

**School/Facility:** Glenwood Middle School

**Location:** General

**Date of IEQ Report Form:** February 1, 2018 (Email)

**Date(s) Investigated:** February 1, 7, and 14 2018

**Date of Report:** March 15, 2018

**IEQ Concern:**

An individual reported a general health concern and inquired about indoor air quality. The individual indicated that the majority of their time is spent in rooms 13, 15, 18, 21, 29, and 33. Additionally, the individual mentioned they could be anywhere in the building at any given time for coverage purposes.

**IEQ Investigation Process:**

Identify deficiencies that may impact IEQ and/or sources of odor concerns. This 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:**

**Room 13**

- Housekeeping practices were acceptable.
- Minor dust deposits were observed on the supply vents.
- No thermal anomalies (indicative of moisture intrusion) were observed while screening the room.
- No elevated moisture readings were detected in the lower portions of the drywall (drywall setting).
- No suspect mold growth was observed.
- Temperature, relative humidity, carbon dioxide, carbon monoxide, and particulate readings were acceptable.

### **Room 15**

- Housekeeping practices were acceptable.
- No thermal anomalies were observed while screening the room.
- No suspect mold growth was observed.
- Temperature, relative humidity, carbon dioxide, carbon monoxide, and particulate readings were acceptable.

### **Room 18**

- Housekeeping practices were acceptable.
- No thermal anomalies were observed while screening the room.
- No suspect mold growth was observed.
- Temperature, relative humidity, carbon dioxide, carbon monoxide, and particulate readings were acceptable.

### **Room 21**

- Housekeeping practices were acceptable.
- No thermal anomalies were observed while screening the room.
- No suspect mold growth was observed.
- Temperature, relative humidity, carbon dioxide, carbon monoxide, and particulate readings were acceptable.

### **Room 29**

- Housekeeping practices were acceptable.
- No thermal anomalies were observed while screening the room.
- No suspect mold growth was observed.
- Temperature, relative humidity, carbon dioxide, and carbon monoxide readings were acceptable.
- A black stain (approximately 2 inches in diameter, not mold growth) was observed. The area was dry as determined by a moisture meter (drywall setting).
- A University of Maryland flag was observed on the wall.
- Temperature, relative humidity, carbon dioxide, carbon monoxide, readings were acceptable.
- A particulate reading (PM<sub>10</sub>) was elevated as the room was recently dusted by custodial staff. Elevated readings would be expected after a dusting event.

### **Room 33**

- Housekeeping practices were acceptable.
- No thermal anomalies were observed while screening the room.
- No suspect mold growth was observed.
- Temperature, relative humidity, carbon dioxide, carbon monoxide, and particulate readings were acceptable.

## **General**

- Minor water staining and rusting was observed within the plenum (above the drop-ceiling). These observations are consistent with the documented humidity issues identified in 2015. More information on this can be found on the Glenwood Middle School IEQ webpage (<http://gms.hcpss.org/environment>).
- Temperature, relative humidity, carbon dioxide, and carbon monoxide readings were collected in several common areas. The readings were acceptable.
- A general walkthrough (classrooms 1 through 40, 43, 45, 61, and 82 through 84) was completed. The housekeeping appeared acceptable in each of the rooms with the exception of Classroom 27.
- During the general walk-through a table cloth was observed in Portable 20 (Spanish), artificial plants were observed in Room 5 (lounge), and cob-webs were observed behind the bookcase in room 27.
- The Roof Top Units (RTUs) servicing Classrooms 1-35, Classrooms 62-69, and the Gymnasium were assessed. The systems were operating and no deficiencies were noted.

## **Corrective Actions:**

- Administration should determine that fabric items (flags, stuffed animals, table cloths, etc.) have a plan in place to be regularly cleaned by the individuals that bring them in. This reduces the potential for allergic reactions due to dust.
- The artificial plants observed in Room 5 (lounge) should be removed. Artificial plants often collect dust.
- Custodial Services should perform a cleaning of the supply vents in Classroom 13 and a general cleaning of Classroom 27 (to include behind the bookcase near the entrance).