



December 13, 2022

Halifax Regional Centre for Education  
33 Spectacle Lake Drive  
Dartmouth, NS B3B 1W8

E-mail: [mflewwelling@hrce.com](mailto:mflewwelling@hrce.com)

Attention: Matt Flewwelling  
*Capital Manager*

**Re: Review of Dust Sample Results and Occupancy Opinion**  
Bicentennial School, 85 Victoria Road, Dartmouth, NS  
Pinchin File: 0319996.000

Pinchin Ltd. (Pinchin) was retained by Halifax Regional Centre for Education (HRCE) to provide the following opinion related to asbestos concerns at Bicentennial School, 85 Victoria Road, Dartmouth, NS.

## **1.0 STATEMENT OF UNDERSTANDING**

We understand that the school is under a phased renovation project to upgrade the exterior wall systems. In the summer of 2022, the project area underwent abatement activities including removal of asbestos-containing plaster from the interior wall finishes following abatement activities prescribed in 'Asbestos in the Workplace: A Guide to Removal of Friable Asbestos Containing Material' (revised November 21, 2013).

On November 28, 2022, Greytop Commercial Construction Inc. (Greytop, Contractor) identified dust from an unknown source, and retained All-Tech Environmental Services Limited (All-Tech) to collect and submit samples of the dust for asbestos analysis from Rooms 9 and 10, and the Teacher's Room, located in the construction area isolated from the remainder of the school. Results were received on December 8, 2022, with the presence of asbestos confirmed. At this time, the school was closed.

Between December 9 and 12, 2022, All-Tech was retained by Greytop to collect air samples and dust samples throughout the school. During this time, Belfor Property Services and Restoration (Belfor) and FirstOnSite were also retained to clean the Thistle Wing construction zone and the adjacent spaces outside the hoarding. The school has remained closed to all except those performing cleaning and testing.

The letter discusses the findings of Pinchin's review of the work completed to date, based on information provided by HRCE.

Pinchin is solely providing this opinion letter based on a desktop review of supplied documents and has not conducted any site reconnaissance to verify site conditions.



## **2.0 SUMMARY OF FINDINGS**

### **2.1 Summer Abatement Work**

Pinchin was provided various documents relating to abatement work completed in the summer, by HRCE to review. The documents reviewed included various pre-inspection reports, perimeter air sampling reports, and clearance air sampling reports prepared by All-Tech for Belfor and Inflector Environmental Services (Inflector). Pinchin also reviewed a 'Safe Work Plan – Maximum Precautions Asbestos' prepared by Inflector on the methods and procedures they would follow for the removal of asbestos containing plaster in the central (gym) portion of the school.

Having reviewed the provided documents, the abatement work completed in the summer of 2022, appears to have been performed in compliance with the Guide to Removal of Friable Asbestos Containing Material. Consistently noted throughout the documents was the classification of the asbestos removal as being 'high' or Type 3. This means that the abatement areas were contained within enclosures constructed of polyethylene sheeting, complete with negative pressure discharging to the building exterior using HEPA filtered negative air machines, and multi-chamber decontamination facilities. The work was reportedly completed using wet methods, and workers wearing appropriate personal protective equipment.

Air sampling was performed outside the enclosure at various times during the abatement using the phase contrast microscopy (PCM) using the NIOSH 7400 method. All samples reviewed were found to contain fibre concentrations within acceptable criteria.

Air sampling was performed inside the Type 3/high risk work areas, using aggressive air sampling methods, and analyzed using the PCM method. All clearance air sampling was reported to contain less than 0.01 fibres per cubic centimeter (f/cc). Various air sample reports reviewed identified that the PCM analysts are part of a 3<sup>rd</sup> party proficiency program (Proficient PT Canada (Fibre Counting), and Canadian Association of Laboratory Accreditation Inc (CALA)).

### **2.2 Dust Sampling – November 2022**

Greytop identified dust from an unknown source in the construction area on November 28, 2022. Five samples of dust were collected on November 28, 2022 by All-Tech, and reported on December 9, 2022. The samples were collected using the ASTM D5755 - Standard Test Method for Microvacuum Sampling and Indirect Analysis of Dust by Transmission Electron Microscopy (TEM) for Asbestos Structure Number Surface Loading. The samples were analyzed at IATL laboratories in Mt. Laurel, NJ.

An initial report issued December 8, 2022 with the results was found to be erroneous, with the results being reported 10 times higher than actual. This error is believed to be associated with a clerical error on



the Chain of Custody supplied by All-Tech indicating a sampling area of 10 square centimeters, rather than the 100 square centimeter area actually collected.

The amended report dated December 9, 2022 identified one sample with no asbestos, and the remaining four samples reported asbestos concentrations between 370 and 18,500 structures per square centimeter, containing chrysotile asbestos. The samples were all collected within the construction area, which was isolated from the remainder of the building.

### **2.3 Building Air Sampling – December 8, and 9 - 10, 2022**

To address concerns in HRCE based on the initial findings of the dust results, All-Tech was approved to collect air samples in the school prior to the cleaning.

