



Hazardous Building Materials Assessment

Point Pelee National Park
North Comfort Station, 407
Monarch Lane, Leamington, ON

Prepared for:

Parks Canada
407 Monarch Lane
Leamington, ON N8H 3V4

Attention: Dan Dufour
Project Coordinator

June 11, 2015

Pinchin File: 104300



Hazardous Building Materials Assessment

Point Pelee National Park, North Comfort Station, 407 Monarch Lane, Leamington, ON
Parks Canada

June 11, 2015
Pinchin File: 104300

Issued to: Parks Canada
Contact: Dan Dufour
Project Coordinator
Issued on: June 11, 2015
Pinchin file: 104300
Issuing Office: 30 Queen Street South, P.O. Box
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EXECUTIVE SUMMARY

Parks Canada (Client) retained Pinchin Ltd. (Pinchin) to conduct a hazardous building materials assessment of the North Comfort Station located at Point Pelee National Park, 407 Monarch Lane, Leamington, ON. The assessment was performed on May 12, 2015.

The objective of the assessment was to identify specified hazardous building materials in preparation for building demolition. 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 entire building. The building was vacant at the time of the assessment work.

SUMMARY OF FINDINGS

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

- Transite cement ceiling tiles present in the Men's Change Room (Location 4) and the Women's Change Room (Location 7).

Lead: Lead was confirmed present in select paints/surface coatings and in the bell and spigot pipe fittings located outside the building. Lead is presumed to be present in electrical components (including wiring connectors, fibre optic cable sheathing, grounding conductors and solder) and glazing on ceramic tiles.

Silica: Crystalline silica is present in concrete, mortar, brick, masonry, ceramics, granite, slate, stone, asphalt, etc., where present in the building.

Mercury: Mercury vapour is present in fluorescent lamps throughout the building.

Polychlorinated Biphenyls (PCBs): No PCB materials were found in this building.

Mould: No mould was observed. If mould is uncovered inside wall cavities during hand demolition, use appropriate precautions and protect workers using methods that comply with provincial guidelines.

SUMMARY OF RECOMMENDATIONS

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

1. Remove asbestos-containing materials prior to demolition or if disturbed by renovation work.
2. Remove mercury-containing items prior to demolition or if disturbed by renovation work.



3. Follow appropriate safe work procedures when handling or disturbing lead, silica and mould.

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

Parks Canada (Client) retained Pinchin Ltd. (Pinchin) to conduct a hazardous building materials assessment of the North Comfort Station at Point Pelee National Park located at 407 Monarch Lane, Leamington, ON.

The assessment was performed by Ralph Verbeek, C.E.T., Senior Project Technologist on May 12, 2015. The surveyor was unaccompanied during the assessment. The building was vacant at the time of the assessment.

The objective of the assessment was to identify specified hazardous building materials in preparation for building demolition. This assessment is intended to be used for pre-demolition purposes only, and may not provide sufficient detail for long term management of hazardous 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 and type of specified hazardous building materials incorporated in the structure(s) and its finishes. The assessed area consisted of all parts of the building.

For the purpose of the assessment and this report, hazardous building materials are defined as follows:

- Asbestos
- Lead
- Silica
- Mercury

The assessment also included:

- Polychlorinated Biphenyls (PCBs)
- Mould

The following Ontario Designated Substances are not typically found in building materials in a composition/state that is hazardous and were not included in this assessment:

- Arsenic
- Acrylonitrile
- Benzene
- Coke oven emissions



- Ethylene oxide
- Isocyanates
- Vinyl chloride monomer

2.0 BACKGROUND INFORMATION

Building Description Item	Details
Building Use	Park Comfort Station
Number of Floors/Levels	One storey
Total Area of Building (Square Feet)	1800
Year of Construction/Significant Additions/Renovations (area assessed)	Mid to late 50's
Structure	Wood
Exterior Cladding	Wood
HVAC	None
Roof	Wood and black mastic tar
Flooring	Concrete, ceramic tile
Interior Walls	Drywall, plaster, steel
Ceilings	Drywall, plaster, transite

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
- Texture finishes (acoustic/decorative)
- Thermal systems insulation

- Vermiculite
- Acoustic ceiling tiles
- Vinyl sheet flooring
- Vinyl floor tiles and mastic
- Firestopping
- Levelling Compound

3.1.2 *Plaster*

Plaster is present on walls and ceilings in the Men's Washroom (Location 5) and Women's Washroom (Location 6). A total of five (5) samples of plaster (samples 0003 A-E) were collected and determined to be non-asbestos by laboratory analysis.

