Uniform Indoor Air Quality Assessment and Evaluation Report Conclusions 2024

Beman

13.0 CONCLUSIONS AND RECOMMENDATIONS

- Dusty ceiling air diffusers in a first floor office abutting the ICM suite and in the second floor vocal room should be cleaned. Dusty/dirty ceiling tiles in the kitchen prep area adjacent the server should be cleaned or removed and replaced.
- The visual survey noted water impacted ceiling tiles in limited areas (dried, historic water staining). These should be removed and replaced under controlled conditions (to avoid spreading possible dust). Investigate above impacted ceiling tiles to see if localized water infiltration is on-going.
- The damaged HVAC duct insulation should be repaired or removed and replaced in third floor storage closet C 311.
- The "rubber" odor in the second floor fitness room should be further investigated.
- The small gap in the exterior window sealant material at classroom 105 should be sealed.

Bielefield

13.0 CONCLUSIONS AND RECOMMENDATIONS

- Middletown should assess and eliminate possible sources of water infiltration. This
 includes, but may not be limited to, repairing roofing materials and exterior wall and
 soffit materials.
- "Dirty" ceiling air diffusers in the nurse's office, teachers' lounge, classroom 13 and the gymnasium should be cleaned. Repair or replace the damaged ceiling diffuser in classroom 13.
- The visual survey noted water impacted ceiling tiles throughout (dried, historic water staining). These should be removed and replaced under controlled conditions (to avoid spreading possible dust/possible mold). Investigate above impacted ceiling tiles to see if localized water infiltration is on-going and take corrective measures to stop any on-going water infiltration.
- Clean the water-stained fluorescent light fixtures located in the kitchen, boiler room and
 in two custodial closets adjacent the boiler room and media center. Clean the waterstained walls in the kitchen near the exterior door and in the boiler room adjacent the
 chimney and conduct further investigation to find the water source.
- Clean up/remove the rodent droppings on top of the suspended ceilings throughout.
 Conduct further investigation throughout to determine how mice are entering the School and take corrective action to prevent future rodent intrusion. Clean the exterior garage light fixture and remove the exterior entrances and roof soffit overhangs mud dauber wasp nests.
- Investigate the cause of the leaking toilet in classroom 3 toilet room and take corrective action.
- Caulk or re-caulk exterior window caulking compound that is damaged/missing at classrooms 29 and 30.

Farm Hill

13.0 CONCLUSIONS AND RECOMMENDATIONS

- Middletown should assess and eliminate possible sources of water infiltration. This
 includes, but may not be limited to, repairing roofing materials and leaking pipe joints
 and valves.
- "Dirty" ceiling air diffusers in the kitchen, toilet rooms, the media center and the gymnasium should be cleaned. Install a new ceiling diffuser in the media center where the missing one is located.
- The visual survey noted water impacted ceiling tiles throughout (dried, historic water staining). These should be removed and replaced under controlled conditions (to avoid spreading possible dust/possible mold). Investigate above impacted ceiling tiles to see if localized water infiltration is on-going. Remove and replace or clean the pipe insulation above the suspended ceiling tiles in classroom 104 where suspect mold growth was noted. Investigate this piping to see if a localized pipe leak is on-going.
- Clean up/remove the rodent droppings on top of the suspended ceilings throughout and
 in the attic mechanical rooms. Conduct further investigation throughout to determine
 how mice are entering the School and take corrective action to prevent future rodent
 intrusion. Remove the main office exterior bird's nest and exterior entrance canopies
 mud dauber wasp nests.

Keigwin

13.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the annual IAQ assessment and evaluation of the School, the following was noted and recommended:

- Middletown should assess and eliminate possible sources of water infiltration. This
 includes, but may not be limited to, repairing/replacing roofing materials, windows,
 HVAC equipment, interior of perimeter walls that have cracks and deteriorated exterior
 brick walls.
- "Dirty" ceiling air diffusers in the corridor adjacent the main office, conference room, boys' locker room, auditorium, former art room, band room and rooms 29 and 30 should be cleaned.
- The visual survey noted water impacted ceiling tiles/sheetrock throughout (dried, historic water staining). These should be removed and replaced under controlled conditions (to avoid spreading possible dust/possible mold). Investigate above impacted ceiling tiles/sheetrock to see if localized water infiltration is on-going and take corrective measures to stop any on-going water infiltration.
- Clean the water-stained fluorescent light fixtures located in the band area mechanical room, adjacent corridor and practice room, kitchen, rooms 22, 25 and 34. Clean the

water-stained walls in rooms 17, 22, 28, and 38, and areas abutting the courtyard and investigate for the possible cause of staining.

