

# APPENDICES



**Stantec**

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File: 121711216

Senior Environmental Specialist  
Environmental Services  
Public Works and Government Services Canada  
1045 Main Street, Unit 100,  
Moncton, New Brunswick, E1C 1H1

**Attention: Marcia Johannesen**

Dear Ms. Johannesen:

**Reference: Asbestos-Containing Materials Overview for  
Rooms A-225, A-227, A-229 and A-231, Main Complex "A" Building AAFC  
Charlottetown, PEI**

## **INTRODUCTION**

In response to your request, contained in the Terms of Reference (ToR) dated October 2011, Stantec Consulting Ltd. (Stantec) is pleased to provide the following letter report describing locations where asbestos-containing materials (ACMs) maybe encountered during the planned laboratory retrofit at the Agriculture & Agri-Food Canada (AAFC) Crops and Livestock Research Centre located on University Avenue, Charlottetown, PEI.

## **BACKGROUND**

Stantec reviewed information provided by Public Works and Government Services Canada (PWGSC). The information provided was a description of the renovation work to be undertaken in a laboratory room (Room No. A-229) inside the Main Complex "A" Building located at the AAFC facility in Charlottetown, PEI. It is our understanding that additional work may be carried out to facilitate the retrofit of Room No. A-229 in the adjoining pipe chase and in the adjoining laboratory rooms (A-225, A-227 and A-231). A specification has been prepared in National Master Specification (NMS) format for the removal of asbestos-containing materials from Room No. A-229 and has been submitted under a separate cover.

## **ASBESTOS-CONTAINING MATERIALS**

Table 1 is a summary of confirmed asbestos-containing materials (ACMs) identified in the proposed work area at the AAFC Crops and Livestock Research Centre facility. Recommended procedures to address the removal or disturbance of ACMs, if required, from the work area are also provided in Table 1.

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**Table 1 Summary of ACMs in Proposed Work Area**

Room ID	Material Description	% Asbestos	Friability	Location(s)	Estimated Quantity	Recommended Abatement Procedure If Removal or Disturbance is Required
Lab 225	Drywall Joint Fill Compound	3% Chrysotile	Non-friable	Ceiling and bulkhead walls	20 m <sup>2</sup>	<p><b>Type I</b> (if removal/disturbance of &lt; 1 m<sup>2</sup> is required)</p> <p><b>Type II</b> (if removal/disturbance of &gt; 1 m<sup>2</sup> is required)</p>
Lab 227	0.3 m x 0.3 m vinyl floor tile: light green with streaks	3% Chrysotile	Non-friable	Surface flooring	20 m <sup>2</sup>	<b>Type I</b>
Lab 229	0.3 m x 0.3 m vinyl floor tile: light green with streaks	3% Chrysotile	Non-friable	Surface flooring	20 m <sup>2</sup>	<b>Type I</b>
Lab 231	No ACMs identified in room					
A-Pipe Chase 2	Parging insulating cement on pipe fittings	45 % Chrysotile	Friable	Pipe runs	95 fittings	<b>Type II</b>
A-Pipe Chase 2	Black tar paper underlying canvass jacketing over fiberglass insulation on straight pipe	2 % Chrysotile	Friable	Pipe runs, painted grey	nq	<b>Type II</b>

**Notes:**

Specification has been prepared in NMS format to address the removal of ACMs (vinyl floor tile) from Room 229 and is provided under a separate cover. nq = not quantified

Prior to any planned disturbance of above noted asbestos-containing building materials, remove confirmed ACMs in accordance with the *PEI Occupational Health and Safety Act-Part 49* and PWGSC Deputy Minister Directive (DIR:057) – Asbestos Management, dated March 12, 1997 following recommended removal and/or disturbance procedures noted in Table 1. Only approved contractors should be used for any activities which may disturb ACMs. Furthermore, for any planned asbestos related work and as per the Asbestos Management Plan (AMP) in place for the facility, the AAFC Facility Asbestos Coordinator (FAC) must be notified in advance. The FAC will notify facility staff and cleaning contractors (if necessary) regarding the planned asbestos related work and maintain relevant documentation received from the PWGSC Project

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Manager (i.e. Contractor Notification Acknowledgement and Asbestos Related Work Record forms, Consultant reports, etc.).

The NMS specification that has been prepared outlines Type I (Minimal Precautions) removal procedures to address the removal of asbestos-containing 0.3 m x 0.3 m vinyl floor tile from Room No. A-229. Table 2 below is a brief summary of the three main types of asbestos abatement procedures.

