School District 85

Port Hardy Secondary School
9350 Granville Street, Port Hardy, BC
Asbestos Management Inventory

North West
Environmental Group Ltd.

NWest File: 39957 AMI1 V1.0
Date Issued: May 4, 2021

Report Information

Client Name:	School District 85
Contact:	Darby Gildersleeve
Issued on:	May 4, 2021
NWest File Number:	39957 AMI1 V1.0
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Document Sign-Off

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1 Introduction

North West Environmental Group Ltd. (NWest) was retained by School District 85 (the Client) to conduct an asbestos management inventory (AMI) at Port Hardy Secondary School located at 9350 Granville Street, Port Hardy, BC (site). The non-destructive assessment was conducted by NWest representatives, Luke Kozlowski and Paddy Greig on August 25, 2020.

The purpose of this assessment is to provide information regarding the presence and condition of asbestos and suspect asbestos containing building materials in the building structure. This inventory assessment involved the identification of asbestos containing materials and a condition assessment in support of the building owner/manager's regular monitoring of asbestos containing material conditions so that materials in good condition may be safely managed in place until they are removed, and damaged materials can be repaired or otherwise addressed in a timely manner. Regular inspections of asbestos containing building materials are required to mitigate the potential for occupant and worker exposure. This report may be used for day to day building maintenance activities involving minor disturbance of materials.

This assessment supports compliance with the following provincial legislation:

- BC Workers Compensation Act – Part 2, Division 4 (General Duties of Employers, Workers and Others), Section 25 (General duties of owner).
- BC Occupational Health and Safety Regulation – Part 6.4 (Asbestos-General Requirements, Inventory).

This asbestos management inventory assessment does not replace the requirement for the owner to undertake a pre-renovation or pre-demolition project-specific hazardous materials assessment as required by the BC Occupational Health and Safety Regulation section 20.112.

Note: ongoing repairs, maintenance, and renovations may result in some changes to the building after this report was printed.

2 Scope of Work and Exclusions

All accessible areas of the facility were included in this assessment. Whenever practicable, representative building material samples were collected for asbestos analysis. See Appendix E for assessment methodologies.

This assessment was non-destructive (e.g., inspection holes to assess otherwise intact systems such as wall cavities were not made) and non-invasive (e.g., assessment of cupboards, closets, and similar personal spaces were not undertaken; ceiling tiles were not removed to assess above-ceiling materials). As such, concealed asbestos containing materials may be present.

The following NWest historical data and information is included herein:

- Project number 30009, "Asbestos Inventory and Condition Assessment Port Hardy Secondary School", issued on November 10, 2016.
- Project number 31788, "HMA Port Hardy Secondary School", issued on January 19, 2017.

Areas/systems not included in the assessment are summarised in the following table.

Table 2-1. Assessment Exclusions

Area/System	Rationale
Roof	Non-destructive assessment
Attic	Non-destructive assessment
Wall/ceiling cavities	Non-destructive assessment
Concrete block walls	Non-destructive assessment
Equipment/System	Outside assessment scope of work
Underground/buried equipment and systems	Outside assessment scope of work
Indoor air quality assessment	Outside assessment scope of work
Contents	Outside assessment scope of work
Room(s)/Area(s) (within construction scope of work): • Multi-purpose wing	1996 addition not suspected to contain asbestos

3 Regulatory Framework

The methods used for assessment, sample collection, and analysis were in accordance with applicable regulations and are acceptable to WorkSafeBC. See Appendix D for details on the applicable regulatory framework and additional standards that apply to this project.

4 Facility Description

The following is a summary of the building. Area calculations are approximate.

Table 4-1. Building Summary

Building System	Details
Construction date	Original construction: 1976 Renovation/Addition(s): Additions in 1978 and 1996
Renovation date(s) and description(s)	- Extent of 1978 renovations not disclosed to NWest - 1996 addition includes multi-purpose wing
Number of floors/levels	1
Area	~80,000 ft^2
Exterior Materials	
Roofing	Tar and gravel
Exterior	Stucco and concrete block siding
Interior Materials	
Ceiling	Acoustic ceiling tiles, drywall, plywood, and Q-deck
Walls	Drywall, concrete, plywood, and ceramic tile
Floors	Sheet flooring, ceramic tile, concrete and carpet
Insulation	Fibreglass, vermiculite (in concrete blocks)
HVAC (system type and insulation type)	Forced air
Pipe lagging	Fibreglass
Lighting	Fluorescent

5 Asbestos Management Inventory and Recommendations

This section summarises the observations made, and the analytical results for material samples collected during the site assessment. Photo plates are presented in Appendix A, analytical laboratory reports are included in Appendix B, and drawings showing sample locations are presented in Appendix C.

The following table summarizes the results of the inventory, condition assessment, and recommended management actions for known and suspect asbestos-containing materials (ACMs). The recommendations are derived by the friability, accessibility, and condition of the ACMs. See Appendix F for details. Quantities are estimated.

Table 5-1. Asbestos-Containing Materials Summary

Description	System	Locations	Status	Quantity	Accessibility	Friability	Condition	Mgmt Recommendation
Sink mastic – black	Sink	Room 507	Confirmed	2 sinks	Access A – Accessible to all building users	Non-friable	Good	Action 5 – Proactive ACM removal / Action 7 – Routinely monitor condition Test prior to impact
Concrete block (contains vermiculite)	Wall insulation	Exterior, Foyer, Hallway 1, Hallway 2, Hallway 3, Hallway 4, Hallway 5, Drama Office, Storage Off Mechanical Corridor, Storage Off Room 213 Electrical, Corridor to Room 645, 645 Mezzanine Boiler Room, Tool Crib Rooms: 100, 110, 136, 138, 209, 355, 357, 525, 527, 545, 605, 607, 613, 615, 629, 631, 655, 657, 665, 667, 669	Confirmed	13,700 ft^2	Access A – Accessible to all building users	Non-friable (Vermiculite friable if exposed)	Good	Action 5 – Proactive ACM removal / Action 7 – Routinely monitor condition Test prior to impact

Description	System	Locations	Status	Quantity	Accessibility	Friability	Condition	Mgmt Recommendation
Drywall joint compound	Wall	Admin Assistant, Boys Washroom off Hallway 5, Copy Room, Counselor Office Left, Counselor Office Right, Counselor Foyer, Foyer, Hallway 2, Hallway 3, Hallway 4, Hallway 7 Off Hallway 4, Hallway 5, Hallway 6, Janitor Closet Off Music Room, Men's Washroom Off Hallway 3, Drama Office, Storage Off Mechanical Corridor, Storage Off Room 213 Electrical, Corridor to Room 645, 645 Mezzanine Boiler Room, Stairwell off Gym to Mezzanine, Women's Washroom off Hallway 5 Rooms: 100, 101, 110, 124, 126, 128, 130, 132, 134, 136, 138, 205, 207, 209, 210, 213, 218, 220, 224, 232, 234, 240, 241, 247, 249, 251, 257, 300, 307, 310, 314, 320, 330, 338, 344, 350, 355, 357, 360, 365, 367, 400, 405, 410, 415, 417, 419, 420, 425, 505, 507, 509, 511, 512, 515, 525, 527, 528, 533 535, 537, 539, 545, 550, 555, 601, 613, 615, 625, 627, 631, 645, 651, 665, 667, 669, 675, 677	Confirmed	69,995 ft^2	Access A – Accessible to all building users	Non-friable	Good	Action 5 – Proactive ACM removal / Action 7 – Routinely monitor condition Test prior to impact
Drywall joint compound	Ceiling	Foyer, Accessible Washroom Off Hallway 1, Men's Washroom/Change Room, Women's Change Room Room: 224, 232, 234, 247, 251, 314, 344, 415, 525, 531, 607, 615	Confirmed	3,985 ft^2	Access A – Accessible to all building users	Non-friable	Good	Action 5 – Proactive ACM removal / Action 7 – Routinely monitor condition Test prior to impact

Description	System	Locations	Status	Quantity	Accessibility	Friability	Condition	Mgmt Recommendation
Stucco	Siding	Exterior	Suspect	Throughout exterior	Access A – Accessible to all building users	Non-friable	Good	Action 5 – Proactive ACM removal / Action 7 – Routinely monitor condition Test prior to impact
Acoustic ceiling tile 2 – random fissure large pinhole	Ceiling	Boys Washroom off Hallway 5, Britney's Room Off Room 535, Copy Room, Counselor Office Left, Counselor Office Right, Counselor Foyer, Custodial Off Hallway 3, Foyer, Janitor Closet Off Music Room, Drama Office, Corridor to Room 645, Stairwell off Gym to Mezzanine, Women's Washroom off Hallway 5 Rooms: 100, 101, 124, 136, 138, 205, 207, 220, 240, 249, 257, 300, 307, 310, 312, 320, 330, 338, 340, 342, 350, 355, 357, 360, 365, 367, 400, 402, 405, 410, 415, 417, 419, 420, 422, 425, 505, 507, 509, 511, 512, 515, 528, 533, 535, 537, 539, 545, 550, 555, 601, 615, 627, 645, 665, 667, 669, 675, 677, 679	Suspect	31, 295 ft^2	Access A – Accessible to all building users	Friable	Good	Action 5 – Proactive ACM removal / Action 7 – Routinely monitor condition Test prior to impact
Acoustic ceiling tile 3 – patterned fissure small and large pinhole	Ceiling	Copy Room Rooms: 415, 615, 645	Suspect	290 ft^2	Access A – Accessible to all building users	Friable	Good	Action 5 – Proactive ACM removal / Action 7 – Routinely monitor condition Test prior to impact
Acoustic ceiling tile 4 – 1'x1' pinhole with random fissure	Ceiling	Rooms: 126, 128, 132, 134	Suspect	650 ft^2	Access A – Accessible to all building users	Friable	Poor	Action 3 – ACM removal required for compliance Test prior to impact
Acoustic ceiling tile 4 – 1'x1' pinhole with random fissure	Wall	Rooms: 126, 128, 132, 134	Suspect	250 ft^2	Access A – Accessible to all building users	Friable	Poor	Action 3 – ACM removal required for compliance Test prior to impact

