



Hazardous Building Materials Assessment – 2 Buildings

40 Willow Avenue E, Souris, MB and 276 1st Street SW, Minnedosa, MB

Prepared for:

Royal Canadian Mounted Police

1091 Portage Avenue Winnipeg, MB R3C 3K2

Attention: Rona Rosier Asset Coordinator

February 27, 2017

Pinchin File: 201843





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Issued on:	February 27, 2017
Pinchin File:	201843
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EXECUTIVE SUMMARY

Royal Canadian Mounted Police (Client) retained Pinchin Ltd. (Pinchin) to conduct a pre-construction asbestos building materials assessment of the RCMP detachments located in 40 Willow Avenue E, Souris, MB and 276 1st Street SW, Minnedosa, MB. Pinchin performed the assessment on February 9, 2017.

The objective of the assessment was to identify asbestos-containing building materials in preparation for building renovation in both detachments. The results of this assessment are intended for use with a properly developed scope of work and performance specification.

The assessed area consisted of the entirety of both buildings.

SUMMARY OF FINDINGS

Asbestos-containing materials (ACM) were confirmed to be present as follows:

- Drywall joint compound throughout the Souris detachment, including the bullpen area, contains chrysotile asbestos;
- Vinyl sheet flooring found in the main exhibit room and the men's washroom in the Souris detachment contains chrysotile asbestos;
- Drywall joint compound found in the Souris residence basement contains chrysotile asbestos;
- Vinyl sheet flooring found within the 2nd floor washroom of the Minnedosa detachment contains chrysotile asbestos;
- Drywall joint compound found on the 2nd floor of the Minnedosa detachment contains chrysotile asbestos; and
- Drywall joint compound found within the main floor of the Minnedosa detachment, including the traffic services, bullpen and cell block areas contain chrysotile asbestos.

SUMMARY OF RECOMMENDATIONS

The following is a summary of significant recommendations; refer to the body of the report for detailed recommendations.

- 1. Prepare an Asbestos Management Program (AMP);
- 2. Perform a re-assessment of asbestos materials on an annual basis;





- 3. Follow appropriate safe work procedures when handing or disturbing asbestos; and
- 4. Remove and properly dispose of ACM prior to demolition or if disturbed by the planned renovation work.

Please refer to Section 4.0 of this report for detailed recommendations regarding administrative, renovation or demolition activities.

This Executive Summary is subject to the same standard limitations as contained in the report and must be read in conjunction with the entire report.





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1.0 INTRODUCTION AND SCOPE

Royal Canadian Mounted Police (Client) retained Pinchin Ltd. (Pinchin) to conduct pre-construction asbestos building materials assessments of the RCMP detachments, located in 40 Willow Avenue E, Souris, MB and 276 1st Street SW, Minnedosa, MB.

Travis Dominey, Project Technologist performed the assessments on February 9, 2017. The surveyor was accompanied by staff members from both detachments during the assessment. The buildings were occupied at the time of the assessment.

The objective of the assessment was to identify asbestos-containing building materials in preparation for building renovation in both detachments. This assessment is intended to be used for pre-construction purposes only, and may not provide sufficient detail for long term management of asbestos-containing building materials as required by Health and Safety regulations. The results of this assessment are intended for use with a properly developed scope of work and performance specification.

1.1 Scope of Assessment

The assessment was performed to establish the location of asbestos-containing building materials incorporated in the structure(s) and its finishes. The assessed area consisted of all parts of both buildings.

2.0 BACKGROUND INFORMATION

Building Description Item	Details
Buildings Use	RCMP detachment
Number of Floors/Levels	Souris detachment – One floor, residence has two floors and one below grade Minnedosa detachment – Two floors, one below grade
Total Area of Buildings (square feet)	Souris detachment – 3,262 square feet Minnedosa detachment – 3,692 square feet
Year of Construction/Significant Additions/Renovations (area assessed)	Souris detachment – Date unknown Minnedosa detachment – Date unknown
Structure	Souris detachment – Concrete, wood Minnedosa detachment – Concrete, wood