3.1.3 *Drywall Joint Compound*

Asbestos in drywall joint compound was banned in Canada in 1980. Drywall joint compound in the Pump Room (Location 3) was installed after 1985 (1980 plus a reasonable non-compliance period based on our experience) and is assumed to contain no asbestos.

3.1.4 *Asbestos Cement Products (Transite)*

Transite cement board is used as a ceiling tile in the Men's Change Room (Location 4) and the Women's Change Room (Location 7). Three (3) samples were collected (samples 0004A-C) and were determined to contain chrysotile asbestos by laboratory analysis. Transite is a non-friable material and was observed in good condition.



Transite ceiling present in the Men's Change Room
(Location 4)



Transite ceiling present in Women's Change Room
(Location 7)

3.1.5 *Sealants, Caulking, and Putty*

White caulking is present on the exterior windows of the building. Three (3) samples of white caulking were collected (samples 0001A-C) and were determined to be non-asbestos by laboratory analysis.



White window caulking present on exterior windows



White window caulking present on exterior windows

3.1.6 Other Building Materials

Tar paper is present on the inside surfaces of the exterior building walls. Three (3) samples were collected (samples 0002A-C) and were determined to be non-asbestos by laboratory analysis.



Tar paper present on the inside surfaces of building walls

3.1.7 Presumed Asbestos Materials

A number of materials which might contain asbestos were not sampled during our 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:

- concrete floor levelling compound
- electrical components or wiring within control centers, breakers, motors or lights, insulation on wiring
- vermiculite in concrete block wall cavities
- adhesives and duct mastics

- paints and coatings
- paper products under wood flooring or metal or slate roofing
- soffit and fascia boards at elevated heights
- mechanical packing, ropes and gaskets

3.2 Lead

3.2.1 Paints and Surface Coatings

A total of two (2) paint samples were collected from interior and exterior painted finishes. The following table summarizes the analytical results for paints sampled and their locations.

Sample Number	Colour, Substrate Description	Locations	Lead (%)
PT-01	Grey paint on wood siding	Exterior of building	0.18
PT-02	Dark grey paint on exterior trim of building	Exterior of building	< 0.08

All paints containing elevated levels of lead were found to be in good condition and not flaking, peeling or delaminating.



Grey paint on wood siding



Dark grey paint on exterior trim of building

Appendix II-B presents the lead testing or bulk sample analytical results.

3.2.2 Presumed Lead Materials

Lead may be present in a number of materials which were not assessed and/or sampled. The following materials, where found, should be considered to contain lead.

- electrical components, including wiring connectors, fibre optic cable sheathing, grounding conductors, and solder

- glazing on ceramic tiles

3.3 Silica

Crystalline silica is a presumed component of the following building materials where present in the building:

- poured or pre-cast concrete
- masonry and mortar
- stone (granite, slate)
- refractory or ceramic materials in high temperature mechanical or production equipment
- ceramic tiles, grout
- plaster

3.4 Mercury

3.4.1 Lamps

Mercury vapour is present in fluorescent lamps and other lighting that is known to contain mercury such as mercury vapour lamps where present in the assessed area.

3.4.2 Mercury-Containing Devices

Mercury-containing devices were not found during the survey.

3.5 Polychlorinated Biphenyls

3.5.1 Caulking

The white caulking present on the exterior windows of the building were sampled for PCB content (sample PCB-01) and contains <0.5 ppm PCBs. The material is a non-PCB solid based on the threshold given in SOR/2008-273 (50 ppm).

3.5.2 Lighting Ballasts

No light ballasts were observed in the building.

3.6 Mould

No mould was observed. If mould is uncovered inside wall cavities during hand demolition, use appropriate precautions and protect workers using methods that comply with provincial guidelines.

Recommendations



3.7 General

1. Prepare plans and specifications for hazardous material removal which will or may be affected by the planned work or is otherwise scheduled for removal. The specifications should include and address the scope of work, safe work practices, risk assessments, personal protective equipment, respiratory protection, and disposal of waste materials.
2. Investigate any items excluded from the scope of work of this report. Ideally this investigation will be performed as part of the development of the specifications, or at a minimum immediately prior to commencing renovations when the areas are no longer occupied.
3. Provide this report and the detailed plans and specifications to the contractor prior to bidding or commencing work.
4. Retain a qualified consultant to specify, inspect and verify the successful removal of hazardous materials.