Description	System	Locations	Status	Quantity	Accessibility	Friability	Condition	Mgmt Recommendation
Acoustic ceiling tile 5 – pinhole	Ceiling	Hallway 1, Hallway 3, Hallway 4, Hallway 7 Off Hallway 4, Hallway 5, Hallway 6, Tool Crib Rooms: 100, 657, 675	Suspect	6,500 ft²	Access A – Accessible to all building users	Friable	Good	Action 5 – Proactive ACM removal / Action 7 – Routinely monitor condition Test prior to impact
Ceramic tile – 1”x1” brown	Floor	Men’s Washroom Off Hallway 3, Women’s Change Room, Women’s Washroom off Hallway 5	Suspect	1,220 ft²	Access A – Accessible to all building users	Non-friable	Good	Action 5 – Proactive ACM removal / Action 7 – Routinely monitor condition Test prior to impact
Ceramic tile – 4”x4” grey	Wall	Boys Washroom off Hallway 5, Men’s Washroom Off Hallway 3, Women’s Washroom off Hallway 5	Suspect	1,190 ft²	Access A – Accessible to all building users	Non-friable	Good	Action 5 – Proactive ACM removal / Action 7 – Routinely monitor condition Test prior to impact
Ceramic tile – 4”x4” white	Wall	Accessible Washroom Off Hallway 1, Men’s Washroom/Change Room, Women’s Change Room, Rooms: 531	Suspect	2,620 ft²	Access A – Accessible to all building users	Non-friable	Good	Action 5 – Proactive ACM removal / Action 7 – Routinely monitor condition Test prior to impact
Ceramic tile – 6”x6” white and brown	Floor	Hallway 1, Hallway 2, Hallway 3, Men’s Washroom/Change Room, Foyer	Suspect	4,920 ft²	Access A – Accessible to all building users	Non-friable	Good	Action 5 – Proactive ACM removal / Action 7 – Routinely monitor condition Test prior to impact
Ceramic tile – 4”x4” dark grey	Floor	Room 675	Suspect	200 ft²	Access A – Accessible to all building users	Non-friable	Good	Action 5 – Proactive ACM removal / Action 7 – Routinely monitor condition Test prior to impact
Stair tread – red	Floor	Stairwell off Gym to Mezzanine	Suspect	150 ft²	Access A – Accessible to all building users	Non-friable	Good	Action 5 – Proactive ACM removal / Action 7 – Routinely monitor condition Test prior to impact
Caulking – grey	Siding	Exterior	Suspect	Select areas of exterior	Access A – Accessible to all building users	Non-friable	Good	Action 5 – Proactive ACM removal / Action 7 – Routinely monitor condition Test prior to impact

Description	System	Locations	Status	Quantity	Accessibility	Friability	Condition	Mgmt Recommendation
Caulking – grey	Ducting	Dust Collection Unit Outside Metal Shop, Foyer, Room 209, Storage Off Mechanical Corridor, Storage Off Room 213 Electrical Rooms: 605, 607, 613, 629, 645, 655, 675, 679	Suspect	Select areas of locations listed (concealed in some locations)	Access A – Accessible to all building users	Non-friable	Good	Action 5 – Proactive ACM removal / Action 7 – Routinely monitor condition Test prior to impact
Caulking – brown	Window	Exterior Rooms: 665, 667	Suspect	Select areas of locations listed (concealed in some locations)	Access A – Accessible to all building users	Non-friable	Good	Action 5 – Proactive ACM removal / Action 7 – Routinely monitor condition Test prior to impact
Firestop – grey	Wall	645 Mezzanine Boiler Room	Suspect	Select areas of locations listed (concealed in some locations)	Access A – Accessible to all building users	Non-friable	Good	Action 5 – Proactive ACM removal / Action 7 – Routinely monitor condition Test prior to impact
Firestop – red	Wall	645 Mezzanine Boiler Room	Suspect	Select areas of locations listed (concealed in some locations)	Access A – Accessible to all building users	Non-friable	Good	Action 5 – Proactive ACM removal / Action 7 – Routinely monitor condition Test prior to impact
Parging – grey	Wall	Room 631, 645 Mezzanine Boiler Room	Suspect	5 ft^2	Access A – Accessible to all building users	Non-friable	Good	Action 5 – Proactive ACM removal / Action 7 – Routinely monitor condition Test prior to impact
Cement board	Wall	Room 645 Stairwell	Suspect	70	Access A – Accessible to all building users	Non-friable	Good	Action 5 – Proactive ACM removal / Action 7 – Routinely monitor condition Test prior to impact
Cement pipe	Plumbing	Room 645 Mezzanine, Room 655	Confirmed	105 linear feet	Access A – Accessible to all building users	Non-friable	Good	Action 5 – Proactive ACM removal / Action 7 – Routinely monitor condition Test prior to impact

Description	System	Locations	Status	Quantity	Accessibility	Friability	Condition	Mgmt Recommendation
Sink mastic – gold/silver	Sink	Copy Room Rooms: 100, 220, 300, 310, 320, 330, 340, 419, 515, 535, 615	Suspect	34 sinks	Access A – Accessible to all building users	Non-friable	Good	Action 5 – Proactive ACM removal / Action 7 – Routinely monitor condition Test prior to impact
Fume hood cement board	Other	Rooms: 300, 310, 320, 330, 340	Suspect	5 fume hoods	Access A – Accessible to all building users	Non-friable	Good	Action 5 – Proactive ACM removal / Action 7 – Routinely monitor condition Test prior to impact
Counter tops	Other	Rooms: 320, 330	Suspect	All counter tops in rooms listed	Access A – Accessible to all building users	Non-friable	Good	Action 5 – Proactive ACM removal / Action 7 – Routinely monitor condition Test prior to impact
Acoustic wall board	Wall	Gym	Suspect	3600 ft^2	Access C – Exposed above 8 feet	Non-friable	Good	Action 5 – Proactive ACM removal / Action 7 – Routinely monitor condition Test prior to impact
Gaskets	Plumbing	Exterior, Room 607	Suspect	4 gaskets	Access A – Accessible to all building users	Non-friable	Good	Action 5 – Proactive ACM removal / Action 7 – Routinely monitor condition Test prior to impact
Baseboard adhesive	Wall	Throughout	Suspect	Throughout building interior	Access A – Accessible to all building users	Non-friable	Good	Action 5 – Proactive ACM removal / Action 7 – Routinely monitor condition Test prior to impact
Duct mastic – red	Ducting	Observed during previous assessment	Confirmed	Suspect on concealed ductwork	Access C(c) – Concealed/requires removal of building component	Non-friable	Unknown	Action 5 – Proactive ACM removal / Action 7 – Routinely monitor condition Test prior to impact

Note: asbestos-containing materials may be present in concealed or excluded locations and/or systems. See Section 2 of this report.