Building Description Item	Details
Exterior Cladding	Souris detachment – Brick, concrete
	Minnedosa Detachment – Vinyl siding
HVAC	Souris detachment – Electric furnace
	Minnedosa detachment – Electric furnace, natural gas
Roof	Asphalt shingles on both buildings
Flooring	Souris detachment – Vinyl sheet flooring, carpet, wood
	Minnedosa detachment – Vinyl sheet flooring, carpet, concrete
Interior Walls	Souris detachment – Drywall, wood, concrete
	Minnedosa detachment – Drywall, wood, concrete
Ceilings	Souris detachment – Acoustic ceiling tiles, drywall, wood, texture coat
	Minnedosa detachment – Acoustic ceiling tiles, drywall, wood, concrete

3.0 FINDINGS

3.1 Asbestos

3.1.1 Suspect Building Materials Not Found

The following types of building materials may historically contain asbestos but were not observed in the building and are not discussed in the report findings:

- Spray-applied fireproofing or thermal insulation;
- Thermal systems insulation;
- Plaster; and
- Vinyl floor tiles and mastic.





3.1.2 Texture Finishes (Acoustic/Decorative)

Texture finish is present applied to drywall ceiling in the Souris residence (samples 0003A-C). No asbestos was detected in the texture coat samples.



Photograph No. 1 – Texture coat on the drywall ceilings in the Souris residence.

3.1.3 Thermal Systems Insulation (TSI)

3.1.3.1 Pipe Insulation

Pipes are either uninsulated or insulated with non-asbestos fibreglass.



Photograph No. 2 – All piping in both building are either uninsulated, or insulated with fibreglass.



Photograph No. 3 – All piping in both building are either uninsulated, or insulated with fibreglass.





3.1.4 Acoustic Ceiling Tiles

Three distinct types of acoustic ceiling tile are present in the assessed buildings, as follows:

Size, Type, Pattern, Photo #	Locations (Quantity in Square Feet)	Sample Number or Date Code	Asbestos Type
12" x 12", glue-on, pinhole, Photograph No. 4	Souris detachment (1,500 SF)	Not sampled	Non-asbestos – Wood fibre
12" x 12", glue-on, Photograph No. 5	Souris residence basement (1,000 SF)	0006A-C	None detected
24" x 48", pinhole and fissure, Photograph No. 10	Minnedosa detachment (1,500 SF)	0012A-C	None detected



Photograph No. 4 – 12" x 12" wood fibre ceiling tiles in the Souris detachment.



Photograph No. 5 – 12" x 12" ceiling tiles sampled from the basement of the Souris residence.

Refer to additional photographs in Appendix IV.

3.1.5 Drywall Joint Compound

Drywall (gypsum board) and drywall joint compound is present as a wall and ceiling finish in both detachments. Based on the results of the testing (samples 0001A-C, 0005A-C, 0009A-C, and 0011A-C), the drywall joint compound in the Souris detachment, the basement of the Souris residence, the second floor of the Minnedosa detachment, and the main floor of the Minnedosa detachment, contains chrysotile asbestos.

Drywall (gypsum board) and drywall joint compound sampled from the main floor and second floor of the Souris residence (samples 0004A-C), does not contain asbestos. Drywall and drywall joint compound sampled in the basement of the Minnedosa detachment (samples 0010A-C), does not contain asbestos.





Hazardous Building Materials Assessment – 2 Buildings

40 Willow Avenue E, Souris, MB and 276 1st Street SW, Minnedosa, MB Royal Canadian Mounted Police



Photograph No.6 – Drywall as a wall finish in the Souris detachment.



Photograph No. 7 – Drywall as a wall and ceiling finish in the Minnedosa detachment.

3.1.6 Vinyl Sheet Flooring

Vinyl sheet flooring is present as follows:

Pattern, Colour and Photo Number	Paper Backing (Yes/No)	Locations (Quantity)	Sample Number	Asbestos Type
Pebbled, tan, Photograph No. 8	Yes	Staff men's washroom and Main exhibit room – Souris detachment (100 SF)	0002A-C	Chrysotile
Stone pattern, tan/brown, Photograph No. 9	Yes	2 nd floor bathroom – Minnedosa detachment (20 SF)	0007A-C	Chrysotile
Pebbled, tan, Photograph No. 11	Yes	Main floor janitors closet – Minnedosa detachment (20 SF)	0008A-C	None detected
White with grey streaks, Photograph No. 12	No	Main floor of Minnedosa detachment	Not sampled due to recent installation	None
White with grey streaks, Photograph No. 13	No	Souris detachment	Not sampled due to recent installation	None

The vinyl sheet flooring is non-friable but can become friable upon removal. Vinyl sheet flooring is in good condition.