- Clean or remove and replace the water-stained/possible mold impacted HVAC insulation above the suspended ceiling in the corner of the media center adjacent room 35, penthouse and second floor mechanical rooms' HVAC insulation and overhead pipe insulation in the custodian's storage room. These should be cleaned or removed and replaced under controlled conditions (to avoid spreading possible dust/possible mold). Investigate to see if localized water infiltration is on-going and take corrective measures to stop any on-going water infiltration.
- Clean up/remove the rodent droppings on top of the suspended ceilings throughout.
 Conduct further investigation throughout to determine how mice are entering the School and take corrective action to prevent future rodent intrusion. Remove the exterior entrances and soffits/eaves mud dauber wasp nests.

Lawrence

13.0 CONCLUSIONS AND RECOMMENDATIONS

- Middletown should assess and eliminate possible sources of water infiltration. This
 includes, but may not be limited to, repairing roofing materials and exterior wood
 siding/soffits/roof eaves.
- The visual survey noted water impacted ceiling tiles in limited locations (dried, historic water staining). These should be removed and replaced under controlled conditions (to
 - avoid spreading possible dust/possible mold). Investigate above impacted ceiling tiles to see if localized water infiltration is on-going.
- "Dirty" ceiling air diffusers in classrooms 16 21 should be cleaned.
- Clean the art room water-stained fluorescent light fixture. Clean the water-stained bulletin board in classroom 16 and investigate for the possible cause of water damage.
- Reconnect the teachers' lounge HVAC duct (above suspended ceiling).
- Investigate the cause of the leaking toilets in classrooms 6 and 23 toilet rooms and take corrective action.
- Repair/reconnect downspouts that are disconnected from their associated gutters and repair or remove and replace damaged downspouts.
- Clean up/remove the rodent droppings on top of limited suspended ceilings throughout.
 Conduct further investigation throughout to determine how mice are entering the School and take corrective action to prevent future rodent intrusion. Remove the exterior entrances and soffit/eaves wasp nests. Remove the bird nests in the exterior damaged wood siding/soffits/roof eaves and repair (close the nest entrances). Remove bird feeders and boxes throughout.

Macdonough

13.0 CONCLUSIONS AND RECOMMENDATIONS

- Middletown should assess and eliminate possible sources of water infiltration. This
 includes, but may not be limited to, replacing/repairing roofing materials, window
 systems, deteriorated exterior brick walls and sealing toilet room floor drains.
- "Dirty" ceiling air diffusers in the library, the nurse's toilet room, elevator room, art room, and room 211 should be cleaned. The cafeteria HVAC mechanical closet should be cleaned.
- The odor in the first floor custodial closet should be investigated. Consider installing/improving a dedicated air exhaust in this closet.
- The visual survey noted water impacted ceiling tiles/sheetrock throughout (dried, historic water staining). These should be removed and replaced under controlled conditions (to avoid spreading possible dust/possible mold). Investigate above impacted ceiling tiles/sheetrock to see if localized water infiltration is on-going and take corrective measures to stop any on-going water infiltration.
- Middletown is in the process of planning a School renovation/demolition project.
 Consider removing water damaged plaster and sheetrock as part of the project.
- Reconfigure and extend the emergency generator exhaust piping to be compliant with the building code.

Middletown High School

13.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the annual IAQ assessment and evaluation of the School, the following was noted and recommended:

- Middletown should assess and eliminate possible sources of water infiltration. This
 includes, but may not be limited to, repairing roofing materials.
- "Dirty" ceiling air diffusers in various locations throughout the School and in the sports complex locker room building and stadium structure locker rooms, coach offices and elevator room should be cleaned. The ceiling air return grille in the corridor custodial closet adjacent classroom 322 should be cleaned.
- The visual survey noted water impacted ceiling tiles in limited locations (dried, historic
 water staining). These should be removed and replaced under controlled conditions (to
 avoid spreading possible dust/possible mold). Investigate above impacted ceiling
 tiles/ceiling decks to see if localized water infiltration is on-going and take corrective
 measures to stop any on-going water infiltration.
- Clean the water-stained fluorescent light fixtures located in boys' team room 1 and in
 the two kitchen electrical rooms. Clean the fluorescent light fixtures located in the first
 floor northeast stairwell and in the corridor between the stage and the band room Clean
 the water-stained walls in the boiler room and the walls and ceilings in the sports
 complex locker room building and stadium structure elevator room and investigate for
 the possible cause of staining.
- Repair/reconnect the VOAG greenhouse disconnected downspout.
- Clean up/remove the rodent droppings were noted in multiple locations above suspended ceiling tiles throughout the school and on the floors of the corridor between classrooms 105 and 106. Conduct further investigation throughout to determine how mice are entering the School and take corrective action to prevent future rodent intrusion. Remove the mud dauber wasp nests and paper wasp nests at exterior

entrances, roof soffit overhangs and on an VOAG exterior window.

