

**School/Facility:** Wilde Lake High  
**Location:** Room 123  
**Date of IEQ Report Form:** March 8, 2017 (sent to IEQ Mailbox March 15, 2017)  
**Date(s) Investigated:** March 20, 2017  
**Date of Report:** June 27, 2017

**IEQ Concern:**

Individual experiencing general health symptoms and indicated the area experienced a water event.

**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 March 2<sup>nd</sup>, an air vent of a mechanical pipe failed and flooded the area below.
- The flooring in the room was extracted of water. However, drywall was impacted and not assessed or addressed at the time. The incident was not reported to the Office of the Environment for proper assessment of damage.
- The area was assessed by the Office of the Environment once learning of the incident in the submitted IEQ concern form. The base of the drywall in the room and art storage closet remained wet as determined by a moisture meter calibrated to drywall.
- Visible mold growth was observed behind the metal filing drawers in room 123.
- The air volume / cubic feet per minute (cfm) from the air supply diffuser appears deficient. Mechanical prints indicate 305 cfm while field measurements were approximately 216 cfm which is more than the +/- 10% allowance.

**Corrective Actions:**

- A restoration company removed impacted drywall and fiberglass insulation.
- Custodial and Building Services personnel throughout the school system were notified as a reminder to contact the Office of the Environment when water events contact wood or drywall so a proper assessment can be conducted.
- Building Services will evaluate the fan within the variable air volume box serving the room and address accordingly. If necessary, the balancing of ventilation system related to air handling unit #5 would be considered.