Materials suspected to contain asbestos which are often concealed in buildings and require destructive assessment to evaluate may be present which include, but are not limited to:

- Electrical wiring and cables
- Buried asbestos cement pipes
- Formed cement products
- Bell and spigot piping gaskets
- Incandescent light fixtures (heat shields)
- Floor leveling compound
- Vermiculite in wall cavities including concrete block void spaces
- Penetration caulking and/or parging

Table 5-2. Non-Asbestos-Containing Materials

Location(s)	Material Description	Sample Quantity	Comments
Britney's Room Off Room 535, Hallway 2, Hallway 3, Hallway 4, Hallway 7 Off Hallway 4, Hallway 5, Hallway 6, Accessible Washroom Off Hallway 1, Janitor Closet Off Music Room, Accessible Washroom Off Hallway 1, Corridor to Room 645, Stairwell off Gym to Mezzanine Rooms: 100, 101, 124, 126, 128, 130, 132, 134, 138, 247, 251, 300, 310, 312, 314, 320, 330, 338, 340, 342, 344, 350, 360, 400, 505, 507, 509, 511, 515, 531, 535, 615, 625, 627, 645	Sheet flooring 1 – beige-brown stone pattern	1	None
Copy Room, Hallway 2, Hallway 3, Hallway 4, Hallway 7 Off Hallway 4, Hallway 5, Hallway 6, Drama Office Rooms: 100, 220, 224, 232, 234, 240, 417, 675, 677, 679	Sheet flooring 2 – rose black stone pattern	1	None
Custodial Off Hallway 3 Rooms: 402, 422, 528	Sheet flooring 3 – yellow beige plus brown streaks	1	None
Rooms: 240, 307, 625, 665	Sheet flooring 4 – gray white black speckles	1	None
Rooms: 360, 415, 419	Sheet flooring 5 – white with light and dark grey specks	0	Installed after 2016 inventory assessment
Accessible Washroom Off Hallway 1, Men's Washroom Off Hallway 3 Rooms: 124, 240, 241, 247, 251, 350, 417, 420, 531, 535, 665, 675	White mastic on sink	1	None
Admin Assistant, Copy Room, Foyer, Hallway 2 Rooms: 100, 210, 218, 415	Acoustic ceiling tile 1 – 2'x2' donnacona	0	Wood fibre ceiling tile not suspected of containing asbestos
Britney's Room Off Room 535, Custodial Off Hallway 3, Corridor to Room 645 Rooms: 300, 310, 312, 320, 330, 338, 340, 342, 402, 410, 507, 511, 512, 525, 528, 539, 545, 555, 601, 615, 675	Drywall with no joint compound	0	Material not suspected to contain asbestos
Electrical Room Off Room 247 Rooms: 247, 255, 512, 525, 535, 629, 655, 679	Paper wrapped fibreglass insulation	0	Material not suspected to contain asbestos

Location(s)	Material Description	Sample Quantity	Comments
Foyer, Janitor Closet Off Music Room Rooms: 209, 679	Foil faced fibreglass insulation	0	Material not suspected to contain asbestos

Materials assumed not to contain asbestos include:

- post-1990 construction materials with the exception of formed cement products, vermiculite, fire stop caulking, gaskets.
- wood and wood composite materials
- carpet
- plastics in non-industrial applications
- metals
- glazing
- exterior below-grade drainage and plumbing systems
- ceramic tile, excluding adhesives, grout, and thinset mortar

6 General Recommendations

Based on observations made and analytical results, NWest makes the following recommendations.

1. Provide copies of this report to Site personnel, including contractors.

2. A copy of this report should be made available to building occupants.

3. A qualified person must undertake a pre-renovation/demolition project-specific hazardous materials assessment prior to planned work that impacts building materials or systems that conforms to the requirements of the BC Occupational Health and Safety Regulation section 20.112.

4. A qualified person must complete a risk assessment and safe work procedures for all hazardous materials that may be impacted by maintenance and/or renovation work.

5. WorkSafeBC Regulations require that all hazardous materials be removed or protected prior to renovation or demolition. Removal or disturbance of hazardous materials must be undertaken by a qualified contractor employing WorkSafeBC-approved procedures.

6. Work must STOP if previously unidentified suspected hazardous materials are encountered or inadvertently damaged or disturbed during renovations and/or demolition activities. These suspect materials must be left undisturbed until a qualified person has determined the status of the material.

7. The Owner must routinely review the presence and conditions of hazardous materials and update this report accordingly.

8. Damage to hazardous materials must be repaired or otherwise rendered non-hazardous to unprotected workers without delay (e.g. enclose damaged materials with a dust barrier).

Appendix A. Photo Plates

The following photo plates provide a general documentation of the building materials that were sampled and analyzed, and observations made during the assessment. They are meant to summarize the results of analysis and observations and are not intended to include all hazardous materials, or their locations, observed during the assessment.

Photo 1
Description: Sink mastic – black
Location: Room 507
Asbestos: 6.8%chrysotile
Sample(s): 30009-20

Photo 2
Description: Concrete block (contains vermiculite)
Location: Room 607
Asbestos: 0.5%Tremolite
Sample(s): 31788-22

Photo 3
Description: Drywall joint compound
Location: Room 310
Asbestos: 1.5%chrysotile
Sample(s): 31788-6b

Photo 4
Description: Stucco
Location: Exterior
Asbestos: Suspect

Photo 5
Description: Acoustic ceiling tile 2 – random fissure large pinhole
Location: Room 205
Asbestos: **Suspect**

Photo 6
Description: Acoustic ceiling tile 3 – patterned fissure small and large pinhole
Location:
Asbestos: **Suspect**

Photo 7
Description: Acoustic ceiling tile 4 – 1'x1' pinhole with random fissure
Location: Room 132
Asbestos: **Suspect**

Photo 8
Description: Acoustic ceiling tile 5 – pinhole
Location: Hallway 1
Asbestos: **Suspect**

Photo 9
Description: Ceramic tile – 1”x1” brown
Location: Women’s Change Room
Asbestos: **Suspect**

Photo 10
Description: Ceramic tile – 4”x4” grey
Location: Men’s Washroom Off Hallway 5
Asbestos: **Suspect**

Photo 11
Description: Ceramic tile – 4”x4” white
Location: Women’s Change Room
Asbestos: **Suspect**

Photo 12
Description: Ceramic tile – 6”x6” white and brown
Location: Hallway 3
Asbestos: **Suspect**

Photo 13
Description: Ceramic tile – 4”x4” dark grey
Location: Room 675
Asbestos: **Suspect**

Photo 14
Description: Acoustic wall board
Location: Gym
Asbestos: **Suspect**

Photo 15
Description: Stair tread – red
Location: Stairwell off Gym to Mezzanine
Asbestos: **Suspect**

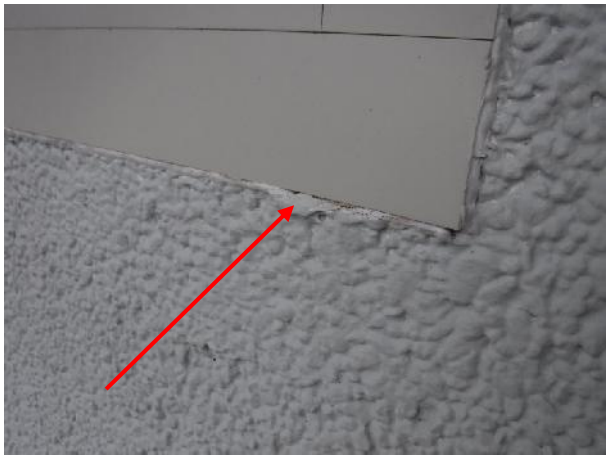

Photo 16
Description: Caulking – grey
Location: Exterior siding
Asbestos: **Suspect**

Photo 17
Description: Caulking – grey
Location: Room 209 ducting
Asbestos: **Suspect**

Photo 18
Description: Caulking – brown
Location: Exterior
Asbestos: **Suspect**

Photo 19
Description: Firestop – grey
Location: 645 Mezzanine Boiler Room
Asbestos: **Suspect**

Photo 20
Description: Firestop – red
Location: 645 Mezzanine Boiler Room
Asbestos: **Suspect**

Photo 21
Description: Parging – grey
Location: 645 Mezzanine Boiler Room
Asbestos: Suspect

Photo 22
Description: Cement board
Location: Room 645 Stairwell
Asbestos: Suspect

Photo 23
Description: Cement pipe
Location: Room 645 Mezzanine
Asbestos: Confirmed (labelled on site)

Photo 24
Description: Sink mastic – gold/silver
Location: Room 300
Asbestos: Suspect

Photo 25
Description: Fume hood cement board
Location: Room 320
Asbestos: **Suspect**

Photo 26
Description: Counter tops
Location: Room 340
Asbestos: **Suspect**

Photo 27
Description: Baseboard adhesive
Location: Room 355
Asbestos: **Suspect**

Photo 28
Description: Gasket
Location: Room 607
Asbestos: **Suspect**

Appendix B. Analytical Reports

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Bulk Samples Report

Asbestos Analysis of Bulk Materials using Polarized Light Microscopy

Client: School District 85 - Vancouver Island North
Contractor: School District 85 - Vancouver Island North
Project: Asbestos Inventory SD 85 Schools

