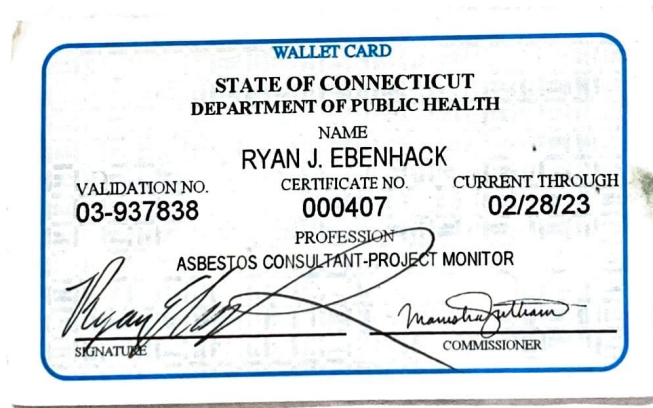
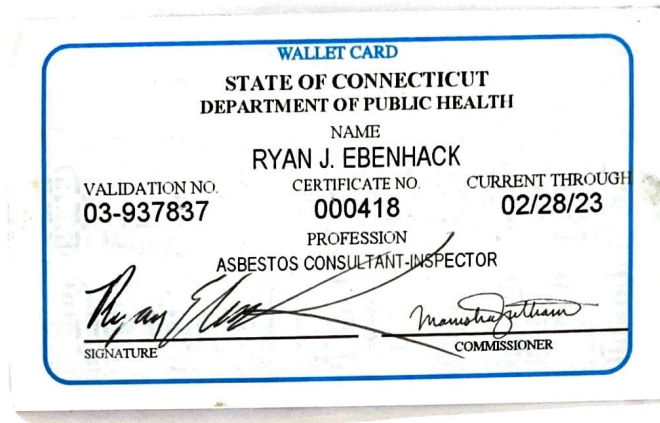
APPENDIX A

PLM BULK ASBESTOS ANALYSIS REPORTS

No samples were collected during the re-inspection on 11/8/22

APPENDIX B

INSPECTOR/MANAGEMENT PLANNER LICENSES/CERTIFICATIONS




WALLET CARD

STATE OF CONNECTICUT
DEPARTMENT OF PUBLIC HEALTH

NAME
JAMES M. TWITCHELL

VALIDATION NO. 03-976839
CERTIFICATE NO. 001822
CURRENT THROUGH 07/31/23

PROFESSION
LEAD INSPECTOR RISK ASSESSOR

SIGNATURE  COMMISSIONER


WALLET CARD

STATE OF CONNECTICUT
DEPARTMENT OF PUBLIC HEALTH

NAME
JAMES M. TWITCHELL

VALIDATION NO. 03-976842
CERTIFICATE NO. 000241
CURRENT THROUGH 07/31/23

PROFESSION
ASBESTOS CONSULTANT-ASPM/AMT PLANNER

SIGNATURE  COMMISSIONER


WALLET CARD

STATE OF CONNECTICUT
DEPARTMENT OF PUBLIC HEALTH

NAME
JAMES M. TWITCHELL

VALIDATION NO. 03-976840
CERTIFICATE NO. 000256
CURRENT THROUGH 07/31/23

PROFESSION
ASBESTOS CONSULTANT-PROJECT MONITOR

SIGNATURE  COMMISSIONER


WALLET CARD

STATE OF CONNECTICUT
DEPARTMENT OF PUBLIC HEALTH

NAME
JAMES M. TWITCHELL

VALIDATION NO. 03-976841
CERTIFICATE NO. 000221
CURRENT THROUGH 07/31/23

PROFESSION
ASBESTOS CONSULTANT-PROJECT DESIGNER

SIGNATURE  COMMISSIONER

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APPENDIX C

PARENT TEACHER NOTIFICATIONS

- Yearly parent teacher notification on placed on the school's website. Individual records of the postings are not maintained.

APPENDIX D

6-MONTH PERIODIC SURVEILANCES

- 6-month periodic surveillances inspections have in the past been performed by Mike Lynch / Kevin Munrett and maintained at the school and in the Board of Education building – moving forward HYGENIX Division of Pennoni will conduct the 6-month periodic inspections