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Photograph No. 8 – Asbestos-containing tan vinyl sheet flooring present in the Souris detachment.

Refer to additional photographs in Appendix IV.



Photograph No. 9 –Asbestos containing vinyl sheet flooring in the 2nd floor bathroom of the Minnedosa detachment.

3.1.7 Presumed Asbestos Materials

A number of materials which might contain asbestos were not sampled during the assessment due to limitations in scope and methodology. Where present, these materials must be presumed to be an asbestos material and are best sampled during project planning and preparation of contract documents for their removal. Materials presumed to contain asbestos include:

- Electrical components or wiring within control centers, breakers, motors or lights, insulation on wiring; and
- Mechanical packing, ropes and gaskets.

4.0 RECOMMENDATIONS

4.1 General

- Prepare plans and performance specifications for the removal of the asbestos-containing building materials required for the planned work. The specifications should include the scope of work, safe work practices, personal protective equipment, respiratory protection, and disposal of waste materials.
- 2. Provide this report and the detailed plans and specifications to the contractor prior to bidding or commencing work.
- 3. Retain a qualified consultant to specify, inspect and verify the successful removal of the asbestos-containing building materials.





4.2 Building Demolition or Renovation Work

The following recommendations are made regarding demolition or renovation involving the hazardous materials identified.

4.2.1 Asbestos

Remove all ACM prior to renovation, alteration, maintenance or demolition work or if ACM may be disturbed by the work.

If the identified ACM will not be removed prior to commencement of the work, disturbance of ACM must follow the appropriate asbestos precautions for the classification of work being performed.

ACM must be disposed of at a landfill approved to accept asbestos waste.

5.0 TERMS AND LIMITATIONS

This work was performed subject to the Terms and Limitations presented or referenced in the proposal for this project.

Information provided by Pinchin is intended for Client use only. Pinchin will not provide results or information to any party unless disclosure by Pinchin is required by law. Any use by a third party of reports or documents authored by Pinchin or any reliance by a third party on or decisions made by a third party based on the findings described in said documents, is the sole responsibility of such third parties. Pinchin accepts no responsibility for damages suffered by any third party as a result of decisions made or actions conducted. No other warranties are implied or expressed.

6.0 **REFERENCES**

The following legislation and documents were referenced in completing the assessment and this report:

- 1. General Regulation Workplace Safety and Health Act W210;
- Workplace Health Hazard Regulation (Manitoba Regulation 217/2006 Workplace Safety and Health Regulation), under the Workplace Safety and Health Act;
- 3. Canadian Environmental Protection Act SOR/92-507; and
- Guideline for Asbestos Operation and Maintenance Program Workplace Safety and Health Branch – Manitoba Labour and Immigration (2007).

\\pinchin.com\wpg\Job\201000s\0201843.000 RCMP, Souris and Minnidosa, Asb Ass\Deliverables\201843 Report 40 Willow Ave E Souris MB and 276 1st ST SW Minnedosa MB RCMP Feb 27 2017.docx

Template: Master Report for Hazardous Materials Assessment Report (Pre-Construction), Haz, January 16, 2017



APPENDIX I Drawings





PINC	HIN			
LEGEND:	SAMPLE			
NOT ALL KNOWN OR SUSPECTED HAZARDOUS BUILDING MATERIALS MAY BE DEPICTED ON THE DRAWING. REFER TO THE HAZARDOUS BUILDING MATERIALS ASSESSMENT REPORT FOR A COMPLETE LIST OF KNOWN AND SUSPECTED				
LEGEND IS COLOUR DEF NON-COLOUR COPIES M INTERPRETATION.	PENDENT. IAY ALTER			
BASE PLAN PROVIDED BY CLIENT.				
CLIENT: ROYAL CAN MOUNTED	NADIAN POLICE			
LOCATION: 276 1ST STR	EET SW.			
MINNEDOSA, M	MANITOBA			
TITLE:				
ASBESTOS ASSESSMENT				
DATE:	PROJECT # :			
2017/02/22	201843			
CI	DRAWING.			
CHECKED BY:				
T.D	1 OF 3			
SCALE: NTS				