Date: September 16, 2020
Purchase Order: 28285
Project Number: 39957

Sample No.	Location	Date Analysed	Analyst	Client Description	Phase	%	Asbestos	%	Other Materials	%	Comments
39957-1b	NISS - Exterior Main Entrance Stairs	Sep 15, 2020	BR	Caulking (Grey)	Grey	100	None Detected	0	Non-Fibrous	100	
39957-2b Layer 1	NISS - Room 100	Sep 15, 2020	BR	Sheet Floor 2 Mastic (Brown)	Wear Surface- Light Grey/Dark Grey	45	None Detected	0	Non-Fibrous	100	
39957-2b Layer 2	NISS - Room 100	Sep 15, 2020	BR	Sheet Floor 2 Mastic (Brown)	Paper Backing - White	45	None Detected	0	Synthetic (65%) Non-Fibrous (35%)	100	
39957-2b Layer 3	NISS - Room 100	Sep 15, 2020	BR	Sheet Floor 2 Mastic (Brown)	Adhesive - Brown	10	None Detected	0	Non-Fibrous	100	
39957-3b	NISS - Room 103	Sep 15, 2020	BR	Ceiling Tile (Acoustic) - ACT 1 Patterned Fissure	Grey/White	100	None Detected	0	Cellulose (36%) Glass (36%) Non-Fibrous (28%)	100	
39957-4b	NISS - Hallway 4	Sep 15, 2020	BR	Ceiling Tile (Acoustic) - ACT 1 Patterned Fissure	Grey/White	100	None Detected	0	Cellulose (36%) Glass (36%) Non-Fibrous (28%)	100	
39957-5b	NISS - Hallway 4	Sep 15, 2020	BR	Drywall Joint Compound	White	100	None Detected	0	Non-Fibrous	100	
39957-6b	NISS - Staff Room (Adj. Hallway 4)	Sep 15, 2020	BR	Drywall Joint Compound	White	100	None Detected	0	Non-Fibrous	100	
39957-7b	NISS - Room 108	Sep 15, 2020	BR	Sink Mastic/Coating (Beige)	Beige	100	None Detected	0	Non-Fibrous	100	
39957-8b	NISS - Room 103 Wall	Sep 15, 2020	BR	Exposed Adhesive (Grey)	Grey	100	None Detected	0	Non-Fibrous	100	
39957-9b Layer 1	NISS - Janitor Closet (Adj. Hallway 4)	Sep 15, 2020	BR	Pipe Elbow Insulation	Pipe Wrap - Off White	10	None Detected	0	Cellulose (78%) Non-Fibrous (22%)	100	
39957-9b Layer 2	NISS - Janitor Closet (Adj. Hallway 4)	Sep 15, 2020	BR	Pipe Elbow Insulation	Pipe Insulation - Off White	90	Chrysotile (26%) Amosite (4%)	30	Cellulose (11%) Non-Fibrous (59%)	70	
39957-10b	NISS - Drama Room	Sep 15, 2020	BR	Drywall Joint Compound	White	100	None Detected	0	Non-Fibrous	100	

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Sample No.	Location	Date Analysed	Analyst	Client Description	Phase	%	Asbestos	%	Other Materials	%	Comments
39957-11b	NISS - Room 319	Sep 15, 2020	BR	Baseboard Adhesive	Yellow	100	None Detected	0	Non-Fibrous	100	
39957-12b Layer 1	NISS - Basement Storage Room	Sep 15, 2020	BR	Pipe fitting insulation	Pipe Wrap - Off White	10	None Detected	0	Cellulose (78%) Non-Fibrous (22%)	100	
39957-12b Layer 2	NISS - Basement Storage Room	Sep 15, 2020	BR	Pipe fitting insulation	Pipe Insulation - Off White	90	Chrysotile (26%) Amosite (4%)	30	Cellulose (11%) Non-Fibrous (59%)	70	
39957-13b Layer 1	NISS - Basement Storage Room	Sep 15, 2020	BR	Pipe elbow insulation	Pipe Wrap - Off White	10	None Detected	0	Cellulose (78%) Non-Fibrous (22%)	100	
39957-13b Layer 2	NISS - Basement Storage Room	Sep 15, 2020	BR	Pipe elbow insulation	Pipe Insulation - Off White	90	Chrysotile (26%) Amosite (4%)	30	Cellulose (11%) Non-Fibrous (59%)	70	
39957-14b	NISS - Drama Room	Sep 15, 2020	BR	Baseboard Adhesive	Tan	100	None Detected	0	Non-Fibrous	100	
39957-15b Layer 1	NISS - Janitor Closet (Adj. Hallway 8)	Sep 15, 2020	BR	Pipe run insulation	Pipe Wrap - Silver/White	25	None Detected	0	Cellulose (36%) Glass (28%) Non-Fibrous (36%)	100	
39957-15b Layer 2	NISS - Janitor Closet (Adj. Hallway 8)	Sep 15, 2020	BR	Pipe run insulation	Insulation - Yellow	75	None Detected	0	Glass	100	
39957-16b	NISS - Basement Crawlspace Foundation Wall	Sep 15, 2020	BR	Tar Paper	Black	100	None Detected	0	Cellulose (58%) Non-Fibrous (42%)	100	
39957-17b Layer 1	NISS - Basement Crawlspace	Sep 15, 2020	BR	Pipe run insulation with black mastic	Pipe Wrap - Silver/Black/White	80	None Detected	0	Cellulose (35%) Non-Fibrous (65%)	100	
39957-17b Layer 2	NISS - Basement Crawlspace	Sep 15, 2020	BR	Pipe run insulation with black mastic	Mastic - Black	20	None Detected	0	Non-Fibrous	100	
39957-18b	NISS - Storage Room (Adj. Hallway 3)	Sep 15, 2020	BR	Drywall Joint Compound	White	100	None Detected	0	Non-Fibrous	100	
39957-19b	NISS Maintenance Shop Building 2 Exterior	Sep 15, 2020	BR	Aggregate Panel beneath Window	Dark Brown/Grey	100	None Detected	0	Non-Fibrous	100	
39957-20b Layer 1	NISS Maintenance Shop Building 1 Room C	Sep 15, 2020	BR	Floor Tile - FT1 9x9 Grey w/White Streaks	Floor Tile - Grey	90	None Detected	0	Non-Fibrous	100	
39957-20b Layer 2	NISS Maintenance Shop Building 1 Room C	Sep 15, 2020	BR	Floor Tile - FT1 9x9 Grey w/White Streaks	Mastic - Black	10	None Detected	0	Non-Fibrous	100	
39957-21b	NISS Shop - Wood Shop Classroom	Sep 15, 2020	BR	Drywall Joint Compound	White	100	None Detected	0	Non-Fibrous	100	
39957-22b	NISS Shop - Wood Shop	Sep 15, 2020	BR	Drywall Joint Compound	White	100	None Detected	0	Non-Fibrous	100	
39957-23b	NISS Shop - Drafting Room	Sep 15, 2020	BR	Drywall Joint Compound	White	100	None Detected	0	Non-Fibrous	100	
39957-24b	NISS Maintenance Shop Building 1 Mech Room	Sep 15, 2020	BR	Drywall Joint Compound	Off White	100	Chrysotile	1.5	Non-Fibrous	98.5	

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Sample No.	Location	Date Analysed	Analyst	Client Description	Phase	%	Asbestos	%	Other Materials	%	Comments
39957-25b	NISS Maintenance Shop Building 1 Storage Room	Sep 15, 2020	BR	Drywall Joint Compound	White	100	None Detected	0	Non-Fibrous	100	
39957-26b	NISS Maintenance Shop Building 1 Mech Room	Sep 15, 2020	BR	Floor tile (Unknown Pattern) under plywood	Beige	100	None Detected	0	Non-Fibrous	100	
39957-27b	Cheslakees Mechanical Room	Sep 15, 2020	BR	Drywall Joint Compound	White	100	None Detected	0	Non-Fibrous	100	
39957-28b	Cheslakees Girls Washroom	Sep 15, 2020	BR	Drywall Joint Compound	White	100	None Detected	0	Non-Fibrous	100	
39957-30b	Sunset Elem. Mezzanine Band Room Janitor Closet	Sep 15, 2020	BR	Ceiling Tile (Acoustic) - CT2 Latitudinal Fissure Small & Large Pinhole	White/Grey	100	None Detected	0	Cellulose (36%) Glass (36%) Non-Fibrous (28%)	100	
39957-31b Layer 1	A.J. Elliott Exterior	Sep 15, 2020	BR	Stucco	Top Coat - White	50	None Detected	0	Non-Fibrous	100	
39957-31b Layer 2	A.J. Elliott Exterior	Sep 15, 2020	BR	Stucco	Base Coat - Grey	50	None Detected	0	Non-Fibrous	100	
39957-32b	Alert Bay Learning Centre Janitor Closet	Sep 15, 2020	BR	Floor Tile - FT1 Beige 12x12 w/Brown + White Streaks	Grey	100	None Detected	0	Non-Fibrous	100	
39957-33b	Alert Bay Learning Centre Janitor Closet	Sep 15, 2020	BR	Ceiling Tile (Acoustic) - CT1 2x4 Small and Large Pinholes	Grey/White	100	None Detected	0	Cellulose (36%) Glass (36%) Non-Fibrous (28%)	100	
39957-34b	Alert Bay Learning Centre Storage Rm 2	Sep 15, 2020	BR	Drywall Joint Compound	Off White/Beige	100	None Detected	0	Non-Fibrous	100	
39957-35b	Alert Bay Learning Centre Storage Rm 2	Sep 15, 2020	BR	Baseboard Adhesive (Brown)	Brown	100	None Detected	0	Non-Fibrous	100	
39957-36b	Alert Bay Learning Centre Girls Washroom Corridor	Sep 15, 2020	BR	Window Putty (Black)	Black	100	Chrysotile	11	Non-Fibrous	89	
39957-37b	83 McRae Drive: Exterior Window	Sep 15, 2020	BR	Window Putty (White)	White	100	None Detected	0	Non-Fibrous	100	
39957-38b Layer 1	86 McRae Drive Hallway	Sep 15, 2020	BR	Sheet Flooring - SF2 Brown Hexagonal Mosaic	Wear Surface - Light Brown/Dark Brown	50	None Detected	0	Non-Fibrous	100	
39957-38b Layer 2	86 McRae Drive Hallway	Sep 15, 2020	BR	Sheet Flooring - SF2 Brown Hexagonal Mosaic	Paper Backing - Off White	50	Chrysotile	35	Non-Fibrous	65	
39957-39b	Tacan Maintenance Offices and Shop Exterior Wall	Sep 15, 2020	BR	Caulking (White) on Vents	White	100	None Detected	0	Non-Fibrous	100	
39957-40b	PHSS - Room 338	Sep 15, 2020	BR	Drywall Joint Compound	White	100	None Detected	0	Non-Fibrous	100	
39957-41b	PHSS - Gym Mezzanine Stairwell	Sep 15, 2020	BR	Stair Tread (Red)	Red	100	None Detected	0	Non-Fibrous	100	