Moody

13.0 CONCLUSIONS AND RECOMMENDATIONS

- Middletown should assess and eliminate possible sources of water infiltration. This
 includes, but may not be limited to, repairing roofing materials, repairing roof drain seals,
 leaking pipe valves, and possible window systems (courtyard #1).
- "Dirty" ceiling air diffuser in the custodial closet and toilet rooms adjacent classroom
 18, the cafeteria, and the toilet rooms adjacent classroom 9 should be cleaned.
- The odor suspected to be coming from an old floor drain in the custodial office (adjacent the boiler room) should be investigated.
- The visual survey noted water impacted ceiling tiles throughout (dried, historic water staining). These should be removed and replaced under controlled conditions (to avoid spreading possible dust/possible mold). Investigate above impacted ceiling tiles to see if localized water infiltration is on-going and take corrective measures to stop any on-going water infiltration.
- The gym teacher's office that was constructed in a former locker/shower room area adjacent to the gymnasium should have an HVAC air supply and return system/ ductwork installed.
- Clean up/remove the rodent droppings on top of the suspended ceilings throughout.
 Conduct further investigation throughout to determine how mice are entering the School and take corrective action to prevent future rodent intrusion.

Spencer

13.0 CONCLUSIONS AND RECOMMENDATIONS

- Middletown should assess and eliminate possible sources of water infiltration. This
 includes, but may not be limited to, repairing/replacing roofing materials and exterior
 soffit/eaves/canopy/wall materials.
- "Dirty" ceiling air diffusers in kindergarten 1 (missing diffuser also), kindergarten 3 toilet room, classroom 13, classroom 16, the janitors' closet between classrooms 9 and 10, gymnasium/auditorium stage and server room should be cleaned. Replace the missing ceiling diffuser in kindergarten 1. Remove and replace the rusted ceiling diffuser in the corridor custodial closet adjacent classroom 16.
- The visual survey noted water impacted ceiling tiles/sheetrock throughout (dried, historic water staining). These should be removed and replaced under controlled conditions (to avoid spreading possible dust/possible mold). Investigate above impacted ceiling tiles/sheetrock to see if localized water infiltration is on-going and take corrective measures to stop any on-going water infiltration.
- Clean the water-stained fluorescent light fixtures located in classrooms 10 and 11 and media center. Clean the water-stained walls in the gymnasium storage room and investigate for the possible cause of staining. Clean/repair the water damaged windowsills and unit ventilator in classroom 8 and investigate for the possible cause of water damage.
- Clean or remove and replace the media center HVAC equipment room and kindergarten
 water-stained fiberglass pipe insulation and investigate for the possible cause of water damage.
- Clean up/remove the rodent droppings on top of the suspended ceilings throughout.
 Conduct further investigation throughout to determine how mice are entering the School and take corrective action to prevent future rodent intrusion. Remove the exterior entrance canopy mud dauber wasp nests. Remove the bird nests in the exterior perimeter soffits throughout the School and repair soffits (close the nest entrances).

Wesley

13.0 CONCLUSIONS AND RECOMMENDATIONS

- Middletown should assess and eliminate possible sources of water infiltration. This
 includes, but may not be limited to, repairing/replacing roofing materials, fascia board
 and masonry façade materials.
- · Repair/reconnect downspouts that are disconnected from their associated gutters.
- A "dirty" ceiling air diffuser in the reading room adjacent classroom 5 should be cleaned.
- The visual survey noted water impacted ceiling tiles/sheetrock throughout (dried, historic water staining). These should be removed and replaced under controlled conditions (to avoid spreading possible dust/possible mold). Investigate above impacted ceiling tiles/sheetrock to see if localized water infiltration is on-going and take corrective measures to stop any on-going water infiltration.
- Clean the water-stained fluorescent light fixtures in the gymnasium storage room and custodial storage room. Clean the band room closet water-stained walls and investigate for the possible cause of staining.
- Clean up/remove the rodent droppings on top of the suspended ceilings throughout.
 Conduct further investigation throughout to determine how mice are entering the School and take corrective action to prevent future rodent intrusion. Remove the exterior entrances, roof soffit overhangs and front roof canopy mud dauber wasp nests.
 Remove the bird nests in the exterior damaged wood fascia at roof eaves and repair (close the nest entrances).

<u>Snow</u>

13.0 CONCLUSIONS AND RECOMMENDATIONS

- Middletown should assess and eliminate possible sources of water infiltration. This
 includes, but may not be limited to, replacing/repairing roofing materials and repairing
 cracked block walls in the gymnasium and classroom 108. Conduct further investigation
 into the wall staining in the auditorium stage.
- The School is scheduled to have a roof replacement and gutter installation project in the summer of 2025.
- · Repair the broken HVAC unit that services the cafeteria.
- Clean up/remove the rodent droppings on top of the suspended ceilings in the corridor adjacent classroom 214, classroom 132 and in the gymnasium lobby as well as the dead bugs inside ceiling light fixtures in gym storage room 117.
- The visual survey noted water impacted ceiling tiles throughout (dried, historic water staining). These should be removed and replaced under controlled conditions (to avoid spreading possible dust/possible mold). Investigate above impacted ceiling tiles to see if localized water infiltration is on-going.
- Repair the damaged kitchen exterior wall.
- Caulk or re-caulk the exterior wall expansion joints that are missing or have deteriorating caulking compounds.