SECOND FLOOR

BASEMENT



PINC	HIN			
LEGEND:	SAMPLE			
NOT ALL KNOWN OR SUSPECTED HAZARDOUS BUILDING MATERIALS MAY BE DEPICTED ON THE DRAWING. REFER TO THE HAZARDOUS BUILDING MATERIALS ASSESSMENT REPORT FOR A COMPLETE LIST OF KNOWN AND SUSPECTED HAZARDOUS BUILDING MATERIALS. LEGEND IS COLOUR DEPENDENT. NON-COLOUR COPIES MAY ALTER INTERPRETATION. BASE PLAN PROVIDED BY CLIENT.				
CLIENT: ROYAL CANADIAN MOUNTED POLICE				
LOCATION: 276 1ST STREET SW, MINNEDOSA, MANITOBA				
TITLE: ASBESTOS ASSESSMENT SECOND FLOOR & BASEMENT				
DATE: 2017/02/22	PROJECT # : 201843			
DRAWN BY:	DRAWING:			
C.L CHECKED BY:				
T.D SCALE: NTS	2 OF 3			



SAMPLES: 0003A-C,0004A-C, 0005A-C, 0006A-C ARE ALL COLLECTED FROM THE RESIDENCE, FOR WHICH WE HAVE NO DRAWINGS.



PINC	HIN			
LEGEND:	SAMPLE			
NOT ALL KNOWN OR SUSPECTED HAZARDOUS BUILDING MATERIALS MAY BE DEPICTED ON THE DRAWING. REFER TO THE HAZARDOUS BUILDING MATERIALS ASSESSMENT REPORT FOR A COMPLETE LIST OF KNOWN AND SUSPECTED HAZARDOUS BUILDING MATERIALS.				
LEGEND IS COLOUR DEPENDENT. NON-COLOUR COPIES MAY ALTER INTERPRETATION.				
BASE PLAN PROVIDED BY CLIENT.				
CLIENT: ROYAL CAN	NADIAN			
MOUNTED	POLICE			
SOURIS, MA	NITOBA			
TITLE:				
ASBESTOS ASSESSMENT				
DATE: PROJECT # :				
2017/02/22	201843			
CI	DRAWING.			
CHECKED BY:				
т.D 3 ОГ 3				
SCALE: NTS				

APPENDIX II Asbestos Analytical Certificates



By Polarized Light Microscopy EPA Method: 600/R-93/116 and 600/M4-82-020



Customer: Pinchin Ltd. 54 Terracon Place Winnipeg, MB R2J 4G7 Attn: Travis Dominey Kyle Lamport

 Lab Order ID:
 1702950

 Analysis ID:
 1702950_PLM

 Date Received:
 2/14/2017

 Date Reported:
 2/17/2017

Project: 201843, Royal Canadian Mounted Police, Souris and Minnedosa, Manitoba

Sample ID	Description	Achastas	Fibrous	Non-Fibrous	Attributes
Lab Sample ID	Lab Notes	Aspestos	Components	Components	Treatment
0001A	DJC - Bullpen area - Filing area wall - Souris	3% Chrysotile		97% Other	Beige Non Fibrous Heterogeneous
1702950PLM_1					Teased
0001B	DJC - Detachment - Near microwave/fridge - Souris	Not Analyzed			
1702950PLM_2					
0001C	DJC - Bullpen areal - Souris	Not Analyzed			
1702950PLM_3					
0002A	VSF - Main exhibit room - Souris	35% Chrysotile	55% Cellulose	10% Other	Gray, Beige Fibrous Heterogeneous
1702950PLM_4	unable to separate mastic				Teased
0002B	VSF - Men's washroom - Souris	Not Analyzed			
1702950PLM_5	-				
0002C	VSF - Men's washroom - Souris	Not Analyzed			
1702950PLM_6	-				
0003A	Texture coat - Main floor - Residence living room - Souris	None Detected	15% Cellulose	85% Other	White Non Fibrous Heterogeneous
1702950PLM_7	1				Teased
0003B	Texture coat - Main floor - Residence dining room - Souris	None Detected	15% Cellulose	85% Other	White Non Fibrous Heterogeneous
1702950PLM_8	1				Teased