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Sample No.	Location	Date Analysed	Analyst	Client Description	Phase	%	Asbestos	%	Other Materials	%	Comments
39957-42b Layer 1	PHSS - Gym Mezzanine Stairwell	Sep 15, 2020	BR	Baseboard Adhesive (Yellow) + DW Joint Compound	Baseboard Adhesive - Brown	50	None Detected	0	Non-Fibrous	100	
39957-42b Layer 2	PHSS - Gym Mezzanine Stairwell	Sep 15, 2020	BR	Baseboard Adhesive (Yellow) + DW Joint Compound	Drywall Joint Compound - White	50	None Detected	0	Non-Fibrous	100	
39957-43b	PHSS - Room 400	Sep 15, 2020	BR	Baseboard Adhesive (White)	Off White	100	None Detected	0	Non-Fibrous	100	
39957-44b	Quatsino Elementary - Storage Room	Sep 15, 2020	BR	Drywall Joint Compound	White	100	None Detected	0	Non-Fibrous	100	
39957-45b	Quatsino Elementary - Exterior Stairs	Sep 15, 2020	BR	Stair Tread (Asphalt)	Black/Grey	100	None Detected	0	Synthetic (35%) Non-Fibrous (65%)	100	
39957-46b Layer 1	Quatsino Elementary - Classroom	Sep 15, 2020	BR	Floor Tile - FT1 Beige 9x9 w/Red, Green, + Yellow Streaks	Wear Surface - Beige/Green/Red	50	None Detected	0	Cellulose (18%) Non-Fibrous (82%)	100	
39957-46b Layer 2	Quatsino Elementary - Classroom	Sep 15, 2020	BR	Floor Tile - FT1 Beige 9x9 w/Red, Green, + Yellow Streaks	Asphalt Paper Backing - Black	50	None Detected	0	Synthetic (14%) Cellulose (38%) Non-Fibrous (48%)	100	
39957-47b	School Board Office Lower Level Main Room	Sep 15, 2020	BR	Window Putty (Black)	Black	100	Chrysotile	12	Non-Fibrous	88	
39957-48b	School Board Office Copy Room	Sep 15, 2020	BR	Drywall Joint Compound	White	100	None Detected	0	Non-Fibrous	100	
39957-49b	School Board Office Lower Level North Exit/Entry	Sep 15, 2020	BR	Drywall Joint Compound	White	100	None Detected	0	Non-Fibrous	100	
39957-50b	School Board Office Interior Stairs	Sep 15, 2020	BR	Stair Tread (Brown/Red)	Red/Brown	100	None Detected	0	Non-Fibrous	100	
39957-51b	Seaview Activity Centre - Room 2 Window	Sep 15, 2020	BR	Window Putty (Black)	Black	100	Chrysotile	12	Non-Fibrous	88	
39957-52b Layer 1	Seaview Activity Centre - Janitor Room	Sep 15, 2020	BR	Pipe Wrap with Black Mastic	Pipe Wrap - Silver/Black	80	None Detected	0	Cellulose (35%) Non-Fibrous (65%)	100	
39957-52b Layer 2	Seaview Activity Centre - Janitor Room	Sep 15, 2020	BR	Pipe Wrap with Black Mastic	Mastic - Black	20	None Detected	0	Non-Fibrous	100	
39957-53b	Seaview Carpentry Shop Storage Room B	Sep 15, 2020	BR	Vermiculite Insulation	Silver/Grey/Brown	100	Actinolite	0.5	Cellulose (4%) Non-Fibrous (95.5%)	99.5	
39957-54b	Seaview Secondary School - Room 5	Sep 15, 2020	BR	Window Putty (Black)	Black	100	None Detected	0	Cellulose (8%) Synthetic (8%) Non-Fibrous (84%)	100	
39957-55b	Seaview Secondary School - Room 4	Sep 15, 2020	BR		Dark Brown	100	None Detected	0	Non-Fibrous	100	
39957-56b	Seaview Elementary - Girls Washroom	Sep 15, 2020	BR	Cement Board	Off White/Grey/Green	100	Chrysotile	31	Non-Fibrous	69	

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Sample No.	Location	Date Analysed	Analyst	Client Description	Phase	%	Asbestos	%	Other Materials	%	Comments
39957-57b	Eagle View Elem. - Gym Stairs	Sep 15, 2020	BR	Mastic - FT3 Mastic (Black)	Black	100	None Detected	0	Non-Fibrous	100	
39957-58b	Eagle View Elem. - Gym Storage Room	Sep 15, 2020	BR	Mastic - FT3 Mastic (Black)	Black	100	None Detected	0	Non-Fibrous	100	

Bulk asbestos analysis was conducted using calibrated visual estimation in conjunction with polarized light microscopy as detailed in EPA method 600/R-93/116. Sample(s) not destroyed in the testing will be kept for 30 days before disposal.

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Note that EPA 600-R93-116 is not an acceptable method for quantifying asbestos concentrations that are lower than 0.5%.

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Bulk Sample Report

Asbestos Analysis of Bulk Materials using Polarized Light Microscopy

Client: School District 85 - Vancouver Island North
Contractor: School District 85 - Vancouver Island North
Project: Port Hardy Secondary AB Inventory

Date: September 08, 2016
Client Job or PO#:
Project number: 30009

Sample No	Location	Date Analysed	Analyst	Client Description	Phase	%	Asbestos	%	Other Materials	%	Comments
30009-1	Room 100 - Multi Purpose Room	Sep-04-2016	IATL	Drywall Joint Compound - White Cementitious	White	100	None Detected	0	Non-Fibrous	100	
30009-2 Layer 1	Room 100 - Multi Purpose Room	Sep-04-2016	IATL	Sheet Flooring - SF2-Rose-Black Stone Pattern	Sheet Flooring - Grey/ Tan	35	None Detected	0	Cellulose (10%) Glass (5%) Non-Fibrous (85%)	100	
30009-2 Layer 2	Room 100 - Multi Purpose Room	Sep-04-2016	IATL	Sheet Flooring - SF2-Rose-Black Stone Pattern	Mastic - Yellow	35	None Detected	0	Non-Fibrous	100	
30009-2 Layer 3	Room 100 - Multi Purpose Room	Sep-04-2016	IATL	Sheet Flooring - SF2-Rose-Black Stone Pattern	Leveling Compound - Grey	30	None Detected	0	Non-Fibrous	100	
30009-3 Layer 1	Room 100 - Kitchen	Sep-04-2016	IATL	Sheet Flooring - SF1-Beige-Brown Stone Pattern	Sheet Flooring - Grey/ Tan	50	None Detected	0	Cellulose (10%) Glass (5%) Non-Fibrous (85%)	100	
30009-3 Layer 2	Room 100 - Kitchen	Sep-04-2016	IATL	Sheet Flooring - SF1-Beige-Brown Stone Pattern	Mastic - Yellow	50	None Detected	0	Non-Fibrous	100	
30009-4	Room 100 - Kitchen	Sep-04-2016	IATL	Ceiling Tile (Acoustic) - ACT 2 Random Fissure, Large Pinholes	White/ Tan	100	None Detected	0	Cellulose (50%) Mineral Fibre (30%) Non-Fibrous (20%)	100	
30009-5	Hallway 2	Sep-04-2016	IATL	Ceiling Tile (Acoustic) - ACT 1 2x2 Fibreboard	White/ Tan	100	None Detected	0	Cellulose (5%) Mineral Fibre (80%) Non-Fibrous (15%)	100	
30009-6	Hallway 2	Sep-04-2016	IATL	Mastic - Gray	Grey	100	None Detected	0	Non-Fibrous	100	
30009-7	Room 100 - Kitchen	Sep-04-2016	IATL	Mastic - Sink Mastic (brown)	Insulation - White	100	None Detected	0	Cellulose (30%) Non-Fibrous (70%)	100	

Note: Samples were analyzed by method: EPA/600/R-93/116" Bulk Asbestos Analysis by Polarized Light Microscopy". For heterogenous materials the concentration may vary. No reproduction without permission.

