

School/Facility: Pointers Run Elementary School
Location: Room 37 (Computer Lab)
Date of IEQ Report Form: November 3, 2017 (via work order #49344)
Date(s) Investigated: November 10, 2017
Date of Report: February 6, 2018

IEQ Concern:

A strong odor was noted during an indoor environmental quality walk through.

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:

- A typical carpet like aroma was detected. In addition, a heat smell was sensed when the ventilation unit began operating.
- A computer is setup near the thermostat(s). The heat generated from the computer may give a false temperature of the room and allow for inefficient operation of the ventilation unit.
- Based on the location and type of ventilation unit, the operation of the outdoor air dampers could not be assessed.
- The reported odor could be associated building materials and room supplies which are influenced by expected fluctuations of indoor and outdoor air temperature and humidity and the operation of the ventilation system (designed to continuously circulate air and

introduce outdoor air during school hours). The odor intensity of the building materials and room supplies can be enhanced by the deficiencies (off, running during scheduled off hours) identified in the HVAC system.

Corrective Actions:

- Work order #49344 - On November 11th, Building Services assessed the outdoor air damper. The damper was reported to be operating as designed. On November 20th, Building Services relocated the two thermostats, on a wall away from the computers.
- School administration is to inform staff not to place items that would produce a thermal differential near thermostats. In addition, the thermostat placement should be discussed during the school's upcoming total ventilation renovation.