

School/Facility: Ellicott Mills Middle
Location: Portable 58
Date of IEQ Report Form: January 19, 2017
Date(s) Investigated: January 23, February 1 and 4, 2017
Date of Report: February 10, 2017

IEQ Concern:

Continued odor reported in portable 58 after work was performed during 2016 winter break.

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:

- The HCPSS IEQ Coordinator initially investigated and observed the following:
 - Minor brown water stained ceiling tile.
 - Suspect mold growth on damaged drywall near the back door.
 - Condensate forming on a window(s),
- Subsequent visit by HCPSS Environmental Safety Specialist and observed the following:
 - The inherent odor was not detected. However, a slight initial odor was detected resembling a garbage and/or beginning or ending of a decaying carcass then smelled more like a new product aroma. After the initial entry, the odor could not be detected when leaving and re-entering the portable.
 - Thermostat tamper proof covers were unsecured or pried. They were set to cooling at 74 degrees, one fan set to “auto” and one set to “on”, and the room temperature was 50 degrees.
 - Damaged drywall near back door was skimmed over and dry as determined by the use of moisture meter calibrated to dry wall.

- Building Services investigation of damaged drywall on February 4th:
 - Interior drywall was removed and discarded until no mold growth was observed.
 - Mold growth was observed on the back side of the interior drywall and exterior drywall sheathing.
 - The damaged drywall and fiberglass insulation were discarded.
 - The exterior sheathing was disinfected /cleaned with Q128 (EPA registered product) and encapsulated with antimicrobial paint as an interim measure.
 - New insulation and interior drywall were installed.
- Work performed during winter break included in attempts to address the odor:
 - Removed and installed all new ventilation duct work.
 - Replaced carpeting with floor tile.
- Additional work performed during winter break:
 - Doors: Secondary door replaced while both doors received a new sweep, threshold, weather stripping, sill flashing, and adjusted and sealed around existing framing. A PVC spacer was provided outside the doors to divert water from possibly entering under doors.
 - Removed exterior lights and reinstalled using a PVC backer blocking and caulked around perimeter.

Corrective Actions:

- The current leak source was determined to be the old hinge pockets of the secondary door and an old screw hole (~1/16" diameter). As a temporary measure additional sealant was applied.
- The removal and replacement of exterior drywall sheathing will be performed during 2017 spring break.
- The door and hinge are to be removed to allow existing hinge pockets to have filler plates and sealants installed before reinstalling the door and hinge assembly. The screw hole will be repaired with a more permanent material. These items are expected to be completed during spring break, if not before.
- The thermostats were properly set.