School/Facility: Patapsco Middle

**Location:** Art Room

**Date of IEQ Report Form:** November 27, 2017 (email correspondence)

**Date(s) Investigated:** November 27, 30, and December 20, 2017

**Date of Report:** February 14, 2018

## **IEQ Concern:**

An individual reported a chemical odor resembling spray paint.

## **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:**

- An odor was detected within the room and resembled art related products.
- The odor was more apparent near the door leading into the related arts hallway.
- A direct source could not be identified within the room, cabinets, or above the drop ceiling.
- The surrounding rooms sharing the same ventilation unit with the art room did not have an odor.
- A stain (did not have an odor) was observed on the floor tile near the corner of the room where the odor appeared stronger.
- Trash cans were located near the doorway in question.
- Plumbing connections (sanitary vents) above the drop ceiling were sealed.
- Sink drain traps were not dried out, thus not back flowing any potential gases.
- This is the first time the odor occurred and staff has been in room for ten plus years.
- Several baby jars were open containing paint / ink, but did not emit a strong odor and/or did not resemble the odor within the room.

• A photoionization detector (PID) was used to screen for potential detectable volatile organic compounds (VOCs). No VOCs were detected.

## **Corrective Actions:**

- School was instructed to remove trash cans and trash bags. Replace with new or return after cleaning.
- The art room was to be cleaned.
- The floor, especially the staining, was to be chemically cleaned.
- The odor no longer existed shortly after the investigation.