On December 8, 2022, 11 PCM air samples were collected in various locations of the school to evaluate airborne fibre concentrations. On December 9 and 10, 2022, an additional 36 PCM air samples were collected throughout the school.

Analysis of the samples in the reports issued December 9, 2022 and December 11, 2022 identified all results as  $<0.01$  f/cc\*, with the \* noting that the sample result was below the limit of detection as defined by NIOSH 7400 analytical method.

HRCE confirmed with All-Tech that the PCM samples were analyzed by staff participating in 3<sup>rd</sup> party proficiency programs.

### **2.4 Dust Sampling – December 9- 11, 2022**

During the period of December 9 to 11, 2022, All-Tech collected 31 additional dust samples throughout the building, from random horizontal surfaces, prior to cleaning activities occurring in many of these areas. The preliminary results were received December 13, 2022, and all 31 samples were found to contain no asbestos, and reported as less than  $925$  s/cm<sup>2</sup>, being below the reporting limit.

### **2.5 Cleaning Activities - December 9- 11, 2022**

It is Pinchin's understanding that the construction area was cleaned by Belfor, and the central portion of the original wing of the building was cleaned by FirstOnSite during the period of December 9 to 12, 2022 during which time the school remained closed. The contractors cleaned the building following asbestos procedures including workers wearing disposable coveralls and respiratory protection with P100 filters, and cleaning included the use of HEPA filtered vacuums and wet wiping.

Based on the information provided to Pinchin, the cleaning of the central portion of the building was performed in due diligence, and not based on analytical results demonstrating any risk.



### 3.0 CONCLUSIONS

Based on the peer review of the documents provided, the following conclusions are provided:

- At this time, the building outside of the construction area (the wing closest and parallel to Thistle Street) is safe for occupancy, and requires no additional protective measures or procedures to access these spaces.
- The construction area (the wing closest and parallel to Thistle Street) is safe for occupancy, and requires no additional protective measures or procedures to access these spaces relating to asbestos.

### 4.0 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.

### 5.0 CLOSURE

Should you have any questions or concerns regarding the contents of this letter, please contact the undersigned.

Yours truly,

**Pinchin Ltd.**

Prepared by:

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Encl: List of Documents Provided to Pinchin

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Template: Master Letter Template, October 1, 2019



The following documents were provided by HRCE to Pinchin for review:

- Asbestos Survey, Bicentennial School, 85 Victoria Rd, Dartmouth, N.S., prepared by Maritime Testing (1985) Limited, dated June 16, 1999
- Safe Work Plan – Maximum Precautions Asbestos, prepared by Inflector
- Enclosure Pre-Abatement Report (Project 29433, report 015), prepared by All-Tech, for Envirobate Environmental Services, dated July 1, 2022
- Final Clearance Air Monitoring Report (Project 29608, report 001), prepared by All-Tech, for Belfor, dated July 27, 2022
- Final Clearance Air Monitoring Report (Project 29642, report 001), prepared by All-Tech, for Belfor, dated August 8, 2022
- Enclosure Pre-Inspection Report (Project 30105, report 002), prepared by All-Tech, for Inflector, dated November 23, 2022
- Perimeter Air Monitoring Report (Project 30105, report 003), prepared by All-Tech, for Inflector, dated November 23, 2022
- Perimeter Air Monitoring Report (Project 30105, report 004), prepared by All-Tech, for Inflector, dated November 24, 2022
- Environmental Background Air Monitoring Report (Project 30105, report 007), prepared by All-Tech, for Inflector, dated November 25, 2022
- Enclosure Pre-inspection Report (Project 30138, report 001), prepared by All-Tech, for Inflector, dated December 1, 2022
- Perimeter Air Monitoring Report (Project 30138, report 002), prepared by All-Tech, for Inflector, dated December 2, 2022
- Post Abatement Visual Report (Project 30138, report 003), prepared by All-Tech, for Inflector, dated December 2, 2022
- Final Clearance Air Monitoring Report (Project 30138, report 004), prepared by All-Tech, for Inflector, dated December 2, 2022
- Microvac Sampling Results – Asbestos in Settled Dust, Bicentennial School, 85 Victoria Road, Dartmouth, NS, prepared by All-Tech, for Greytop (Project 30128), dated December 8, 2022
- Microvac Sampling Results – Asbestos in Settled Dust, Bicentennial School, 85 Victoria Road, Dartmouth, NS, prepared by All-Tech, for Greytop (Project 30128), dated December 9, 2022



**List of Documents Provided to Pinchin**

Bicentennial School, 85 Victoria Road, Dartmouth, NS  
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- Background Air Monitoring Report (Project 30171, report 001), prepared by All-Tech, for HRCE, dated December 8, 2022
- Background Air Monitoring Report (Project 30171, report 002), prepared by All-Tech, for HRCE, dated December 11, 2022
- All-Tech Environmental Site Observations, Bicentennial School, 85 Victoria Road, Dartmouth, NS, prepared by All-Tech, for HRCE, dated December 12, 2022
- Microvac Sampling Results – Asbestos in Settled Dust, Bicentennial School, 85 Victoria Road, Dartmouth, NS, prepared by All-Tech, for HRCE, dated December 13, 2022