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Byron Stroble (39)

Analyst

w **Approved Signatory**



By Polarized Light Microscopy EPA Method: 600/R-93/116 and 600/M4-82-020



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 1702950_PLM

 Date Received:
 2/14/2017

 Date Reported:
 2/17/2017

Project: 201843, Royal Canadian Mounted Police, Souris and Minnedosa, Manitoba

Sample ID	Description	Ashastas	Fibrous	Non-Fibrous	Attributes
Lab Sample ID	Lab Notes	Aspestos	Components	Components	Treatment
0003C	Texture coat - 2nd floor - Souris	None Detected	15% Cellulose	85% Other	White Non Fibrous Heterogeneous
1702950PLM_9					Teased
0004A	DJC - Residence main floor - Kitchen - Souris	None Detected		100% Other	White Non Fibrous Heterogeneous
1702950PLM_10					Teased
0004B	DJC - Residence main floor - Living room - Souris	None Detected		100% Other	White Non Fibrous Heterogeneous
1702950PLM_11	-				Teased
0004C	DJC - Residence 2nd floor - Bedroom - Souris	None Detected		100% Other	White Non Fibrous Heterogeneous
1702950PLM_12	-				Teased
0005A	DJC - Residence basement	3% Chrysotile		97% Other	Beige Non Fibrous Heterogeneous
1702950PLM_13					Teased
0005B	DJC - Residence basement	Not Analyzed			
1702950PLM_14					
0005C	DJC - Residence basement	Not Analyzed			
1702950PLM_15					
0006A	9x9 ceiling tile - Residence basement - Souris	None Detected	45% Cellulose 45% Mineral Wool	10% Other	Orange Fibrous Heterogeneous
1702950PLM_16	ceiling tile not floor tile				Teased, Ashed

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 2/14/2017

 Date Reported:
 2/17/2017

Project: 201843, Royal Canadian Mounted Police, Souris and Minnedosa, Manitoba

Sample ID Lab Sample ID	Description Lab Notes	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
					Treatment
0006B	9x9 ceiling tile - Residence basement - Souris	None Detected	45% Cellulose 45% Mineral Wool	10% Other	Beige Fibrous Heterogeneous
1702950PLM_17	ceiling tile not floor tile				Teased, Ashed
0006C	9x9 ceiling tile - Residence basement - Souris	None Detected	45% Cellulose 45% Mineral Wool	10% Other	Beige Fibrous Heterogeneous
1702950PLM_18	ceiling tile not floor tile				Teased, Ashed
0007A	VSF - 2nd floor washroom - Minnedosa	35% Chrysotile	55% Cellulose	10% Other	Gray Fibrous Heterogeneous
1702950PLM_19	unable to separate mastic				Teased
0007B	VSF - 2nd floor washroom - Minnedosa	Not Analyzed			
1702950PLM_20					
0007C	VSF - 2nd floor washroom - Minnedosa	Not Analyzed			
1702950PLM_21					
0008A - A	VSF - Main floor - Janitors room - Minnedosa	None Detected	90% Cellulose	10% Other	Gray, Beige Fibrous Heterogeneous
1702950PLM_22	vinyl bakcing				Teased
0008A - B	VSF - Main floor - Janitors room - Minnedosa	None Detected		100% Other	Yellow Non Fibrous Heterogeneous
1702950PLM_37	mastic				Dissolved
0008B - A	VSF - Main floor - Janitors room - Minnedosa	None Detected	90% Cellulose	10% Other	Gray, Beige Fibrous Heterogeneous
1702950PLM_23	vinyl backing				Teased

