

Jeffrey S. Moquin, Director
Risk Management Department

Telephone: 754-321-3200
Facsimile: 754-321-3290

August 12, 2005

Signature on File

TO: Mr. Kelvin Lee, Principal
McNicol Middle School

FROM: Robert J. Krickovich, Coordinator, LEA
Facilities and Construction Management, Environmental Division

SUBJECT: Indoor Air Quality (IAQ) Assessment
FISH 117A and 119A

On August 8, 2005 the IAQ Assessment Team conducted an assessment of FISH 117A and 119A at **McNicol Middle School**. The evaluation consisted of a walkthrough of the identified areas to assess the current condition of the location with regard to indoor air quality. This assessment included observations of the carpet, floor tile, ceiling tile, interior walls, false ceiling plenum, and accessible ventilation equipment.

Attached are the findings of this assessment along with recommendations for further assessment, remediation, or corrective actions, if needed.

Generally, the IAQ Assessment did not identify any existing conditions significantly impacting IAQ and thereby presenting immediate health and safety concerns to building occupants. However, due to individual sensitivities and predisposing health factors, it is possible that some building occupants may elicit a health response to agents and / or conditions identified during the evaluation. Therefore, to further improve IAQ, prevent development of future IAQ-related problems, and to reduce the potential for IAQ-related complaints by building occupants, the IAQ Assessment Team recommends appropriate follow up of each item identified and listed in the attached evaluation.

Should any questions arise, or if the current concerns continue after the attached recommendations have been addressed, please feel free to contact me at 754-321-1638.

cc: Sam Gregg, Area Superintendent
Steven Friedman, Area Director
Jeffrey S. Moquin, Director, Risk Management
Jerry Linkous, Project Manager II, Facilities and Construction Management
Diane Watts, Broward Teachers Union
Mark Dorsett, Manager 1, Physical Plant Operations Division, Zone 1
Roy Norton, Manager Custodial/Grounds, Physical Plant Operations Division

RK/tc
Enc.

IAQ Assessment

McNicol Middle School

Evaluation Requested

Time of Day

Evaluation Date

Outdoor Conditions Temperature Relative Humidity Ambient CO2

| | | | | | | | |
|-----------------------------------|--|--------------------------------------|-----------------------------------|--|-----------------------------------|---|--------------------------------|
| Fish | Temperature | Range | Relative Humidity | Range | CO2 | Range | # Occupants |
| <input type="text" value="117A"/> | <input type="text" value="71.3"/> | <input type="text" value="72 - 78"/> | <input type="text" value="73.2"/> | <input type="text" value="30% - 60%"/> | <input type="text" value="543"/> | <input type="text" value="Max 700 > Ambient"/> | <input type="text" value="2"/> |
| Noticeable Odor | | Visible water damage / staining? | | Visible microbial growth? | | Amount of material affected | |
| <input type="text" value="No"/> | | <input type="text" value="No"/> | | <input type="text" value="No"/> | | <input type="text" value="None"/> | |
| Ceiling Type | <input type="text" value="2 x 4 Lay In"/> | | <input type="text" value="No"/> | <input type="text" value="No"/> | <input type="text" value="None"/> | | |
| Wall Type | <input type="text" value="Drywall"/> | | <input type="text" value="No"/> | <input type="text" value="No"/> | <input type="text" value="None"/> | | |
| Flooring | <input type="text" value="12 x 12 Vinyl"/> | | <input type="text" value="No"/> | <input type="text" value="No"/> | <input type="text" value="None"/> | | |

| | Clean | Minor Dust / Debris | Needs Cleaning | Corrective Action Required |
|--------------------------|----------------------------------|----------------------------------|----------------------------------|--|
| Ceiling | <input type="text" value="Yes"/> | <input type="text" value="No"/> | <input type="text" value="No"/> | <input type="text"/> |
| Walls | <input type="text" value="Yes"/> | <input type="text" value="No"/> | <input type="text" value="No"/> | <input type="text"/> |
| Flooring | <input type="text" value="No"/> | <input type="text" value="Yes"/> | <input type="text" value="Yes"/> | <input type="text" value="Thoroughly clean and sanitize floor"/> |
| HVAC Supply Grills | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text" value="NONE"/> |
| HVAC Return Grills | <input type="text" value="No"/> | <input type="text" value="Yes"/> | <input type="text" value="Yes"/> | <input type="text" value="Clean with Wexcide disinfectant"/> |
| Ceiling at Supply Grills | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text" value="No supply in room"/> |
| Surfaces in Room | <input type="text" value="No"/> | <input type="text" value="Yes"/> | <input type="text" value="Yes"/> | <input type="text" value="Clean as appropriate"/> |

