

Report of the Jointly Conducted IEQ-Related Inspection at Bethune E.S.

Inspection Date: 10.20.2016

Report Date: 10.26.2016

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Inspection Participants: Brian Joseph, SDPOEMS & Frank Gosminski, SDP/FMS

The 10/20/2016 inspection at Bethune ES was initiated by a request from building educational staff to the PFTH&WF/U-H&S regarding water intrusion, from new and re-occurring leaks in multiple classroom locations, and thermal condition problems, as detailed below.

We notified OEMS about the expressed staff concerns and a joint assessment was then scheduled and conducted on 10/20/2016. A request was made to OEMS to review, and share, relevant work orders and previous inspection findings as well as the Facility Condition Assessment for this site, prior to our inspection. OEMS informed us that it did not have a copy of the Facility Condition Assessment for this location available to be reviewed; however, the IEQ Dashboard, and some related documents were provided from the visit previously conducted by OEMS on 6/1/16. These were reviewed prior to inspection.

On arrival I met with Brian Joseph, representing SDP/OEMS and Frank Gosminski, representing SDP/FMS. We spoke with the school Principal, Building Engineer, PFT Building Representative and several classroom teachers and inspected ten [10] locations: rooms 5, 106, 119C, 202, 203, 204, 206, 207, 208 & 219. We were also told about a “new” leak in a first floor hallway area and a reoccurrence of a leak [reportedly previously addressed] outside of the school office.

The following is an abbreviated summary reflecting my general observations and findings and is provided to supplement, and be used in conjunction with, the OEMS reports for this school:

- 1) Water staining, moisture-related damage/efflorescence to painted surfaces and mold growth was observed in seven [7] classroom areas including 106, 202, 203, 204, 206, 207 & 208.
- 2) Flaking paint [presumed to be lead-containing] was observed on the window wall in Room 5 above the Classroom Unit Ventilator [CUV].
- 3) Visible mold growth observed on pipe insulation was present in room 119C - likely related to condensation during operation of the Heating, Ventilation & Air Conditioning [HVAC] -during air conditioning use.
- 4) Water staining on the ceiling was observed in room 219 – the leak has reportedly been repaired;
- 5) In room 208, the sound of “bubbling” water was heard associated with the CUV indicating a leak.
- 6) Thermal control problems were reported by staff and measured temperatures were approximately 80 degrees in normally occupied areas and relative humidity above 60%. CO2 levels in one room [202] were measured to be 2200 ppm – 2500 ppm.
- 7) Pneumatically controlled thermostatic system and related HVAC components and were reported to be poorly and/substantially non-functional.

Preliminary Action Items

- 1) All visible mold growth throughout the school should be immediately remediated and documentation confirming the completion of the work provided to building occupants and PFTH&WF/U-H&S representatives;
- 2) All flaking and damaged paint [presumed to be lead] should be remediated in accordance with lead safe work practices and procedures. Following remediation work, surfaces should be repainted. Documentation confirming the completion of the work should be provided to building occupants and PFTH&WF/U-H&S representatives.
- 3) All sources of moisture and dampness throughout Bethune ES, including from the building envelope, ventilation system components, or other, should be systematically and comprehensively evaluated and an explanation of root cause sources and effective remediation actions and scheduling provided to building occupants and PFTH&WF/U-H&S representatives.
- 4) A systematic and comprehensive evaluation of the condition, function and operational sufficiency of thermal control system and HVAC components should be performed to identify root cause problems and to determine the necessary remediation and response requirements. A summary of findings and remediation needs and scheduling should be provided to building occupants and to PFTH&WF/U-H&S representatives.
- 5) Information about remediation status of the thirty-one [31] listed deficiencies from the recently conducted 6/1/2016 inspection, as included on the 10/05/2016 IEQ Master Dashboard, should be provided to building occupants and to PFTH&WF/U-H&S representatives. Three [3] of the documented deficient conditions are listed as “closed” with twenty-eight [28] still remaining “open” as of 10/5/2016.
- 6) A comprehensive survey of school IEQ issues, review of existing relevant data, and further on-site assessment as necessary, should be conducted to identify all outstanding IEQ-related building concerns and deficiencies.

***** Please note that OEMS issued a school-specific IEQ Dashboard and Mold Data Design Collection [DDC] packages for Bethune ES on 10/21/16 which were provided on 10/26/2016. The findings, observations and corrective actions reported by OEMS are assumed & considered to be incorporated by reference in this report. Additional findings and action items, as described herein and highlighted in yellow, should also be included as part of the SDP-OEMS action-response plan for Bethune.***