

School/Facility: Glenwood Middle
Location: Rooms 4, 24, 33, and 7th Grade Hallway
Date of IEQ Report Form: May 1, 2017
Date(s) Investigated: May 18, 2017
Date of Report: August 17, 2017

IEQ Concern:

Staff member detects a musty and/or chemical odor.

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:

- Particulate was build-up was forming on the corner(s) of the diffusers to the ceiling ventilation unit.
- The wood casework along the exterior wall in room 33 was damp in locations as determined by the use of a moisture meter calibrated to wood. Two sections of cabinets were removed for further inspection. The back sides of the casework (~2 SF) and the paint on the exterior wall had spotty mold growth. The growth on the wall was disinfected / cleaned and painted with antimicrobial stain blocking paint. The two sections of casework were discarded. Growth was more at the base and centered between the two sections of the casework.

A window block (sill / ledge) at base of window on the exterior side had a crack. A gap under the window was observed between the window and brick.

Building Services at the time caulked the openings and to plan a future project to review all windows and make necessary corrections to avoid similar incidents.

The mold growth was well concealed based on the construction of the casework, thus not offering a direct pathway to occupants.

- Carbon dioxide measurements in room 24 were slightly elevated (~132 parts per million / ppm) compared to indoor air quality guidelines. At the time of the investigation, the testing & balancing and commissioning of the ventilation system was still ongoing.

Corrective Actions:

- Facilities is proposing an evaluation of the exterior building envelope, especially windows, to generate a scope of work for a later project to assist with any moisture intrusion impacting the backs of exterior wood casework along the exterior walls of the classrooms.
- School administration is to ensure custodial staff observes and cleans the diffusers when visible particulate is present on the diffusers of the ceiling mounted ventilation units.