School/Facility: Manor Woods Elementary

Location: Pod 5

Date of IEQ Report Form: January 17, 2017

Date(s) Investigated: February 6, 2017

Date of Report: March 24, 2017

IEO Concern:

Staff observed brown water within the Pod 5 area, mouse droppings in Pod 5 closet, and water not completely turning off in boy's restroom outside of Pod 5.

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. Brownish water was observed within the toilet and sink in the men's room around the corner of the custodial office. The brownish water was not observed in any other cold water fixture or toilet checked. However, the brownish water was randomly observed from hot water fixture throughout the building.
- Building Services was to investigate and/or inspect for galvanized piping, grit traps, hot water tank (failing, sediment, etc.).

Building Services checked water piping and found the cold water main is galvanized piping. This will cause some of the brown water if the water is not used for a short time, such as weekends and holiday breaks. Building Services flushed the water throughout the building and did not see brown water in the student restrooms. They ran hot and cold

water and the water was clear at that time. 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.

Corrective Actions:

- If the water is discolored upon use of a fixture, flush until clear.
- Until a permanent solution, Building Services is to develop and implement a flushing program of the school.
- Work order #18419 was generated for Building Services to investigate and address the leaking faucet.
- In addition to this statement, a correspondence was initially sent responding to the concern form that pest concerns need to be addressed at the school custodial and administrative level utilizing the integrated pest management (IPM) program.