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Sample ID Lab Sample ID	Description Lab Notes	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
					Treatment
0008B - B	VSF - Main floor - Janitors room - Minnedosa	None Detected		100% Other	Yellow Non Fibrous Heterogeneous
1702950PLM_38	mastic				Dissolved
0008C - A	VSF - Main floor - Janitors room - Minnedosa	None Detected	90% Cellulose	10% Other	Gray, Beige Fibrous Heterogeneous
1702950PLM_24	vinyl backing				Teased
0008C - B	VSF - Main floor - Janitors room - Minnedosa	None Detected		100% Other	Yellow Non Fibrous Heterogeneous
1702950PLM_39	mastic				Dissolved
0009A	DJC - 2nd floor - Minnedosa	None Detected		100% Other	White Non Fibrous Heterogeneous
1702950PLM_25	-				Teased
0009B	DJC - 2nd floor - Minnedosa	None Detected		100% Other	White Non Fibrous Heterogeneous
1702950PLM_26	-				Teased
0009C	DJC - 2nd floor - Minnedosa	3% Chrysotile		97% Other	Beige Non Fibrous Heterogeneous
1702950PLM_27	-				Teased
0010A	DJC - Basement - Minnedosa	None Detected		100% Other	Gray Non Fibrous Heterogeneous
1702950PLM_28	1				Teased
0010B	DJC - Basement - Minnedosa	None Detected		100% Other	Gray Non Fibrous Heterogeneous
1702950PLM_29	1				Teased

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 2/17/2017

Project: 201843, Royal Canadian Mounted Police, Souris and Minnedosa, Manitoba

Sample ID	Description	Ashastas	Fibrous Components	Non-Fibrous Components	Attributes
Lab Sample ID	Lab Notes	Aspestos			Treatment
0010C	DJC - Basement - Minnedosa	None Detected		100% Other	Gray Non Fibrous Heterogeneous
1702950PLM_30	1				Teased
0011A	DJC - Traffic services - Minnedosa	3% Chrysotile		97% Other	Beige Non Fibrous Heterogeneous
1702950PLM_31	-				Teased
0011B	DJC - Bullpen - Minnedosa	Not Analyzed			
1702950PLM_32	-				
0011C	DJC - Cell block - Minnedosa	Not Analyzed			
1702950PLM_33	-				
0012A	24x48 acoustic ceiling tile - Office - Main floor - Minnedosa	None Detected	45% Cellulose 45% Mineral Wool	10% Other	Beige Fibrous Heterogeneous
1702950PLM_34					Teased, Ashed
0012B	24x48 acoustic ceiling tile - Office - Main floor - Minnedosa	None Detected	45% Cellulose 45% Mineral Wool	10% Other	Beige Fibrous Heterogeneous
1702950PLM_35	1				Teased, Ashed
0012C	24x48 acoustic ceiling tile - Bullpen - Minnedosa	None Detected	45% Cellulose 45% Mineral Wool	10% Other	Beige Fibrous Heterogeneous
1702950PLM_36	-				Teased, Ashed

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Analyst

w **Approved Signatory**

APPENDIX III Methodology



1.0 GENERAL

Pinchin conducts a room-by-room survey (rooms, corridors, service areas, exterior, etc.) to identify the hazardous building materials as defined by the scope of work. All work is conducted in accordance with our own internal Standard Operating Procedures.

Information regarding the location and condition of asbestos-containing building materials encountered and visually estimated quantities are recorded. The locations of any samples collected are recorded on small-scale plans.

As-built drawings and previous reports are referenced where provided.

1.1 Scope Limitations

The assessment excludes the following:

- Articles belonging to the owner, tenant or occupant (e.g. stored items, furniture, appliances, etc.);
- Underground materials or equipment (e.g. vessels, drums, underground storage tanks, pipes, etc.);
- Building envelope, structural components, inaccessible or concealed materials or other items where sampling may cause consequential damage to the property;
- Energized systems (e.g. internal boiler components, elevators, mechanical or electrical components);
- Controlled products (e.g. stored chemicals, operational or process-related substances); and
- Materials not typically associated with construction (e.g. settled dust, spills, residual contamination from prior spills, etc.).