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Sample No	Location	Date Analysed	Analyst	Client Description	Phase	%	Asbestos	%	Other Materials	%	Comments
30009-8	Room 249 - PE Office	Sep-04-2016	IATL	Drywall Joint Compound - White Cementitious	White	100	None Detected	0	Non-Fibrous	100	
30009-9	Room 247 (Men)	Sep-04-2016	IATL	Drywall Joint Compound - White Cementitious	White	100	None Detected	0	None Detected	0	
30009-10 Layer 1	Room 247 (Men)	Sep-04-2016	IATL	Sheet Flooring - SF1-Beige-Brown Stone Pattern	Sheet Flooring - Tan	50	None Detected	0	Cellulose (10%) Glass (5%) Non-Fibrous (85%)	100	
30009-10 Layer 2	Room 247 (Men)	Sep-04-2016	IATL	Sheet Flooring - SF1-Beige-Brown Stone Pattern	Mastic - Yellow	50	None Detected	0	Non-Fibrous	100	
30009-11	Stairway off Gym to Mezzanine	Sep-04-2016	IATL	Drywall Joint Compound - White Cementitious	White	100	None Detected	0	Non-Fibrous	100	
30009-12	Room 625	Sep-04-2016	IATL	Drywall Joint Compound - White Cementitious	White	100	None Detected	0	Non-Fibrous	100	
30009-13	Room 645	Sep-04-2016	IATL	Sheet Flooring - SF1-Beige-Brown Stone Pattern	Sheet Flooring - Tan/Grey	100	None Detected	0	Cellulose (10%) Glass (5%) Non-Fibrous (85%)	100	
30009-14	Room 645	Sep-04-2016	IATL	Ceiling Tile (Acoustic) - ACT 2 Random Fissure Large Pinholes	White/ Tan	100	None Detected	0	Cellulose (30%) Mineral Fibre (50%)	80	
30009-15	Room 645	Sep-04-2016	IATL	Ceiling Tile (Acoustic) - ACT 3 Patterned Fissure Small and Large Pinholes	White/ Tan	100	None Detected	0	Cellulose (50%) Non-Fibrous (50%)	100	
30009-16	Room 657	Sep-04-2016	IATL	Ceiling Tile (Acoustic) - ACT 5 2x2 pinhole	White/ Tan	100	None Detected	0	Cellulose (50%) Mineral Fibre (10%) Non-Fibrous (40%)	100	
30009-18 Layer 1	Room 665 - Alternate Program	Sep-04-2016	IATL	Sheet Flooring - SF4-Gray White Black Speckles	Sheet Flooring - White/ Grey	50	None Detected	0	Glass (10%) Synthetic (10%) Non-Fibrous (80%)	100	
30009-18 Layer 2	Room 665 - Alternate Program	Sep-04-2016	IATL	Sheet Flooring - SF4-Gray White Black Speckles	Mastic - Yellow	50	None Detected	0	Non-Fibrous	100	
30009-19	Gymnasium			Other - Metal Q Deck	Fibreglass Board - Yellow	100	None Detected	0	Glass	100	
30009-20	Room 507	Sep-04-2016	IATL	Mastic - Sink Mastic - Black	Mastic - Black	100	**Chrysotile**	**6.8**	Non-Fibrous	93.2	
30009-21	Overview	Sep-04-2016	IATL	Mastic - Mastic - Black around exterior vent	Caulk - Brown	100	None Detected	0	Non-Fibrous	100	

Note: Samples were analyzed by method: EPA/600/R-93/116" Bulk Asbestos Analysis by Polarized Light Microscopy". For heterogenous materials the concentration may vary. No reproduction without permission.

Sample No	Location	Date Analysed	Analyst	Client Description	Phase	%	Asbestos	%	Other Materials	%	Comments
30009-22	Hallway 5	Sep-04-2016	IATL	Drywall Joint Compound - White Cementitious	White	100	None Detected	0	Non-Fibrous	100	
30009-23 Layer 1	Custodial- off Hallway 3	Sep-04-2016	IATL	Sheet Flooring - SF3- Yellow Beige plus Brown Streaks	Sheet Flooring - Yellow/ Tan	50	None Detected	0	Non-Fibrous	100	
30009-23 Layer 2	Custodial- off Hallway 3	Sep-04-2016	IATL	Sheet Flooring - SF3- Yellow Beige plus Brown Streaks	Mastic - Tan	50	None Detected	0	Non-Fibrous	100	
30009-24	Room 340	Sep-04-2016	IATL	Other - Fume Hood - Cement Board	Cementitious Material - Grey	100	None Detected	0	Glass (40%) Non-Fibrous (60%)	100	
30009-25 Layer 1	Overview	Sep-04-2016	IATL	Roofing Debris	Tar - Black	50	None Detected	0	Non-Fibrous	100	
30009-25 Layer 2	Overview	Sep-04-2016	IATL	Roofing Debris	Fibrous Material - Brown	50	None Detected	0	Cellulose (95%) Non-Fibrous (5%)	100	
30009-26	Room 675	Sep-04-2016	IATL	Mastic - White Mastic on Sink.	White	100	None Detected	0	Cellulose (40%) Non-Fibrous (60%)	100	

Note: Samples were analyzed by method: EPA/600/R-93/116" Bulk Asbestos Analysis by Polarized Light Microscopy". For heterogenous materials the concentration may vary. No reproduction without permission.

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Bulk Sample Report

Asbestos Analysis of Bulk Materials using Polarized Light Microscopy

Client: CanWest Mechanical
Contractor: CanWest Mechanical
Project: HMA Port Hardy Secondary School-

Date: January 19, 2017
Client Job or PO#:
Project number: 31788

Sample No	Location	Date Analysed	Analyst	Client Description	Phase	%	Asbestos	%	Other Materials	%	Comments
31788-1b	Room 350 - Perimeter Wall	Jan-18-2017	LR	Drywall Joint Compound	White	100	None Detected	0	Non-Fibrous	100	
31788-2b	Room 365 - Perimeter Wall	Jan-18-2017	LR	Drywall Joint Compound	White	100	None Detected	0	Non-Fibrous	100	
31788-3b	Room 550 - Perimeter Wall	Jan-18-2017	LR	Drywall Joint Compound	White	100	None Detected	0	Non-Fibrous	100	
31788-4b	Custodial Room (Science Wing) - Interior Wall	Jan-18-2017	LR	Drywall Joint Compound	White	100	None Detected	0	Non-Fibrous	100	
31788-5b	Women's Washroom - Interior Wall	Jan-18-2017	LR	Drywall Joint Compound	White	100	None Detected	0	Non-Fibrous	100	
31788-6b	Room 527 - Interior Wall	Jan-18-2017	LR	Drywall Joint Compound	Off White	100	**Chrysotile**	**1.5**	Non-Fibrous	98.5	
31788-7b	Hallway Outside Room 550	Jan-18-2017	LR	Ceiling Tile (Acoustic) - 2' x 4' - Regular Pinhole and Fissures	White/Light Grey	100	None Detected	0	Cellulose (45%) Glass (10%) Non-Fibrous (45%)	100	
31788-8b	Hallway Outside Room 605	Jan-18-2017	LR	Ceiling Tile (Acoustic) - 2' x 2' with popcorn texture	Off White	100	None Detected	0	Glass (98%) Non-Fibrous (2%)	100	
31788-9b	Room 555	Jan-18-2017	LR	Kickstop adhesive	Tan	100	None Detected	0	Non-Fibrous	100	
31788-10b	Room 350	Jan-18-2017	LR	Kickstop adhesive	Off White	100	None Detected	0	Non-Fibrous	100	
31788-11b	Room 550	Jan-18-2017	LR	Kickstop adhesive	Off White	100	None Detected	0	Non-Fibrous	100	
31788-12b Layer 1	Room 550	Jan-18-2017	LR	Wallpaper - weave pattern	Wall Paper - Off White	94	None Detected	0	Synthetic (99%) Non-Fibrous (1%)	100	

Note: Samples were analyzed by method: EPA/600/R-93/116" Bulk Asbestos Analysis by Polarized Light Microscopy".
For heterogenous materials the concentration may vary. No reproduction without permission.

