

ASBESTOS-CONTAINING BUILDING MATERIALS REPORT



Lady Mackenzie Public School

1746 Kirkfield Road,
Kirkfield, Ontario

Presented to:

Trillium Lakelands District School Board

Box 420, County Road 36
Lindsay, Ontario
K9V 4S4

Attention: Daniel Whalen

May, 2022

Maple Project No. 20172 C

Executive Summary

Asbestos-Containing Building Materials

Maple Project	School Name	Address
20172-C	Lady Mackenzie P.S.	1746 Kirkfield Road, Kirkfield

Maple Environmental Inc. was retained by Trillium Lakelands District School Board to perform an assessment of the subject building for Asbestos-Containing Building Materials in conformation with O. Reg 278/05

The findings and recommendations of the current assessment are summarized below. Please refer to the main body of the report for details.

FINDINGS

Asbestos-containing materials (ACM) identified within the building at the time of the assessment are as follows:

ASBESTOS BUILDING MATERIALS SUMMARY								
MATERIAL		ASBESTOS			FRIABILITY		Remedial Work Required	
		Yes	No	Suspect	Friable	Non-Friable		Potentially
Sprayed Fireproofing			X		X			NO
Textured Finish			X		X			NO
Mechanical Insulations	Pipe Fittings		X		X			NO
	Pipe Straight		X		X			NO
	Ductwork		X		X			NO
	Mechanical Equip.		X		X			NO
Ceiling Tiles			X				X	NO
Vinyl Sheet Flooring			X				X	NO
Vinyl Floor Tiles			X			X		NO
Asbestos Cement (Transite)			X			X		NO
Plaster			X				X	NO
Drywall Joint Compound			X			X		NO
Other (roofing, caulking, etc.)				X		X		NO

No known major sources of asbestos have been identified in the building

Executive Summary

Asbestos-Containing Building Materials

RECOMMENDATIONS

As no known asbestos-containing materials have been identified in the building, an annual re-assessment for asbestos materials for compliance with O. Reg 278/05 is **not** required.

Prior to performing work in the building that would disturb non-friable suspect asbestos materials (ie. roofing and/or caulking) additional sampling should be performed.

General Statement

The Executive Summary must be read in conjunction with the main body of this report.

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1.0 INTRODUCTION

MAPLE Environmental Inc. ("MAPLE") was retained by the Trillium Lakelands District School Board (TLDSB) to perform a re-assessment of known asbestos-containing building materials within all TLDSB schools where asbestos was previously confirmed to be present (by others).

The assessment was completed in accordance with the requirement of Ontario Regulation 278/05 to complete a re-assessment on an annual basis.

The following report presents the findings and recommendations of the assessment for the specific building listed.

SUMMARY OF BUILDING INFORMATION	
School Name:	Lady Mackenzie P.S.
Building Address:	1746 Kirkfield Road, Kirkfield
Number of Floors:	2
Date of Construction:	1991
Assessed by:	Richards Reboks
Assessment Date:	March, 2022

2.0 APPLICABLE ONTARIO REGULATIONS

Applicable Ontario Regulations for each of the materials included in the investigation are briefly described below.

2.1 Ontario Regulation 278/05 (Asbestos)

The Ontario Ministry of Labour Regulation 278/05 requires a detailed asbestos inventory be performed in all buildings where friable and non-friable asbestos-containing materials (ACM) are present. The inventory must be available at the work place and must identify the type and location of asbestos-containing materials.

The report prepared by MAPLE meets or exceeds the requirements for an asbestos survey under Ontario Regulation 278/05.

Ontario Regulation 278/05 applies to buildings with regards to maintenance, renovation or demolition work where ACM is present and may be disturbed. The regulation requires all buildings where asbestos is known to be part of the building materials to implement an Asbestos Management Program

(AMP). TLDSB has prepared and maintains an AMP of which the current report is part of.

2.2 Ontario Regulation 347

Ontario Regulation 347 applies to the transport of waste from the location of generation to a landfill site authorized to receive specific wastes. The regulation also prescribes procedures on how the specific wastes are to be handled at the landfill site.

The major requirements of the building owner and the person(s) removing the waste are to ensure that:

- The waste is appropriately packaged and labelled;
- The transport vehicle is appropriately placard; and
- The waste is to be transported as directly as possible to the landfill site once it leaves the site.

Some wastes require the Owner to register a Generator (of waste) number and many wastes require classification that can restrict or even prohibit their disposal in landfill.

It is important to note that the building owner can be held responsible for the waste until the waste disposal site accepts it.

3.0 SURVEY SCOPE AND METHODOLOGY

As the building is of newer construction, the presence of asbestos-containing building materials (ACM) is limited. In addition, a previous report prepared by Jacques Whitford dated January 2007 did not identify suspect ACM. As such the assessment was conducted on a general walk-through basis, with representative views above ceilings and in rooms throughout the building.

The scope of the surveys included all friable and major non-friable materials suspected to contain asbestos. The term friable is applied to a material that can be readily reduced to dust or powder by hand or moderate pressure. Asbestos materials that are friable have a much greater potential to release airborne asbestos fibres when disturbed.

Typical friable asbestos materials include; sprayed fireproofing or thermal insulation, textured (stippled) plaster, and thermal mechanical insulation. Typical non-friable materials include: asbestos cement (transite) products, caulking, vinyl floor tiles, asbestos textiles and gaskets. Additional materials such as ceiling tiles and drywall joint compounds are classified as non-friable, but because of their ability to release dust when disturbed they are considered as "potentially friable" for the purpose of this report.