Observations

Findings: (storage room)

- Dust and debris on floor
- Dust and debris on HVAC return grill. Return grill for the classroom is in this storage room.
- There is no HVAC supply grill in the room
- Heavy dust and debris and condensation on shelving in room
- Dust and debris on environmental surfaces
- Humidity level elevated

Recommendations:

Site Based Maintenance:

- Thoroughly clean and sanitize floor
- Clean HVAC return grill in storage room with Wexcide disinfectant solution
- Clean shelving as appropriate
- Clean environmental surfaces
- Continue to monitor this location for any signs of microbial growth as well as dust and debris accumulation and clean as appropriate

Physical Plant Operations Division:

- Evaluate HVAC system. May need to move return grill into classroom
- Install supply grill in FISH 117A
- Evaluate and repair HVAC system to lower humidity level

IAQ Assessment

McNicol Middle School

Evaluation Requested

Time of Day

Evaluation Date

Outdoor Conditions Temperature Relative Humidity Ambient CO2

| | | | | | | | |
|-----------------------------------|--|--------------------------------------|-----------------------------------|--|-----------------------------------|---|--------------------------------|
| Fish | Temperature | Range | Relative Humidity | Range | CO2 | Range | # Occupants |
| <input type="text" value="119A"/> | <input type="text" value="71.3"/> | <input type="text" value="72 - 78"/> | <input type="text" value="68.3"/> | <input type="text" value="30% - 60%"/> | <input type="text" value="548"/> | <input type="text" value="Max 700 > Ambient"/> | <input type="text" value="1"/> |
| Noticeable Odor | | Visible water damage / staining? | | Visible microbial growth? | | Amount of material affected | |
| <input type="text" value="No"/> | | <input type="text" value="No"/> | | <input type="text" value="No"/> | | <input type="text" value="None"/> | |
| Ceiling Type | <input type="text" value="2 x 4 Lay In"/> | | <input type="text" value="No"/> | <input type="text" value="No"/> | <input type="text" value="None"/> | | |
| Wall Type | <input type="text" value="Drywall"/> | | <input type="text" value="No"/> | <input type="text" value="No"/> | <input type="text" value="None"/> | | |
| Flooring | <input type="text" value="12 x 12 Vinyl"/> | | <input type="text" value="No"/> | <input type="text" value="No"/> | <input type="text" value="None"/> | | |

| | Clean | Minor Dust / Debris | Needs Cleaning | Corrective Action Required |
|--------------------------|----------------------------------|----------------------------------|----------------------------------|---|
| Ceiling | <input type="text" value="Yes"/> | <input type="text" value="No"/> | <input type="text" value="No"/> | <input type="text"/> |
| Walls | <input type="text" value="Yes"/> | <input type="text" value="No"/> | <input type="text" value="No"/> | <input type="text"/> |
| Flooring | <input type="text" value="Yes"/> | <input type="text" value="No"/> | <input type="text" value="No"/> | <input type="text"/> |
| HVAC Supply Grills | <input type="text" value="Yes"/> | <input type="text" value="No"/> | <input type="text" value="No"/> | <input type="text"/> |
| HVAC Return Grills | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text" value="Through door"/> |
| Ceiling at Supply Grills | <input type="text" value="Yes"/> | <input type="text" value="No"/> | <input type="text" value="No"/> | <input type="text"/> |
| Surfaces in Room | <input type="text" value="No"/> | <input type="text" value="Yes"/> | <input type="text" value="Yes"/> | <input type="text" value="Clean as appropriate"/> |

Observations

Findings:

- Dust and debris on environmental surfaces
- Humidity level elevated

Recommendations:

Site Based Maintenance:

- Clean environmental surfaces
- Continue to monitor this location for any signs of microbial growth as well as dust and debris accumulation and clean as appropriate

Physical Plant Operations Division:

- Evaluate and repair HVAC system to lower humidity level