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LAB# 202314

Sample No	Location	Date Analysed	Analyst	Client Description	Phase	%	Asbestos	%	Other Materials	%	Comments
31788-12b Layer 2	Room 550	Jan-18-2017	LR	Wallpaper - weave pattern	Adhesive - Tan	3	None Detected	0	Non-Fibrous	100	
31788-12b Layer 3	Room 550	Jan-18-2017	LR	Wallpaper - weave pattern	Caulking - Clear	3	None Detected	0	Non-Fibrous	100	
31788-13b	Courtyard Outside of Room 550	Jan-18-2017	LR	Stucco - Rock	Grey	100	None Detected	0	Non-Fibrous	100	
31788-14b	Exterior - Outside Room 550	Jan-18-2017	LR	Stucco - Rock	Grey	100	None Detected	0	Non-Fibrous	100	
31788-15b	Courtyard Outside Room 550	Jan-18-2017	LR	Stucco - Rock	Grey	100	None Detected	0	Non-Fibrous	100	
31788-16b	Exterior - Outside Room 365	Jan-18-2017	LR	Stucco - Trowel	Grey	100	None Detected	0	Non-Fibrous	100	
31788-17b	Exterior - Adjacent to Courtyard	Jan-18-2017	LR	Stucco - Trowel	Grey	100	None Detected	0	Non-Fibrous	100	
31788-18b	Exterior - Adjacent to Science Wing	Jan-18-2017	LR	Stucco - Trowel	Grey	100	None Detected	0	Non-Fibrous	100	
31788-19b	Beside Contractor's Trailer	Jan-18-2017	LR	Duct Mastic Red (In Waste Pile)	Red	100	**Chrysotile**	**5**	Non-Fibrous	95	
31788-20b	Beside Contractor's Trailer	Jan-18-2017	LR	Duct Mastic Red (In Waste Pile)	Red	100	**Chrysotile**	**5**	Non-Fibrous	95	
31788-21b	Beside Contractor's Trailer	Jan-18-2017	LR	Duct Mastic Red (In Waste Pile)	Red	100	**Chrysotile**	**5**	Non-Fibrous	95	
31788-22b	Room 527 - Interior Wall	Jan-18-2017	LR	Vermiculite - inside concrete block walls	Brown/Beige/Bronze	100	**Tremolite**	**0.5**	Non-Fibrous	99.5	
31788-23b	Exterior - Beside Room 605	Jan-18-2017	LR	Vermiculite - inside concrete block walls	Brown/Beige/Bronze	100	**Tremolite**	**0.5**	Non-Fibrous	99.5	

Note: Samples were analyzed by method: EPA/600/R-93/116" Bulk Asbestos Analysis by Polarized Light Microscopy".
For heterogenous materials the concentration may vary. No reproduction without permission.

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Appendix C. Sample Location Drawings

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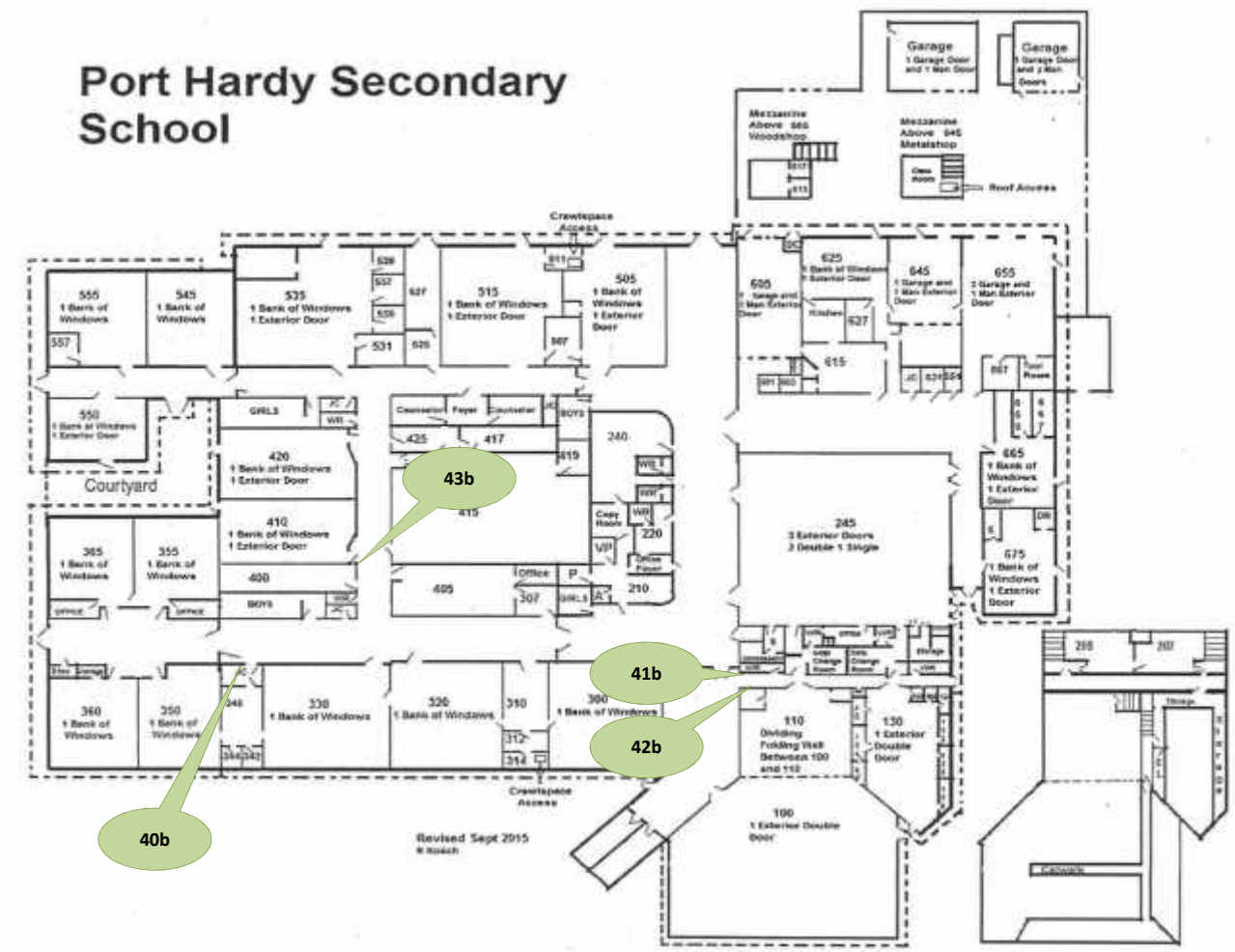
Location: Port Hardy Secondary School, 9350 Granville Street, Port Hardy, BC
Drawing Title: Sample Locations
Project No: 39957
Drawing No: 001
Surveyed By: PG & LK
Survey Date: August 25, 2020

40b	**Drywall joint compound**
41b	**Stair tread – red**
42b	**Baseboard adhesive**
43b	**Baseboard adhesive**

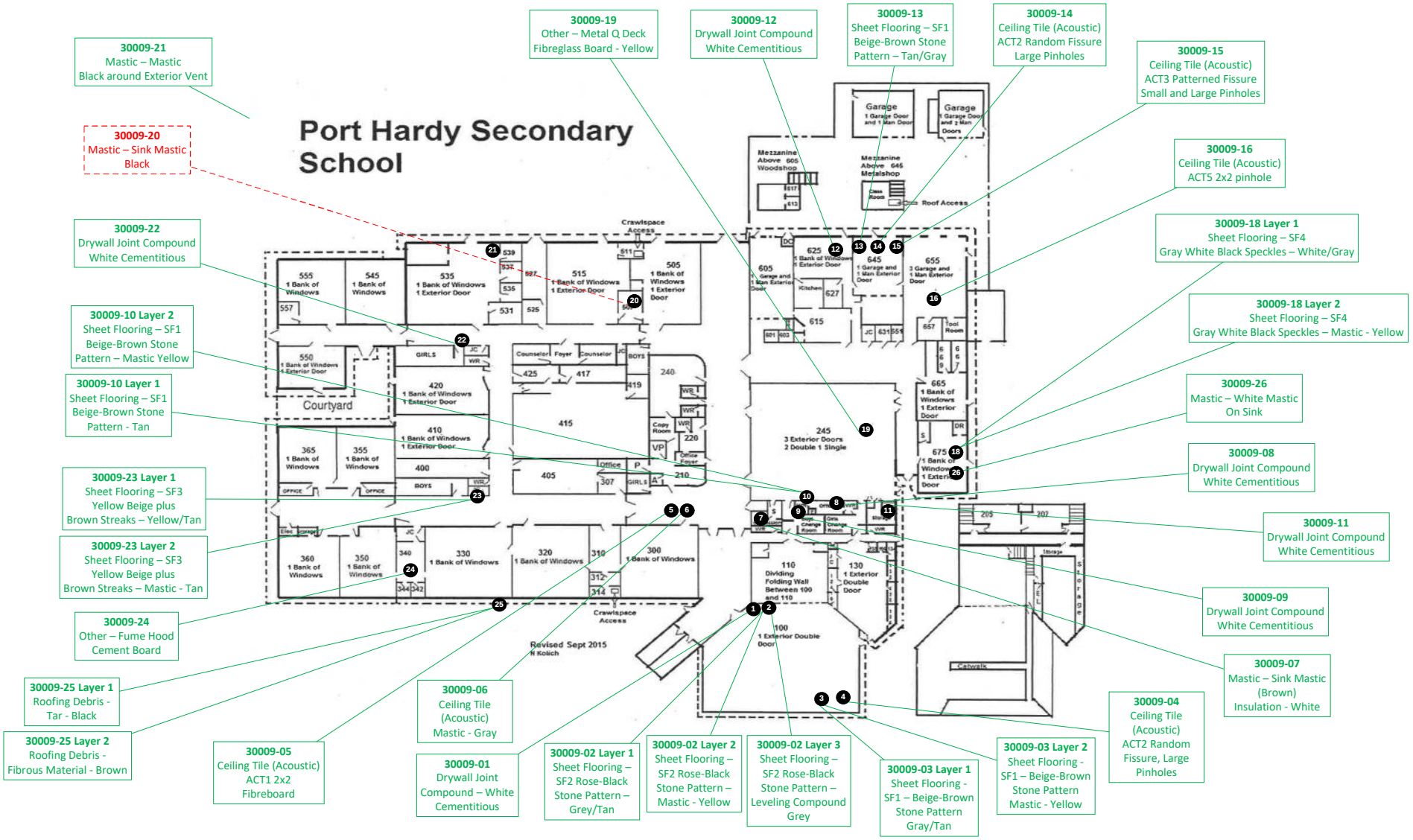


Sample Results

Asbestos Not Detected

Material Contains Asbestos

Not to scale



Drawing Not to Scale

Sample Result Key

123	No Asbestos Detected
123	Material Contains Asbestos
123	Lead (Pb) Sample

ADDRESS/LOCATION:
Port Hardy Secondary School
9350 Granville Street, Port Hardy, BC
VON 2P0