3.8 Building Demolition or Renovation Work

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

3.8.1 Asbestos

Remove all asbestos-containing materials (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.

Asbestos-containing materials must be disposed of at a landfill approved to accept asbestos waste.

3.8.2 Lead

Construction disturbance of lead in paint and coatings (or other materials) may result in over-exposure to lead dust or fumes. The need for work procedures, engineering controls and personal protective equipment will need to be assessed on a project-by-project basis and must comply with provincial standards or guidelines. Performing an exposure assessment during work that disturbs lead in paints and coatings may be able to alleviate the use of some of the precautions specified by these standards or guidelines.

Lead-painted items may be a hazardous waste. Test lead-painted materials for leachable lead prior to disposal.



Lead-containing items [lead-acid batteries, others] should be recycled when taken out of service or prior to building demolition.

3.8.3 *Silica*

Construction disturbance of silica-containing products may result in excessive exposures to airborne silica, especially if performed indoors and dry. Cutting, grinding, drilling or demolition of materials containing silica should be completed only with proper respiratory protection and other worker safety precautions that comply with provincial standards or guidelines.

3.8.4 *Mercury*

Do not break lamps or separate liquid mercury from components. Recycle and reclaim mercury from fluorescent light tubes and thermostats when taken out of service. Light tubes are accepted free of charge at many local recycling depots. Liquid mercury is classified as a hazardous waste and must be disposed of in accordance with local regulations.

3.8.5 *Mould*

No mould was observed. If mould is uncovered inside wall cavities during hand demolition, use appropriate precautions and protect workers using methods that comply with provincial guidelines.

4.0 LIMITATIONS

The work performed by Pinchin was conducted in accordance with generally accepted engineering or scientific practices current in this geographical area at the time the work was performed. No warranty is either expressed or implied by furnishing written reports or findings. The Client acknowledges that subsurface and concealed conditions may vary from those encountered or inspected. Pinchin can only comment on the environmental conditions observed on the date(s) the survey is performed. The work is limited to those materials or areas of concern identified by the Client or outlined in our proposal. Other areas of concern may exist but were not investigated within the scope of this assignment.

Pinchin makes no other representations whatsoever, including those concerning the legal significance of its findings or as to other legal matters touched on in this report, including, but not limited to, ownership of any property, or the application of any law to the facts set forth herein. With respect to regulatory compliance issue, regulatory statutes are subject to interpretation and these interpretations may change over time. Pinchin accepts no responsibility for consequential financial effects on transactions or property values, or requirements for follow-up actions and costs.

The liability of Pinchin or our officers, directors, shareholders or staff will be limited to the lesser of the fees paid or actual damages incurred by the Client. Pinchin will not be responsible for any consequential



or indirect damages. Pinchin will only be liable for damages resulting from the negligence of Pinchin. Pinchin will not be liable for any losses or damage if the Client has failed, within a period of two years following the date upon which the claim is discovered (Claim Period), to commence legal proceedings against Pinchin to recover such losses or damage unless the laws of the jurisdiction which governs the Claim Period which is applicable to such claim provides that the applicable Claim Period is greater than two years and cannot be abridged by the contract between the Client and Pinchin, in which case the Claim Period shall be deemed to be extended by the shortest additional period which results in this provision being legally enforceable.

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.

5.0 REFERENCES

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

Ontario

1. Asbestos on Construction Projects and in Buildings and Repair Operations, Ontario Regulation 278/05.
2. Designated Substances, Ontario Regulation 490/09.
3. Lead on Construction Projects, Ministry of Labour Guidance Document.
4. Ministry of the Environment Regulation, R.R.O. 1990 Reg. 347 as amended.
5. Surface Coating Materials Regulations, SOR/2005-109, Hazardous Products Act.
6. Silica on Construction Projects, Ministry of Labour Guidance Document.
7. Alert – Mould in Workplace Buildings, Ontario Ministry of Labour.