3.1 Limitations and Omissions from Scope

Due to the nature of building construction, some limitations exist in regards to the possible thoroughness of any building materials inventory. The field observations, measurements, and analysis are considered sufficient in detail and scope to form a reasonable basis for the findings presented in this report. MAPLE warrants that the findings and conclusions contained herein have been made in accordance with generally accepted evaluation methods in the industry and applicable regulations at the time of the performance of the inventory.

It is possible that conditions may exist which could not be reasonably identified within the scope of the inventory or which were not apparent during the site investigation. MAPLE believes that the information collected during the inventory period concerning the property is reliable. No other warranties are implied or expressed.

In addition, during a standard asbestos assessment, performed for the purposes of regulatory compliance, it is industry practice to exclude some non-friable materials in the inventory. Examples of such assumptions include; elevator brakes, roofing felts and mastics, high voltage wiring, mechanical packing and gaskets, underground services or piping, fire-doors, window caulking, levelling compound, and/or materials used in operating equipment. As such, these materials were not sampled at the time of this survey and where present are assumed to be asbestos containing until proven otherwise.

3.2 Sampling Strategy and Analytical Methods

Samples of suspect ACM were collected in conformance with the criteria outlined below and in compliance with O. Reg. 278/05.

A small volume of the material was removed either from a damaged section or cut out of intact material and then repaired by sealing with tape to prevent the release of fibres. The collected samples were placed in plastic bags, sealed and labelled and then sent to an independent laboratory for analysis. To ensure quality results, the independent laboratory chosen is NVLAP accredited and successfully participates in an "Asbestos Proficiency Analytical Testing Program" and as such, these laboratories are responsible for their findings.

The collection of samples was performed in accordance with regulatory sampling requirements and with sufficient frequency to obtain a general pattern of asbestos use within the building. Due to building renovations or modifications that have occurred, the consistency of the application of asbestos materials may not be uniform throughout the entire building. It is important to note that without sampling every wall, pipe section, ceiling tile etc. it is not possible to identify the possible asbestos content in every material present in the building. For this reason, materials similar in appearance to those sampled elsewhere in the building were visually identified as being homogeneous and thus are assumed to be composed of the same material, thus additional sampling is not required.

In accordance with Reg. 278/05, samples were collected at the following frequency.

Material Type	No. Samples
Sprayed Fireproofing	Up to 7
Texture Coat	Up to 7
Pipe Fitting Insulation	3
Pipe Straight Insulation	3
Ductwork Insulation	3
Ceiling Tiles	3
Vinyl Sheeting Flooring	3
Vinyl Floor Tile	3
Plaster Finishes	Up to 7
Drywall Compound	Up to 7

An independent NVLAP accredited laboratory, was used to analyse the collected samples. Analysis was performed following the Code of Practice for the identification of asbestos in bulk material, as detailed in Ontario Regulation 278/05. Bulk samples were analysed using the Polarized Light Microscopy ("PLM") Technique with Dispersion Staining. The identification of asbestos fibre in bulk material is based on a collective set of parameters dependent on the unique shape and crystallographic properties of each fibre as viewed through the microscope. This method is useful for the qualitative identification of asbestos and the semi-quantitative determination of asbestos content in bulk materials expressed as a percent of projected area. The method identifies types of asbestos and also measures percent of asbestos as perceived by the analyst in comparison to standard area projections or trained experience.

4.0 INVENTORY FINDINGS

The following is a brief discussion of the extent to which ACM was identified in the building. The discussion is organized under the headings of materials that are generally suspected of containing asbestos.

4.1 Sprayed Fireproofing (Friable)

No sprayed fireproofing was observed in the building.

4.2 Thermal Mechanical Insulation (Friable)

No asbestos-containing mechanical insulations are present in the building.

Mechanical systems were either not insulated or insulated with materials not suspected of containing asbestos such as fibreglass, Armaflex, foam, etc.

4.3 Texture Finish (Friable)

Texture finishes, if present in the building, are not suspected of containing asbestos based on the date of construction.

4.4 Acoustic Ceiling Tiles (Potentially Friable)

Ceiling tiles present in the building are not suspected of containing asbestos based on the date of construction.

4.5 Vinyl Sheet Flooring (Potentially Friable)

Vinyl sheet flooring present in the building is not suspected of containing asbestos based on the date of construction.

4.6 Vinyl Floor Tile (Non-Friable)

Vinyl floor tiles present in the building is not suspected of containing asbestos based on the date of construction.

4.7 Asbestos Cement Products “Transite” (Non-Friable)

No Asbestos Cement products were identified in the building.

4.8 Drywall Joint Compound (DJC)

Drywall Joint Compound present in the building is not suspected of containing asbestos based on the date of construction.

4.9 Plaster

Plaster finishes were not identified in the building.

5.0 RECOMMENDATIONS

As no known asbestos-containing materials have been identified in the building, an annual re-assessment for asbestos materials for compliance with O. Reg 278/05 is not required.

Prior to performing work in the building that would disturb non-friable suspect asbestos materials (ie. roofing and/or caulking) additional sampling should be performed.

6.0 LIMITATIONS

Due to the nature of building construction some limitations exist as to the possible thoroughness of the subject investigation. The field observations are considered sufficient in detail and scope to form a reasonable basis for the findings presented in this report. MAPLE warrants that the findings and conclusions contained herein have been made in accordance with generally accepted evaluation methods in the industry and applicable regulations at the time of the performance of the assessment.

It is possible that conditions may exist which could not be reasonably identified within the scope of the investigation or which were not apparent during the site investigation. MAPLE believes that the information collected during the investigation period concerning the property is reliable. No other warranties are implied or expressed.

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Please contact Maple Environmental Inc. at (905) 257-4408 for inquiries regarding this project.

Sincerely,

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