DRAWING TITLE:
School District 85

PROJECT NO.: 30009

DATE: 09/02/2016

SURVEYED BY: Julie Scott/Moncrieff/ Bill Sullivan

DRAWING NO.: 005

North West Environmental Group Ltd.
#201-415 Gorge Road East
Victoria B.C. V8T 2W1

Appendix D. Regulatory Framework

1. **Workers Compensation Act,** Part 2, Division 4 (General Duties of Employers, Workers and Others), Section 25 (General duties of owner).
2. **BC Occupational Health and Safety Regulation**, BC Reg. 296/97, including amendments.
3. **Safe Work Practices for Handling Asbestos**, WorkSafeBC, current edition.
4. **Hazardous Waste Regulation**, BC Ministry of Environment, including amendments.
5. **Transportation of Dangerous Goods Regulations SOR / 2008-34**, Transportation of Dangerous Goods Act, SOR/2008/34 including amendments.

Appendix E. Methodology

The assessment adhered to applicable regulations and followed industry-accepted standards and methodologies.

Note: Not all of the following materials and/or methods were necessarily included in this assessment.

Asbestos

An initial walk-through was conducted of the assessment areas for building materials and machinery or equipment to make a preliminary determination if asbestos could be present.

To confirm or discount the presence of asbestos, representative bulk samples were collected. The sample locations in the building are identified with a unique sample number. Whenever practicable, a representative number of material samples were collected as per WorkSafeBC guidance. Some materials could not be representatively sampled due to accessibility or if sample collection would damage the remaining material.

Bulk samples were submitted for analysis in accordance with the following method: EPA 600 R-93 / 116-1993. Samples consisting of greater than 0.5% asbestos were reported as an asbestos-containing material as per WorkSafeBC. See Appendix G for details on how asbestos-containing materials are evaluated to determine management actions.

Vermiculite samples were submitted for analysis in accordance with the Research Method for Sampling and Analysis of Fibrous Amphibole in Vermiculite Attic Insulation (EPA/600/R-04/004, January 2004, US EPA.) Samples of loose fill vermiculite insulation found to contain any trace of asbestos were reported as

Appendix F. Evaluation of Asbestos-Containing Materials

Evaluation of asbestos-containing materials (ACMs) is based on the condition of the material, its accessibility, and its friability. The following are guidelines used to evaluate ACMs and the action, if any, required to safely manage them.

Spray Applied Fireproofing, Insulation and Texture Finishes

In evaluating the condition of ACM spray applied as fireproofing, thermal insulation or texture, decorative or acoustic finishes, the following criteria apply.

GOOD	Surface of material shows no significant signs of damage, deterioration or delamination. Up to one percent visible damage to surface is allowed within range of GOOD. Evaluation of sprayed fireproofing requires the assessor to be familiar with the irregular surface texture typical of sprayed asbestos products. GOOD condition includes un-encapsulated or unpainted fireproofing or texture finishes, where no delamination or damage is observed, and encapsulated fireproofing or texture finishes where the encapsulation has been applied after the damage or fallout occurred.
POOR	Sprayed materials show signs of damage, delamination or deterioration. More than one percent damage to surface of ACM spray.
DEBRIS	Spray materials are dislodged from surface application source. The identified debris is noted as being separated from the original source.

Mechanical Insulation

In evaluating the condition of mechanical insulation (on boilers, breeching, ductwork, piping, tanks, equipment etc.) the following criteria are used.

GOOD	Insulation is completely covered in jacketing and exhibits no evidence of damage or deterioration. No insulation is exposed. Includes conditions where the jacketing has minor surface damage (i.e., scuffs or stains), but the jacketing is not penetrated.
FAIR	Minor penetration damage to jacketed insulation (cuts, tears, nicks, deterioration or delamination) or undamaged insulation that has never been jacketed. Insulation is exposed but not showing surface disintegration. The extent of missing insulation should be minor to none.
POOR	Original insulation jacket is missing, damaged, deteriorated or delaminated. Insulation is exposed and significant areas have been dislodged. Damage cannot be readily repaired.
DEBRIS	Insulation materials are dislodged from surface application source. The identified debris is noted as being separated from the original source.

Non-Friable and Potentially Friable Materials

Non-friable materials generally have little potential to release airborne fibres, even when damaged by mechanical breakage. However, some non-friable materials, i.e., exterior asbestos concrete products, may have deteriorated so that the binder no longer effectively contains the asbestos fibres. In such cases of significantly deteriorated non-friable material, the material will be treated as a friable product.

Accessibility

The accessibility of building materials known or suspect of being ACM is rated according to the following criteria.

Access (A)	Areas of the building within reach (from floor level) of all building users. Includes areas such as gymnasiums, workshops, and storage areas where activities of the building users may result in disturbance of ACM not normally within reach from floor level.

Access (B)	Frequently entered maintenance areas within reach of maintenance staff, without need for a ladder. Includes: frequently entered pipe chases, tunnels and service areas or areas within reach from a fixed ladder or catwalk (e.g.,, tops of equipment, mezzanines).
Access (C) Exposed	Areas of the building above 2.5 metres where use of a ladder is required to reach the ACM. Only refers to ACM materials that are exposed to view, from the floor or ladder, without removing or opening other building components such as ceiling tiles, or service access doors or hatches. Does not include infrequently accessed service areas of the building.
Access (C) Concealed	Areas of the building which require removal of a building component including lay-in ceilings and access panels into solid ceiling systems. Includes rarely entered crawlspaces, attic spaces etc. Observations are limited to the extent visible from the access points.
Access (D)	Areas of the building behind inaccessible solid ceiling systems, walls, or mechanical equipment, etc., where demolition of the ceiling, wall or equipment etc., is required to reach the ACM. Evaluation of condition and extent of ACM is limited or impossible, depending on the assessor's ability to visually examine the materials in Access D.
ACM in Plenum	Areas of the building where air movement through open or closed air spaces or plenums can be accesses by Access X, where X is any of the Accesses A-D, inclusive.

Action Matrix

The following Action Matrix determines what, if any, action is required to safely manage ACMs.

	Condition			
Access	**Good**	**Fair**	**Poor**	**Debris**
(A)	Action 5/7	Action 5/6	Action 3	Action 1
(B)	Action 7	Action 6/5	Action 3	Action 1
(C) Exposed	Action 7	Action 6	Action 4	Action 2
(C) Concealed	Action 7	Action 7	Action 4	Action 2
(D)	Action 7	Action 7	Action 7	Action 7
(X)	Action 5/7	Action 5/6	Action 3	Action 1

Action Table

The following is a description of the action required to manage ACMs, based on the outcome of the evaluation.

Action 1	**Immediate Clean Up of Debris That is Likely to be Disturbed** Restrict access/shut off air handling system if disturbance of the ACM DEBRIS is likely, and clean up ACM DEBRIS immediately. Utilize proper asbestos procedures. This action is required for compliance with regulatory requirements.
Action 2	**Entry into Areas with ACM Debris** At locations where ACM DEBRIS can be isolated in lieu of removal or clean up, use appropriate means to limit entry to the area. Restrict access to the area to persons utilizing moderate risk asbestos-work precautions. The precautions will be required until the ACM DEBRIS has been cleaned up, and the source of the DEBRIS has been stabilized or removed.
Action 3	**ACM Removal Required for Compliance** Remove ACM for compliance with regulatory requirements. Utilize asbestos procedures appropriate to the scope of the removal work.
Action 4	**Access into Areas Where ACM is Present and Likely to be Disturbed by Access** Use asbestos precautions when entry or access into an area is likely to disturb the ACM. ACTION 4 must be used until the ACM is removed (Use ACTION 1 or 2 if DEBRIS is present).
Action 5	**Proactive ACM Removal**

	Remove ACM in lieu of repair, or at locations where the presence of asbestos in GOOD condition is not desirable.
Action 6	**ACM Repair** Repair ACM found in FAIR condition, and not likely to be damaged again or disturbed by normal use of the area or room. Upon completion of the repair work, treat ACM as material in GOOD condition and implement ACTION 7. If ACM is likely to be damaged or disturbed during normal use of the area or room, implement ACTION 5.
Action 7	**Routine Surveillance** Institute routine surveillance of the ACM. Trained workers or contractors must use appropriate asbestos precaution during disturbance of the remaining ACM.

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