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Template: Master Report for Hazardous Materials Assessment Report (Pre-Construction), Haz, December 10, 2014

APPENDIX I
Drawings

APPENDIX II-A
Asbestos Analytical Certificates



Bulk Asbestos Analysis

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



NVLAP Lab Code: 200664-0

Customer: Pinchin Ltd.
30 Queen St S
Tilbury Ontario N0P 2L0

Attn: Chris Verbeek
Ola Folami

Lab Order ID: 1509240
Analysis ID: 1509240_PLM
Date Received: 5/13/2015
Date Reported: 5/20/2015

Project: 104300, Parks Canada, North Comfort Station, 407 Monarch Lane, Leamington, ON

Sample ID	Description	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
Lab Sample ID	Lab Notes				Treatment
0001A	White Exterior Window Caulking, Exterior (Location 1)	None Detected		100% Other	Gray Non Fibrous Homogeneous
1509240PLM_1					Ashed
0001B	White Exterior Window Caulking, Exterior (Location 1)	None Detected		100% Other	Gray Non Fibrous Homogeneous
1509240PLM_2					Ashed
0001C	White Exterior Window Caulking, Exterior (Location 1)	None Detected		100% Other	Gray Non Fibrous Homogeneous
1509240PLM_3					Ashed
0002A	Exterior Wall Tar Paper, Exterior (Location 1)	None Detected	70% Cellulose	30% Other	Black Fibrous Heterogeneous
1509240PLM_4					Teased, Dissolved
0002B	Exterior Wall Tar Paper, Exterior (Location 1)	None Detected	70% Cellulose	30% Other	Black Fibrous Heterogeneous
1509240PLM_5					Teased, Dissolved
0002C	Exterior Wall Tar Paper, Exterior (Location 1)	None Detected	70% Cellulose	30% Other	Black Fibrous Heterogeneous
1509240PLM_6					Teased, Dissolved
0003A - A	Plaster, (Location 5)	None Detected		100% Other	White Non Fibrous Heterogeneous
1509240PLM_7	finish				Crushed
0003A - B	Plaster, (Location 5)	None Detected		100% Other	Beige Non Fibrous Heterogeneous
1509240PLM_15	base				Crushed

Disclaimer: Due to the nature of the EPA 600 method, asbestos may not be detected in samples containing low levels of asbestos. We strongly recommend that analysis of floor tiles, vermiculite, and/or heterogeneous soil samples be conducted by TEM for confirmation of "None Detected" by PLM. This report relates only to the samples tested and may not be reproduced, except in full, without the written approval of SAI. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. government. Estimated MDL is 0.1%.

Byron Stroble (19)

Analyst

Approved Signatory



Bulk Asbestos Analysis

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



NVLAP Lab Code: 200664-0

Customer: Pinchin Ltd.
30 Queen St S
Tilbury Ontario N0P 2L0

Attn: Chris Verbeek
Ola Folami

Lab Order ID: 1509240
Analysis ID: 1509240_PLM
Date Received: 5/13/2015
Date Reported: 5/20/2015

Project: 104300, Parks Canada, North Comfort Station, 407 Monarch Lane, Leamington, ON

Sample ID	Description	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
Lab Sample ID	Lab Notes				Treatment
0003B - A	Plaster, (Location 5)	None Detected		100% Other	White Non Fibrous Heterogeneous
1509240PLM_8	finish				Crushed
0003B - B	Plaster, (Location 5)	None Detected		100% Other	Beige Non Fibrous Heterogeneous
1509240PLM_16	base				Crushed
0003C - A	Plaster, (Location 5)	None Detected		100% Other	White Non Fibrous Heterogeneous
1509240PLM_9	finish				Teased
0003C - B	Plaster, (Location 5)	None Detected		100% Other	Beige Non Fibrous Heterogeneous
1509240PLM_17	base				Crushed
0003D - A	Plaster, (Location 6)	None Detected		100% Other	White Non Fibrous Heterogeneous
1509240PLM_10	finish				Teased
0003D - B	Plaster, (Location 6)	None Detected		100% Other	Beige Non Fibrous Heterogeneous
1509240PLM_18	base				Crushed
0003E - A	Plaster, (Location 6)	None Detected		100% Other	White Non Fibrous Heterogeneous
1509240PLM_11	finish				Teased
0003E - B	Plaster, (Location 6)	None Detected		100% Other	Beige Non Fibrous Heterogeneous
1509240PLM_19	base				Crushed

Disclaimer: Due to the nature of the EPA 600 method, asbestos may not be detected in samples containing low levels of asbestos. We strongly recommend that analysis of floor tiles, vermiculite, and/or heterogeneous soil samples be conducted by TEM for confirmation of "None Detected" by PLM. This report relates only to the samples tested and may not be reproduced, except in full, without the written approval of SAI. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. government. Estimated MDL is 0.1%.

