

Summary Report of an IEQ Evaluation Conducted at the Richmond E.S.

Inspection Date: 06.06.2016
Report Date 06.07.2016

Date of Inspection: 6/6/2016 **Inspection Conducted By:** J Roseman, M.Sc.IH

Conditions of Concern: Asbestos, Mold, & Construction-Related Issues [Dust & Noise]

Information Provided by: PFT, School Educational Staff, & School Principal

1.0 BACKGROUND

- According to the most recently available SDP School Profile report [12/13/2012] Richmond ES is a 3 floor + basement K-8 school built in 1929 and as per information provided on site there are approximately 700 students and 80 staff at the school.
- The most recent IEQ-building condition occupant health and safety-related evaluation conducted [prior to this one] was on 3/17/2016 with findings of: [a] damaged asbestos-containing materials [ACM]; and [b] mold growth present in occupied areas of the school;
- The IEQ evaluation request that led to the most recent visit [i.e. the subject of this report] was initiated by school staff and by PFTH&WF/U representatives with an evaluation conducted by J. Roseman, PFTH&WF/U-H&S, Director of Environmental Science & Occupational Safety & Health on 6/6/2016 to assess occupant concerns, and to answer questions related to asbestos, mold, and health and educational programming impacts related to an ongoing major construction project.
- Concerns were also noted about the status of asbestos-related exposure conditions in the schools attic and mechanical spaces and potential exposures in normally occupied building areas

IEQ Issues Requiring Evaluation & Response

- 1. Asbestos Related** – Occupant concerns were expressed related to the original “House Fan” heating/exhaust system and involving asbestos contamination and potential exposure impacts throughout the school;
- 2. Mold Growth** – Occupant concerns were expressed related to the presence of mold growth in multiple building areas; and
- 3. Construction** – Issues of concern were raised related primarily to noise impacts in some area from the use of chipping hammers, and potential exposures to dust and debris, possibly silica-containing, associated with a large scale, demolition, masonry and roofing project that is ongoing and will continue throughout the next school year [2016-2017]

2.0 IEQ EVALUATION SUMMARY – 06.06.2016 INSPECTION

Summarized below is a preliminary list of some of the issues and concerns reported to us during the 06.06.2016 site visit. The problem list described below should be supplemented by a comprehensive review of all outstanding Maintenance Department work orders, Capital department information and summaries of building and related environmental conditions, and OEMS evaluations, reports and status updates subsequent to March 21, 2016:

1) Asbestos Related Hazards

Air flow/movement through the existing original house fan system openings, and supply and return/exhaust system components of the ventilation system are occurring with dust, dirt and debris sometimes being observed on/at the return shaft floors and in other locations.

This situation, especially given the categorization of the school attic at Richmond as a “Category D” space [defined by OEMS as: “Asbestos-containing materials exist – Sample results indicate ACM on pipes, fittings, elbows, or equipment located within this function space and **DISTRIBUTED VISIBLE DEBRIS or SIGNIFICANT DAMAGE [emphasis added]** observed at the time of this inspection.” as per SDP inspection date referred to is 11/25/2008] is of concern related to potential asbestos contamination and exposure in normally occupied areas of the building.

2) Mold Related Hazards

Occupants expressed concerns, and had questions about, whether or not the existence of all visible mold growth on surfaces throughout the school [as identified on previous inspections and otherwise reported] have been fully remediated and all sources of moisture and dampness successfully resolved.

3) Construction Related

Occupants expressed concerns related to the potential impacts associated with the large-scale, ongoing, and major roofing and masonry capital improvement project that is currently ongoing [during times of normal occupancy] and that is scheduled to continue throughout the 2016-2017 school year. Some of the specific issues to address re: the construction project include, but may not be limited to:

- [a] Potential asbestos-related impacts and exposures associated with construction activities;
- [b] Dust, dirt and debris that might impact on building interior spaces resulting from exterior construction activities; and
- [c] Noise impacts related to construction activities severe enough to result in compromising educational and academic programs/teaching in some areas.

** It should be noted that during the 06.06.2016 site visit, construction-related demolition activities associated with a fire tower were being done in an appropriate and safe manner with respect to dust control. According to the contractor, during chipping and demolition work, employees were misting areas as a dust control technique and observations of building interior areas were being conducted. Building occupants confirmed that dust control had so far been effective. At the same time, dust control is likely to become much more challenging when grinding work is conducted during periods of occupancy during the 2016-2017 school year.*

Damage and disturbance to ACM, associated with ongoing construction activities as described to me during the 06.06.2016 site visit, seems unlikely to occur, and there was no evidence that it was occurring at the time. Additionally, the contractor’s representative was knowledgeable and informed about the issue and stated that he would be following up if any issues did crop up. However, given the nature of asbestos exposure risk, this issue should be explored further.

Noise levels were problematic inside some building areas and, at least one classroom had to be relocated because the noise associated with the construction work made it too difficult to continue effective instruction in her classroom. This will be a continuing issue that will require attention.

3.0 INTERIM RECOMMENDATIONS

- 1) Assess the current amount, condition and location of all asbestos-containing materials [ACMs] at Richmond ES, if this has not yet been completed, and provide a comprehensive inventory and summary to all occupants and to the PFTH&WF/U-H&S representatives describing current status.**
- 2) Provide information to all occupants and to the PFTH&WF/U-H&S representatives, about the potential impacts, if any, of the ongoing construction project work, on ACMs, at Richmond;**
- 3) Provide updated copies [as available] of the Indoor Environmental Quality [IEQ] Dashboard [dated 3/17/16], Photo Log [dated 3/17/16], Asbestos [3/21/16], and Mold [dated 3/21/16] DDCs [dated 3/21/16] for Richmond E.S. to all occupants and to the PFTH&WF/U-H&S representatives.**
- 4) Provide updated information and status related to response, remediation and/or other repair work conducted pursuant to findings [re: the 36 separate findings on the March, 2016 IEQ Dashboard, that included information about damaged asbestos insulation materials and visible mold growth] to all occupants and to the PFTH&WF/U-H&S representatives.**
- 5) Jointly [by PFTH&WF/U-H&S and SDP representatives] conducted and coordinated evaluation and assessment of construction project impacts on occupants and educational programming to include but not be limited to noise and dust exposures should be immediately arranged and conducted.**
- 6) An Environmental Action Team [E.A.T.] should be immediately established and implemented to follow-up on the construction project being undertaken and to facilitate and ensure ongoing inspection, evaluation, coordination and collaboration at the school level and to include SDP and PFTH&WF/U-H&S representatives,**

**** The evaluation conducted on 6/6/2016 was of a preliminary nature primarily involving information gathering from school staff as a way to understand the nature and scope of current issues and problems present in the school. To date [as of this 06.17.2016 revision] we have not been provided with any response by, or information from, the SDP about what, if any, response actions have been implemented to date, at Richmond specifically addressing the findings from the March, 2016 site visits and reports.**