School/Facility: Hollifield Station Elementary School

**Location:** Room 55 (in addition inspected 1B, 2C, 3B, 3D, 5D,

37, 52, 55, 61, and Commons 4)

**Date of IEQ Report Form:** November 29, 2017

**Date(s) Investigated:** December 8 and 20, 2017

**Date of Report:** March 2, 2018

## **IEQ Concern:**

An individual experiencing a chronic health symptom inquired about Indoor Air Quality (IAQ) and mold.

## **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:**

- Since the person is not stationed in one location, random areas were selected to be included in the inspection to achieve a general representation of the school. The areas included 1B, 2C, 3B, 3D, 5D, 37, 52, 55, 61, and Commons 4.
- The chalk tray in room 2C was not 100% clean.
- A brown ceiling tile stain was observed outside the door of classroom 37 and appears to be associated with a roof drain and/or an uninsulated domestic water pipe elbow.
- Room 3D had paper clutter around the teacher area and stuffed animals within bins.
- Fabric pouches were observed on the back of student chairs in room 1B.
- Individual indicate room 61 had window leaks. Based on observations and/or work order review, the windows form condensate and Building Services painted the wall around the window and windows are in the process of being repaired / replaced this month.

- A slight "orange" like odor was detected in room 61 and thought to be the peach mango hand lotion bottle.
- Ventilation roof top units 1, 5, and 9 were reviewed. The outdoor air dampers to units 5 and 9 were observed to be closed. Mineral salts are forming on the metal ceiling of unit 1 and thought to be related to an exterior leak starting to form.

## **Corrective Actions:**

- School administration is to inform and ensure staff responsible for cleaning chalk trays (room 2C) to be more thorough when cleaning.
- School administration is to inform and ensure staff in 3D to improve housekeeping and periodically clean stuffed animals if they are to remain in the classroom.
- School administration is to inform and ensure staff in 1B to periodically launder the fabric pouches.
- Work order 60029 was submitted for Building Services to evaluate and address accordingly the water stained ceiling tile outside of classroom 37.
- Work order 53701 was created to evaluate and address ventilation units. Building Services indicated the outdoor air damper was working in Unit 5, but the minimum outdoor air position was not properly working. The minimum outdoor air setting was reset and checked for proper operation. The outdoor air damper associated with Unit 9 had a bad controller which was replaced. Mineral salts were scraped from Unit 1 was scraped and cleaned and the source of leak was sealed.