School/Facility: Hollifield Station Elementary School

Location: Room 52

Date of IEQ Report Form: November 28, 2017

Date(s) Investigated: December 15, 2017

Date of Report: January 16, 2018

IEQ Concern:

A "musty/mildew" odor was identified in the room. It was believed that the odor was causing a general health symptom.

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:

- A faint carpet-like odor was observed within the room. This odor is typical of classrooms and does not appear to represent a concern.
- Moisture readings from the carpet were collected in a grid-pattern within the space. No elevated moisture was detected.
- Moisture readings were collected from the drywall around the perimeter of the space using a moisture meter (drywall setting). No elevated moisture readings were detected.
- No suspect mold growth or significant water staining was observed.
- Carbon Dioxide and Carbon Monoxide levels within the space were measured and were acceptable.
- The outdoor air dampers on the Roof Top Unit (RTU) servicing the room were closed. The closed air dampers would limit outdoor air into the system. Outdoor air is introduced to dilute contaminants such as Carbon Dioxide (CO₂) and human bioeffluents (i.e. body odor).

Corrective Actions:

• Building Services (HVAC) was asked to assess the outdoor air dampers under Work Order #53701. A deficiency was found related to the percentage of outdoor air being delivered to the space. The deficiency was corrected by Building Services on December 21, 2017.