

**School/Facility:** Alholton High School

**Location:** Mechanical Room 33

**Date of IEQ Report Form:** January 9, 2018

**Date(s) Investigated:** January 9, 2018

**Date of Report:** April 4, 2018

**IEQ Concern:**

Mold growth was identified on duct insulation within Mechanical Room 33 during an Indoor Environmental Quality (IEQ) Walkthrough.

**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 concerned 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:**

- Mold growth was identified on ductwork within the mechanical room. The growth is limited and only occurs on the supply ducts.
- It was reported that the insulation had previously been removed and replaced due to similar conditions (similar locations and pattern).
- The interior of the insulation appeared “clean.” No suspect mold growth or water staining was observed on the fiberglass insulation, within the duct liner. This observation indicates that condensation may be forming on the outside of the insulation.
- Relative humidity was below the EPA recommended level (60%) to prevent mold growth.
- A definitive cause could not be found. Increased humidity during the summer and lack of air movement within the space may be causing the persistent growth.

**Corrective Actions:**

- Impacted areas were cleaned with a biocide. The impacted areas were then encapsulated with a mold inhibiting duct sealant. The duct insulation will be assessed during the next IEQ walkthrough. Students do not have access to the locked mechanical room.