

School/Facility: Swansfield Elementary
Location: Health Suite
Date of IEQ Report Form: October 17, 2016
Date(s) Investigated: October 24, November 21, December 12 and 19, 2016
January 27 and February 21, 2017
(Ongoing correspondence with construction and concerned individual during the investigation.)
Date of Report: March 6, 2017

IEQ Concern:

An individual reported a health concern due to odor from new bulletin board.

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:

- On October 24th, the dedicated outdoor air roof top unit (RTU) serving the area was off with outdoor air dampers open. HVAC balancing work was still ongoing. The RTU was operating during the remaining visits.
- A newness odor could be detected on the initial visit and could be attributed to the new wood furnishings and bulletin board. The new bulletin boards are located throughout the school as phases of renovation are completed. A corkboard is located in the patient area and the small office within the health suite. The odor within the ambient air diminished each visit, but a slight odor could always be detected directly at the surface of the corkboard.

- The adhesive and cork board comply with LEED's indoor environmental quality low emitting materials criteria. A photoionization detector (PID) was used during the investigation to screen for volatile organic compounds (VOCs) in the ambient air and at the exposed surface of the bulletin board(s). Detectable VOCs were not present. Often times the odor threshold is lower than detectable and health concern thresholds.
- The first two phases passed the LEED's IEQ air sampling criteria performed by ARIA Environmental.

Corrective Actions:

- The bulletin board within the small office within the health suite can be removed. This was not an acceptable and/or preferred recommendation to construction personnel or school administration during the investigation. This could always be reconsidered.
- The bulletin board has been exposed during all investigation visits. The bulletin board could be covered to prevent or diminish the odor from emanating.
- If not a security and/or privacy issue, the office door should be kept open after hours and during the school day (as long as health suite is attended by personnel or secured).
- Relocate the individual to the open health suite area instead of within the smaller office.