

School/Facility: River Hill High School
Location: Main Entrance Foyer and Hallway Leading to and Including Room 256
Date of IEQ Report Form: February 16, 2018 (initially via email)
Date(s) Investigated: February 16, 2018
Date of Report: March 22, 2018

IEQ Concern:

Three individuals attending a conference at River Hill High School detected an odor and / or experienced 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 with concerned 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:

- A rain event had occurred the evening prior and the morning of the investigation. Weather during the assessment was warm, overcast, and humid.
- The front entrance foyer between the two sets of doors has carpeted style walk-off squares that were damp or wet as determined by a moisture probe. The ventilation within the foyer consists of a fan coil unit providing heat. Suspect visible mold growth was not observed on top of or underneath the walk-off squares.
- The backing of the cabinet under the sink in room 256 does not exist and exposes a cement block chase containing mechanical piping and ventilation duct work. The condition of the chase was typical and no suspect mold growth was observed on the pipe insulation.

- An outstanding odor was not detected within the foyer, but an odor could be expected and not uncommon knowing the weather, area's intended purpose and materials, and confinement of the area.
- The bulkhead and skylights in the hallway(s) were visibly assessed for signs of moisture along with using an infrared camera. No suspect moisture concerns were observed.
- Three ventilation air handling units serving the hallways in question and room 256 were assessed. No deficiencies were observed. The units appeared clean with the outdoor air dampers open.
- The ventilation systems for the school were functioning as a normal school day (6:30 a.m. to 3:00 p.m.). However, the cooling / air conditioning components have been serviced for the winter and will not allow for cooling on a warm day during the winter. As with commercial ventilation systems, the fan continuously operates during the school hours and introduces outdoor air. Thus on an unseasonably warm, humid, and moist day, the indoor environment may feel a little uncomfortable or different from a typical cold winter day. No concerns were identified with interior temperatures or relative humidity (72 degrees Fahrenheit and 50% respectively).

Corrective Actions:

- Per work order 60942, Building Services will remove cabinets and plumbing fixture this coming summer. The wall will be enclosed and access panels installed to access ventilation smoke damper sensors.