

School/Facility: Pointers Run Elementary
Location: Gymnasium and Gym Office
Date of IEQ Report Form: May 16, 2017
Date(s) Investigated: May 31 and June 1, 2017
Date of Report: September 12, 2017

IEQ Concern:

An individual reported experiencing general health symptoms.

IEQ Investigation Process:

Identify deficiencies that may impact IEQ and/or sources of odor concerns. Typically includes the following depending on the nature of concern, but not limited to:

- interview/questionnaire of concern individual(s)
- inspection above drop ceiling (condition of roof deck, pipe insulation, return air plenum)
- inspection of ventilation system (operation of variable air volume box and outdoor air dampers, check controls, measurements of carbon dioxide, temperature and relative humidity, sources near outdoor air intake, measure return and supply air volume, cleanliness of coils, liner and condensate pan)
- inspection of exterior
- inspection below drop ceiling (housekeeping, sink and floor drain traps, signs of past and present moisture concern via visual and/or moisture meter, mold growth, ensure connection of current and capping of abandoned sanitary vents, odorizers, excessive plants and fabric items, identify potential pathways, and measure volatile organic compounds, carbon monoxide, and lighting)

Findings:

- The sound liner's primary barrier of the air handling unit (AHU) serving the gym office is failing (cracking).
- The sound liner's primary barrier of the heating ventilation unit (HV) serving the gym is failing (peeling). The sound liner is not pitted or showing signs of eroding due to its failing primary layer/barrier. The failing liner could produce black flakes that can be emitted from the air supply diffusers and settle out on interior surfaces. The flakes would be considered a nuisance / housekeeping matter not a health concern since too large of a particle.
- The housekeeping (settled dust) within the gym office could improve.
- The shower's floor drain was difficult to determine if water was in the trap. Based on the interview it appears the drain trap dried out and released sewer odors in the past.

- The upper left exterior wall of the gym (as walking into gym from main hall) showed evidence of mineral efflorescence (moisture related) on the cement block wall (CMU). Upon further investigation from the roof, a layer from the brick facing was falling off in a sufficient quantity where the patches of efflorescence were present.

Corrective Actions:

- Building Services is currently working on a scope of work to evaluate and address the efflorescence of the CMU walls and deteriorating brick facing.
- School administration is to inform custodial and teaching staff to work together to improve the housekeeping of the gym office.
- School administration is to inform custodial staff to ensure at least five gallons of water is poured down the shower drain monthly to prevent trap from drying out and allowing the potential for sewer gases to backflow.
- An upcoming mechanical (ventilation system) renovation will address the failing sound liner. The finding does not require immediate attention.
- Over the summer, Building Services cleaned the exhaust vent in the PE office and a return vent ductwork in the gym.