River Hill High
Various Locations
May 12, 2017
June 5, 2017
September 6, 2017

## IEQ Concern:

Staff observed brown water in health room, main office, restrooms, water fountains, and science rooms, especially after periods of non-use.

## **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:

- HCPSS Office of the Environment went throughout the school flushing various sinks and toilets. A faint brownish tint was observed in some toilets and sinks.
- School administration mentioned Building Services indicated the school consisted of galvanized piping. Overtime, galvanized piping naturally rusts and will discolor idle water.
- The school is served by public water meeting safe drinking water standards. The discoloration is due to rust and not a health concern. The Environmental Protection Agency has primary and secondary contaminant standards. The primary contaminants are health related and regulated/enforced. The secondary contaminants are esthetic (appearance, odor, and taste discouraging people to drink water) related and not enforceable. Rust is a secondary contaminant.

• Prior work orders 20018 and 31051 had been submitted regarding this concern.

## **Corrective Actions:**

- If the water is discolored upon use of a fixture, flush until clear.
- Building Services is to further investigate, inspect for, and/or verify galvanized piping, grit traps, hot water tank (failing, sediment, etc.).
- Until a permanent solution, Building Services is to develop and implement a flushing program of the school.