**Table 2 Summary of Asbestos Abatement Procedures**

Asbestos Abatement Procedure Type	Description
Type I or Low Risk (Minimum Precautions)	<ul style="list-style-type: none"> <li>- Minimal/low risk of releasing fibres from work activities, unless controlled by safe work protocol</li> <li>- Removal of non-friable ACMs</li> <li>- Removal of small amounts (&lt; 1 m<sup>2</sup>) of asbestos containing drywall joint compound</li> <li>- Removal of non-friable ACMs with hand tool</li> <li>- Dust generation is minimal and controlled by wet wiping or misting with amended water</li> <li>- Poly sheeting flaps and/or enclosure to be used to limit spread of dust</li> </ul>
Type II or Moderate Risk (Intermediate Precautions)	<ul style="list-style-type: none"> <li>- Moderate/intermediate risk of releasing fibres from work activities, unless controlled by safe work protocol</li> <li>- Moderate disturbance or removal of less than 3 m<sup>2</sup> (surface area) of friable ACMs per work period</li> <li>- Removal of non-friable ACMs with power tool equipped with HEPA collection system</li> <li>- Removal of larger amounts (&gt; 1 m<sup>2</sup>) of asbestos containing drywall joint compound</li> <li>- Isolation and/or enclosure of work area required</li> <li>- Use of the Glovebag technique for removal of asbestos containing thermal pipe insulation where possible</li> <li>- Worker protection including NIOSH approved air purifying respirator respirators with P-100 filters is mandatory</li> </ul>
Type III or High Risk (Maximum Precautions)	<ul style="list-style-type: none"> <li>- High risk of releasing fibres from work activities, unless controlled by safe work protocol</li> <li>- Disturbance or removal of greater than 3 m<sup>2</sup> (surface area) of friable ACMs per project</li> <li>- Use of the Glovebag technique for removal of asbestos containing thermal pipe insulation where possible</li> <li>- Isolation and/or enclosure of work area required with negative air pressure (minimum of 4-air exchanges per hour) maintained during asbestos operations</li> <li>- Minimum of a three (3) chamber decontamination (decon) unit set up for access/exit to contaminated work area               <ul style="list-style-type: none"> <li>o Decon contains:                   <ul style="list-style-type: none"> <li>▪ Clean changing room,</li> <li>▪ Shower room and,</li> <li>▪ Contaminated change room for removing and storing contaminated protective clothing and equipment.</li> </ul> </li> </ul> </li> </ul>

Based on our understanding of the proposed work, there may be a requirement to drill holes through the masonry block wall present in Room 229 and into the adjoining pipe chase. Due care should be taken when completing drilling through walls and into the adjoining pipe chase so as not to disturb any of the above noted

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asbestos-containing insulating materials present on mechanical piping within the pipe chase. If any drilling or cutting into the masonry block wall could potentially disturb asbestos-containing pipe insulation inside the pipe chase, the materials should be removed prior to the drilling/cutting activity following Type II removal procedures as noted above in Table 1.

Also, during the asbestos assessment of the building in 2010, a thermal pad was identified stored on a lab bench cabinet present in Room 229. This pad was presumed to contain asbestos and may or may not still be inside this room. The bench and cabinet drawers will likely be emptied prior to the retrofit; however, the bench and cabinetry should be checked to ensure the thermal pad is not disposed of with the remainder of the cabinet debris. Should the thermal pad require disposal, it should be carefully placed in an asbestos waste bag and disposed of properly.

Should a material suspected to contain asbestos fibres become uncovered or discovered during renovation activities, all work in the area that may disturb the material should be stopped. Samples of the suspect material should be submitted for laboratory analysis to determine if asbestos fibres are present.

## **CLOSING**

This letter has been prepared for the sole benefit of Public Works and Government Services Canada (PWGSC) and Agriculture & Agri-Food Canada. The report may not be relied upon by any other person or entity without the express written consent of Stantec and PWGSC.

Any use which a third party makes of this report, or any reliance on decisions made based on it, are the responsibility of such third parties. Stantec accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report.

The information and conclusions contained in this report are based upon work undertaken by trained professional and technical staff in accordance with generally accepted engineering and scientific practices at the time the work was performed. The conclusions presented herein represent the best technical judgment of Stantec based on the information obtained from available information. Due to the nature of the investigation and the limited data available, Stantec cannot warrant against undiscovered environmental liabilities.

If any conditions become apparent that differ significantly from our understanding of conditions as presented in this letter, we request that this information be brought to our attention so that we may re-assess the conclusions presented herein.

This report was prepared by Paul D. Paulin, P.Eng. and reviewed by Don Carey, M.Sc. P.Eng., FGS.

Yours truly,

## **STANTEC CONSULTING LTD**

*Original Signed By*

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