**School/Facility:** Worthington Elementary

**Location:** 1<sup>st</sup> Grade Pod Storage Room

**Date of IEQ Report Form:** January 17, 2017

**Date(s) Investigated:** February 1, 2017 and March 31, 2017

**Date of Report:** April 4, 2017

## **IEQ Concern:**

Strong odor detected in this room during the 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 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 sewer ejector pit exists in this storage closet.
- The HVAC supply air and exhaust systems are functional within the storage room.
- The storage room is under negative pressure based on a smoke tube test.
- The smaller lid of the sewer ejector pit was not secured / tightly closed. The screws were not in place and a lip / air gap existed around the edges of the lid.
- The tank was positively pressurized based on a smoke tube test.
- A weak sewer odor was detected on 2/1/17 while a stronger sewer odor was detected on 3/31/17 after corrective actions were in place.

## **Corrective Actions:**

- Building Services installed a new gasket, filled in screw holes, and installed new bolts to allow the lid to compress the gasket for a tight seal.
- Since an odor continues after the initial corrective actions, the Office of the Environment and Building Services together will review additional explanations and solutions.