

School/Facility: Marriotts Ridge High
Location: Room 214
Date of IEQ Report Form: August 28, 2017 (via initial work order 41031)
Date(s) Investigated: September 1, 15, and 22, 2017
Date of Report: December 7, 2017

IEQ Concern:

Individual reported recurring odor in room.

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:

- Past corrective actions in an IEQ report dated June 27, 2017 have been completed.
- A brown water stained ceiling was observed.
- The dedicated outdoor air roof top unit #5 has been shut on and off for diagnostics of and preventing a leak (rain water and/or condensate from air conditioning) to the floor below. The common finding when responding to this recurring concern is RTU 5 is not operating.

Outdoor air is introduced to assist with diluting human bioeffluent (a.k.a. body odors). The odor is formed when the RTU is not operating and is influenced by occupancy and fluctuations in weather, temperature, and humidity acting upon building materials and classroom supplies.

The room is heated/cooled by its own fan coil / unit ventilator located within the classroom.

Corrective Actions:

- Per work order 43836, the water stained ceiling tile was from a past condensate leak from a ventilation unit. The ceiling tile was replaced.
- Building Services has found a temporary solution regarding the condensate in RTU 5 traveling down to the floor below.