Byron Stroble (19)

Analyst

Approved Signatory



Bulk Asbestos Analysis

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



NVLAP Lab Code: 200664-0

Customer: Pinchin Ltd.
30 Queen St S
Tilbury Ontario N0P 2L0

Attn: Chris Verbeek
Ola Folami

Lab Order ID: 1509240
Analysis ID: 1509240_PLM
Date Received: 5/13/2015
Date Reported: 5/20/2015

Project: 104300, Parks Canada, North Comfort Station, 407 Monarch Lane, Leamington, ON

Sample ID	Description	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
Lab Sample ID	Lab Notes				Treatment
0004A	Transite Ceiling Tile (Location 4)	15% Chrysotile		85% Other	Gray, White Non Fibrous Heterogeneous
1509240PLM_12					Teased
0004B	Transite Ceiling Tile (Location 4)	Not Analyzed			
1509240PLM_13					
0004C	Transite Ceiling Tile (Location 7)	Not Analyzed			
1509240PLM_14					

Disclaimer: Due to the nature of the EPA 600 method, asbestos may not be detected in samples containing low levels of asbestos. We strongly recommend that analysis of floor tiles, vermiculite, and/or heterogeneous soil samples be conducted by TEM for confirmation of "None Detected" by PLM. This report relates only to the samples tested and may not be reproduced, except in full, without the written approval of SAL. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. government. Estimated MDL is 0.1%.

Byron Stroble (19)

Analyst

Approved Signatory

1509240

Version 1-15-2012

Client: Contact: Pinchin Ltd. Ralph Verbeek 30 Queen Street South, PO Box 339, Tilbury, ON N0P 2L0 Address: Phone: 519-682-4492 Fax: 519-682-4493 Email: rverbeek@pinchin.com Project: ofolami@pinchin.com 104300, Parks Canada, North Comfort Station, 407 Monarch Lane, Leamington ON	*Instructions: Use Column "B" for your contact info To See an Example Click the bottom Example Tab. Enter samples between "<<" and ">>" Begin Samples with a "<<" above the first sample and end with a ">>" below the last sample. Only Enter your data on the first sheet "Sheet1" Note: Data 1 and Data 2 are optional fields that do not show up on the official report, however they will be included in the electronic data returned to you to facilitate your reintegration of the report data.	Invoice to: Contact name here Email address here
Client Notes: P.O. #. 104300 Date Submitted: May 12 2015 Analysis: PLM - Stop Positive TurnAroundTime: 4 days	 Scientific Analytical Institute 4604 Dundas Dr. Greensboro, NC 27407 Phone: 336.292.3888 Fax: 336.292.3313 Email: lab@sailab.com	

Sample Number	Data 1 (Lab use only)	Sample Description	Data 2 (Lab use only)
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<<			
0001A		White Exterior Window Caulking, Exterior (Location 1)	
0001B		White Exterior Window Caulking, Exterior (Location 1)	
0001C		White Exterior Window Caulking, Exterior (Location 1)	
0002A		Exterior Wall Tar Paper, Exterior (Location 1)	
0002B		Exterior Wall Tar Paper, Exterior (Location 1)	
0002C		Exterior Wall Tar Paper, Exterior (Location 1)	
0003A		Plaster, (Location 5)	
0003B		Plaster, (Location 5)	
0003C		Plaster, (Location 5)	
0003D		Plaster, (Location 6)	
0003E		Plaster, (Location 6)	
0004A		Transite Ceiling Tile (Location 4)	
0004B		Transite Ceiling Tile (Location 4)	
0004C		Transite Ceiling Tile (Location 7)	
>>			

Accepted

Rejected

M. Beatty
5/13/10 AM

APPENDIX II-B
Lead Analytical Certificates



Analysis for Lead Concentration in Paint Chips

by Flame Atomic Absorption Spectroscopy
EPA SW-846 3050B/6010C/7420



Customer: Pinchin Ltd.
30 Queen St S
Tilbury Ontario N0P 2L0

Attn: Ola Folami
Ralph Verbeek

Lab Order ID: 1509253
Analysis ID: 1509253_PBP
Date Received: 5/13/2015
Date Reported: 5/19/2015

