

School/Facility: Pointers Run Elementary
Location: RECC Room 2
Date of IEQ Report Form: December 13, 2016
Date(s) Investigated: January 4 and 12, 2017
Date of Report: February 27, 2017

IEQ Concern:

An individual was experiencing eye irritation.

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 gap (~6 square inches) exists in the exterior wall above the drop ceiling where electrical conduit enters possibly allowing unconditioned outdoor air to enter above the drop ceiling and interior space.
- An air purifier (Ion Tech model B-1000) was recently placed within the classroom.
- The exterior wood casework was dry as determined by a moisture meter calibrated for wood. However, a targeted area at the base indicated the wood was wet. A hole was drilled within the area in question and found to be dry and no mold growth. It is believed the moisture meter provided a false positive by contacting metal (i.e. nails or staples within the framing joints / connections).
- The symptom starts during October and the only difference is thought to be the start of the heating season.

Corrective Actions:

- Building Services sealed the gap in the exterior wall above the drop ceiling where electrical conduit entered.
- The school administration is to instruct staff that portable air cleaners / purifiers are not recommended and products other than HEPA and/or charcoal air filters are prohibited since these can introduce a concern. The model observed in this investigation is prohibited and must be removed.
- The school administration is to instruct staff that the fabric curtains covering casework are to be periodically laundered or vacuumed.
- If heating season is a contributing factor to the eye irritation due to lower humidity in the air there is nothing that can be done to address the low humidity. Portable humidifiers are prohibited because can become a source of a clinical environmental illness if they are not properly maintained.