



November 20, 2009

Pinchin File No. 02-03-00077

Eastern School District
Suite 601, Atlantic Place
215 Water Street
St. John's, NL
A1C 6C9

Attention: Mr. Jim Sinnott

**Re: St Bernard's Elementary School, Witless Bay, NL
Follow-Up Mould Investigation**

Introduction

Pinchin LeBlanc Environmental Limited (Pinchin) was commissioned by the Eastern School District to conduct a follow-up visual mould investigation in St Bernard's Elementary School located in Witless Bay, NL.

This inspection was performed as a follow-up to recommendations made by Pinchin as a result of an Indoor Air Quality (IAQ) assessment conducted at the school on October 20 and 21, 2009 where results from mould air sampling indicated further investigation and visual inspection of building materials in various rooms.

On November 19, 2009 further investigation was conducted in Rooms 125, 120, 117, 116, 122, 104 and 109 to determine the possible presence of any hidden mould growth. The investigation was conducted by Craig Hollett, P Tech with Pinchin. Mr. Larry Smallwood, Maintenance Supervisor for Eastern School District, and two (2) maintenance personnel were also present for the course of the investigation. During the investigation, Eastern School District representatives Mr. Ford Rice, Mr. Jim Sinnott and Mr. Albert Trask and Department of Education representative Mr. David Noel, were also in attendance.

Observations and Summary of Data

Visual inspection in the above mentioned rooms consisted of checking walls, floors, cupboards baseboards and roofing materials located above the ceiling tiles. The air handling unit air supply

diffuser grilles located in the hallways were also examined. The inspection also included moisture checks of drywall walls, using a moisture meter.

Observations

Visible dust was noted on window screens in Room 109 and on tennis balls used for cushion supports on the legs of chairs (Photos 1 and 2). Removal of the rubber baseboard from the only drywall wall in the room did not reveal visible mould growth on this material or the drywall wall. Moisture checks of the drywall wall did not detect any elevated building material moisture sources. Visual inspections of the interior of the wall looking down between the drywall walls of Rooms 109 and 107 from above the ceiling tiles also did not reveal any visible signs of mould growth (Photo 3). Visual inspections of the ceiling space revealed all metal products consisting of steel structural support beams, webbed joisting and a Q-decked metal roof (Photo 4).

Similar visual inspections conducted in all remaining rooms did not identify any visible signs of mould growth. However dust on a window screen was also noted in Room 120 and chairs using tennis balls for support cushion were also noted in Rooms 120 and 125.

Visual inspection also observed slight to moderate dust build-up on some the air supply diffuser grilles associated with the building air handling unit. This may be an indicator of improper filters, filter fit, or dirt build-up within the ventilation ducts (Photo 5).

Discussion/Conclusions

Prior to the investigation a meeting was held via telephone with Eastern School District personnel and Mr. David Muise of Pinchin. During this meeting the ongoing renovations in the school along with exterior excavations were discussed.

The species of mould *Penicillium chrysogenum* was recovered as the dominant species in a number of sample locations during the air sampling. This species of mould can be found in a variety of habitats including soils. Based on the visual inspections, indicating no visible mould growth, and the fact that there is ongoing excavations on the exterior of the building, it is reasonable to assume that the *Penicillium chrysogenum* recovered from the air sampling is being generated by the outdoor activities not indoor mould growth.

Based on the conclusion that there appears to be no active mould growing in the school, and the results of the previous sampling, the school can be occupied.

Based on the visual findings it is recommended that:

- Existing filters associated with the buildings air exchange system be inspected to see if they are properly fitted into the filter casing or are worn and are causing a breakdown of

filtration. Inspections should also be made into the ductwork for the presence of dust build-up. Dust observed on the air supply diffuser grills and inside air ventilation ducts should be cleaned.

Limitations

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, or intended by the agreement executed with the Client, or by furnishing oral or written reports or findings. The Client acknowledges that subsurface and concealed conditions may vary from those encountered or inspected. Pinchin could only comment on the conditions observed on the date(s) the assessment was performed.

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Pinchin did not attempt to identify locations of deposition of mould spores or particles, or minor mould growth that would not exhibit any signs of spotting/staining on building materials. Pinchin would not be able to identify locations of concealed mould growth within wall cavities

and other hidden locations without performing intrusive inspections. The degree of mould growth noted in the report may change with time if water or humidity issues continue or develop after the assessment date(s). Any sources of water infiltration or high humidity must be corrected to prevent the continuation or occurrence of mould growth. Air sampling results (if any) will apply only to the time and conditions of the testing and may not be used to reliably predict conditions on other days.

Should you have any questions or require additional information, please contact the undersigned.

Yours truly,

PINCHIN LEBLANC ENVIRONMENTAL LIMITED

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PHOTOS



PHOTO 1 – ROOM 109 – EXAMPLE OF WINDOW SCREEN WITH VISIBLE DUST.



PHOTO 2 – ROOM 109 – EXAMPLE OF VISIBLE DUST BUILD UP ON TENNIS BALL CHAIR CUSHIONS.



PHOTO 3 – AN EXAMPLE OF AN AREA OF DRYWALL WALL INSPECTION BETWEEN ROOMS 109 AND 107 – PHOTO TAKEN FROM ABOVE CEILING TILE LOOKING DOWN.



PHOTO 4 – EXAMPLE OF UPPER ROOFING MATERIAL.



PHOTO 5 – EXAMPLE OF HVAC AIR SUPPLY DIFFUSER SHOWING DUST BUILD UP.