Project: 104300 North Comfort Station

Sample ID	Description	Mass (g)	Concentration (ppm)	Concentration (% by weight)
Lab Sample ID	Lab Notes			
PT-01	Grey wood siding (location 1)	0.0592	1800	0.18%
1509253PBP_1				
PT-02	Dark grey wood trim (location 1)	0.0499	< 80.	< 0.008%
1509253PBP_2				

Unless otherwise noted blank sample correction was not performed on analytical results. Scientific Analytical Institute participates in the AIHA IHPAT program. IHPAT Laboratory ID: 173190. This report relates only to the samples tested and may not be reproduced, except in full, without the written approval of SAI. Analytical uncertainty available upon request. The quality control samples run with the samples in this report have passed all EPA required specifications unless otherwise noted. RL: (Report Limit for an undiluted 50ml sample is 4µg Total Pb).

Daniel Olson (2)

Analyst

Laboratory Director

1509253

Version 1-15-2012

Client: Contact: Address: Phone: Fax: Email:	Pinchin Ltd. O Folami 30 Queen Street South, Tilbury 519-682-4492 rverbeek@pinchin.com, ofolami@pinchin.com	*Instructions: Use Column "B" for your contact info To See an Example Click the bottom Example Tab. Enter samples between "<<" and ">>" Begin Samples with a "<<" above the first sample and end with a ">>" below the last sample. Only Enter your data on the first sheet "Sheet1" Note: Data 1 and Data 2 are optional fields that do not show up on the official report, however they will be included in the electronic data returned to you to facilitate your reintegration of the report data.	Invoice to: ofolami@pinchin.com  Scientific Analytical Institute 4604 Dundas Dr. Greensboro, NC 27407 Phone: 336.292.3888 Fax: 336.292.3313 Email: lab@sailab.com
Project: Client Notes: P.O. #. Date Submitted: Analysis: TurnAroundTime:	104300 North Comfort Station 5/11/2015 0:00 Lead Regular		

Sample Number	Data 1 (Lab use only)	Sample Description	Data 2 (Lab use only)
---------------	-----------------------	--------------------	-----------------------

<<		Grey Wood Siding (Location 1) Dark Grey Wood Trim (Location 1)	
PT-01			
PT-02			

Accepted

Rejected

MRB
5/13

>>

APPENDIX II-C
PCB Analytical Certificates

Certificate of Analysis

Ola Folami

Pinchin Environmental Ltd (Tilbury)
30 Queen Street South, PO Box 399, Tilbury, ON N0P2L0

Printed: May 19, 2015

Report Description: 1 Solid Sample was submitted for the following chemical analysis

Project Name: Parks Canada North Comfort Station	Date Sampled: May 08, 2015
Project No.: 104300	Date Tested: May 15, 2015
Site Location: 407 Monqarch Lane, Leamington, ON	Sampled by: Ralph Verbeek

Report Number: 15-0928

No.	Analyte	Result	Units	MDL	Comments	Technique / Test Method
1	<i>Sample ID.: PCB-01 White Exterior Window Caulking, North Comfort Station</i>					
	PCBs in Solid	<0.5	mg/kg	0.5		LAB-M06 (EPA 3550C/8082A modified)
	Comment(s)	-	N/A	N/A	"mg/kg" is equivalent to "ppm"	N/A

Results relate only to the samples tested above, as received.

Approved By:

Son C.H. Le, B. Eng. (Chem.)

Lab Manager

Phone: (519) 740-1333 Ext.: 230

Fax: (519) 740-2320

Email: SonLe@aevitas.ca

The Analytical Chemistry Laboratory of Aevitas Inc. (Ayr) is accredited for specific tests in accordance with the recognised International Standard ISO/IEC 17025:2005 by the Canadian Association for Laboratory Accreditation (CALA) Inc. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated 8 January 2009). The laboratory quality management system of Aevitas Inc. (Ayr) meets the principles of ISO 9001:2008.

All Analytical data is subject to uncertainty which, may vary with sample matrices, sample preparation techniques and instrumental parameters. As a general guideline, uncertainty may be expressed as approximately +/- 50% of the reported value at or near the Method Detection Limit (MDL) and +/-10% or less, of the reported result that is greater than 10 times the MDL. Method Detection Limits are defined as approximately 3 times the standard deviation value (at 99% confidence level), which is obtained from replicate analysis of a low-level standard as per the Ontario MOE - MISA Protocol for the Sampling and Analysis of Industrial / Municipal Wastewater (1999). MDL determination is based on undiluted samples with relatively low matrix interferences. Where dilutions are required, the reported MDL value will be scaled proportionally.