The assessment includes limited demolition of wall and ceiling finishes (drywall or plaster) to view concealed conditions at representative areas as permitted by the current building use. Limited destructive testing of flooring is conducted where possible (under carpets or multiple layers of flooring). Demolition of masonry walls (chases, shafts etc.), structural items or exterior building finishes is not conducted.





1.2 Asbestos

Pinchin conducts an inspection for the presence of friable and non-friable asbestos-containing materials (ACM). A friable material is a material that when dry can be crumbled, pulverized or powdered by hand pressure.

A separate set of samples is collected of each type of homogenous material suspected to contain asbestos. A homogenous material is defined by the US EPA as material that is uniform in texture and appearance, was installed at one time, and is unlikely to consist of more than one type or formulation of material. The homogeneous materials are determined by visual examination and available information on the phases of construction and prior renovations.

Pinchin collects samples at a rate that is in compliance with the requirements of local regulations and guidelines.

The sampling strategy is also based on known ban dates and phase out dates of the use of asbestos; sampling of certain building materials is not conducted after specific construction dates. In addition, to be conservative, several years past these dates are added to account for some uncertainty in the exact start/finish date of construction and associated usage of ACM.

In some cases, manufactured products such as asbestos cement pipe are visually identified without sample confirmation.

Flooring mastic/adhesive and leveling compounds are only sampled and analyzed if present on the underside of flooring samples (vinyl floor tile and vinyl sheet flooring).

If present, the following materials are presumed to be asbestos-containing and are best sampled immediately prior to commencing renovation/disturbance:

- Electrical components or wiring within control centers, breakers, motors or lights, insulation on wiring;
- Refractory materials and insulations in boilers, incinerators and stacks;
- Insulation under metal clad boilers and vessels; and
- Mechanical packing, ropes and gaskets.

Pinchin submits the bulk samples to a NVLAP accredited laboratory for analysis. The analysis is performed in accordance with Test Method EPA/600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials, July 1993.

In Manitoba an ACM is defined as materials containing 0.1% or more asbestos by weight for friable materials, 1% or more asbestos by weight for non-friable materials.



The asbestos analysis is completed using a stop positive approach. Only one result meeting the above regulated criteria is required to determine that a material is asbestos-containing, but all samples must be analyzed to conclusively determine that a material is non-asbestos. The laboratory stops analyzing samples from a homogeneous material once a result equal to or greater than the regulated criteria is detected in any of the samples of that material. All samples of a homogeneous material are analyzed if no asbestos is detected. In some cases, all samples are analyzed in the sample set regardless of result. Where building materials are described in the report as non-asbestos, this means that either no asbestos was detected by the analytical method utilized in any of the multiple samples or, if detected, it is below the lower limit of an ACM in the applicable regulation.

Asbestos materials are evaluated in order to make recommendations regarding remedial work. The priority for remedial action is based on several factors:

- Friability (friable or non-friable);
- Condition (good, fair, poor, debris);
- Accessibility (ranking from accessible to all building users to inaccessible);
- Visibility (whether the material is obscured by other building components); and
- Efficiency of the work (for example, if damaged ACM is being removed in an area, it may be most practical to remove all ACM in the area even if it is in good condition).

Master Template: Methodology Document for Hazardous Building Materials Pre-Construction, HAZ, October 18, 2016



APPENDIX IV Photographs



Pre-Renovation Asbestos Assessment Souris and Minnedosa, Manitoba Royal Canadian Mounted Police February 27, 2017 Pinchin File: 201843 Appendix IV



Photograph No. 10 - 24" x 48" acoustic ceiling tiles sampled from the main floor of the Minnedosa detachment (samples 0012A-C).



Photograph No. 11 – Vinyl sheet flooring from the main floor janitors closet in the Minnedosa detachment.





Pre-Renovation Asbestos Assessment Souris and Minnedosa, Manitoba Royal Canadian Mounted Police February 27, 2017 Pinchin File: 201843 Appendix IV



Photograph No. 12 – Recently installed vinyl sheet flooring on the main floor of the Minnedosa detachment.



Photograph No. 13 – Recently installed vinyl sheet flooring in the Souris detachment.

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Template: Master Photo Appendix, HazMat, February 10, 2016