All testing procedures follow strict guidelines and quality assurance / quality control (QA/QC) protocols. QA/QC data is available for review at any time upon client's request.

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.

Information regarding the approximate quantity, location, and condition of hazardous 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 Limitations on Scope

The assessment excludes the following:

- Owner or occupant articles (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.

In occupied facilities, Pinchin only undertakes non-intrusive testing. Concealed spaces such as those above solid ceilings and within shafts and pipe chases are accessed via existing access panels only. Pinchin does not conduct demolition of walls, solid ceilings, structural items, interior finishes or exterior building finishes, to determine the presence of concealed materials.



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 EPA¹ 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, available information on the phases of the construction and prior renovations.

Pinchin collects samples at a rate that is in compliance with Table 1 of O.Reg. 278/05. 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.

Pinchin conducts limited demolition of masonry block walls (core holes) to investigate for loose fill insulation. The core holes are temporarily patched with expanding foam.

Pinchin undertakes sampling of roofing felts at the client's request. A temporary repair is made with asphalt-based mastic and fibreglass mesh. A more permanent repair is required if the roofing or the building is to remain in use for any extended period of time. Pinchin is not responsible or liable for leaks or water damage caused by sampling and or repair.

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).

Pinchin submits the bulk samples to a NVLAP² 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.

The asbestos analysis is completed using a stop positive approach. Only one result of the regulated criteria (0.5%) or greater is required to determine that a material is asbestos-containing, but all samples

¹ Environmental Protection Agency

² National Voluntary Laboratory Accreditation Program



must be analyzed to conclusively determine that a material is non-asbestos. The laboratory stops analyzing samples from a homogeneous material once a result 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, or described as containing no asbestos, this is subject to the limitations of the analytical method used, and should be understood to mean no asbestos was detected.

Asbestos materials are evaluated in order to make recommendations regarding remedial work. This includes friability, condition and efficiency and practicality of the work.

1.3 Lead

Pinchin collects samples of distinctive paint finishes and surface coatings present in more than a limited application, where removal of the paint is possible. Pinchin collects samples by scraping the painted finish to include base and covering applications. Drawings included show sample locations.

Analysis for lead in paints or surface coatings is performed in accordance with EPA Method No. 3050B/Method No. 7420; flame atomic absorption at an accredited laboratory.

For this report, all paints containing lead at a concentration of 0.009% or greater are discussed. Paint and surface coatings are evaluated for condition.

Lead building products (e.g. batteries, lead sheeting, flashing) are identified by visual observation only.

1.4 Silica

Pinchin identifies building materials suspected of containing crystalline silica (e.g. concrete, cement, tile, brick, masonry, mortar) by knowledge of current and historic applications and visual inspection only. Pinchin does not perform sampling of these materials for laboratory analysis of crystalline silica content.

1.5 Mercury

Building materials/products/equipment (e.g. thermostats, barometers, pressure gauges, light tubes), suspected to contain mercury were identified by visually inspection only. Dismantling of equipment suspected of containing mercury was not performed. Sampling of these materials for laboratory analysis of mercury content was not performed.

Mercury spills or damaged mercury-containing equipment was recorded where observed.



1.6 Polychlorinated Biphenyls

Pinchin determines the potential for light ballast and wet transformers to contain PCBs based on the age of the building, a review of maintenance records and examination of labels or nameplates on equipment, where present and accessible. The information is compared to known ban dates of PCBs and Environment Canada publications.

Dry type transformers are presumed to be free of dielectric fluids and hence non-PCB.

Pinchin records spills or leakage of suspect PCB-containing fluids where observed or identified in historical documents.

Fluids (mineral oil, hydraulic or Askaral) in transformers or other equipment are not sampled for PCB content.

Pinchin decides to sample exterior caulking or sealants for PCBs based on the date of construction or installation. Caulking installed after 1985 is presumed to be free of PCBs and hence not sampled. If sampled, analysis for PCBs is performed using an ASTM³ test method appropriate to the sample matrix at an accredited laboratory.

1.7 Visible Mould

Pinchin identifies the presence of mould if visibly present in a significant quantity on exposed building surfaces. If any mould growth is concealed within wall cavities it is not addressed in this assessment.

³ American Society for Testing and Materials