

RISK MANAGEMENT...

managing risk with responsibility

Jeffrey S. Moquin, Director
Risk Management Department

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

July 14, 2008

Signature on File

TO: Mr. Jonathan Williams, Principal
Northeast High School

FROM: Robert Krickovich, Coordinator, LEA
Facilities and Construction Management

SUBJECT: Indoor Air Quality (IAQ) Assessment
FISH 101 and 101A

| For Custodial Supervisor Use Only | |
|--|--------------------------------|
| <input type="checkbox"/> | Custodial Issues Addressed |
| <input type="checkbox"/> | Custodial Issues Not Addressed |
| _____ | |
| _____ | |

On July 8, 2008 I conducted an assessment of FISH 101 and 101A at **Northeast High School**. This evaluation included observations of the flooring system, ceiling tiles, false ceiling plenum, environmental surfaces, interior and exterior walls, and the accessible ventilation equipment. Additionally, environmental parameter measurements were taken to include temperature, relative humidity, and carbon dioxide. The detailed findings, along with the recommended corrective action can be found on the attached IAQ Assessment Worksheets.

The IAQ assessment did identify one or more existing conditions impacting IAQ and has generated appropriate work orders to correct deficiencies in systems and maintenance that could contribute to decreased indoor air quality. At the time of the assessment, these concerns were not an immediate health or safety concern 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.

Please ensure that your Head Facilities Serviceperson receives a copy of this correspondence so that the recommendations requiring their attention can be addressed. Within two weeks a representative from the Custodial/Grounds Department will conduct a follow-up visit to ensure that all issues have been appropriately addressed.

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: Dr. Leontine Butler, Area Superintendent
Dr. Margaret Underhill, Area Director
Jeffrey S. Moquin, Director, Risk Management
Robert Goode, Project Manager, Facilities and Construction Management
Dane Ramson, Broward Teachers Union
Roy Jarrett, Federation of Public Employees
Mark Dorsett, Manager 1, Physical Plant Operations Division, Zone 1
Roy Norton, Manager Custodial/Grounds, Physical Plant Operations Division

RK/tc
Enc.

IAQ Assessment

Location Number
 Evaluation Requested
 Evaluation Date

Northeast High School

Time of Day

Outdoor Conditions Temperature Relative Humidity Ambient CO2

| | | | | | | | |
|----------------------------------|---|--------------------------------------|-----------------------------------|--|----------------------------------|---|-------------------------------------|
| Fish | Temperature | Range | Relative Humidity | Range | CO2 | Range | # Occupants |
| <input type="text" value="101"/> | <input type="text" value="71.8"/> | <input type="text" value="72 - 78"/> | <input type="text" value="55.4"/> | <input type="text" value="30% - 60%"/> | <input type="text" value="528"/> | <input type="text" value="Max 700 > Ambient"/> | <input type="text" value="4"/> |
| Noticeable Odor | <input type="text" value="Yes"/> | | Visible water damage / staining? | | Visible microbial growth? | | Amount of material affected |
| Ceiling Type | <input type="text" value="12 x 12 Spline"/> | | <input type="text" value="No"/> | | <input type="text" value="No"/> | | <input type="text" value="None"/> |
| Wall Type | <input type="text" value="Plaster"/> | | <input type="text" value="No"/> | | <input type="text" value="No"/> | | <input type="text" value="None"/> |
| Flooring | <input type="text" value="Carpet"/> | | <input type="text" value="Yes"/> | | <input type="text" value="No"/> | | <input type="text" value="entire"/> |

| | Clean | Minor Dust / Debris | Needs Cleaning | Corrective Action Required |
|--------------------------|---------------------------------|----------------------------------|----------------------------------|--|
| Ceiling | <input type="text" value="No"/> | <input type="text" value="Yes"/> | <input type="text" value="Yes"/> | <input type="text" value="Clean as appropriate"/> |
| Walls | <input type="text" value="No"/> | <input type="text" value="Yes"/> | <input type="text" value="Yes"/> | <input type="text" value="Repair/replace as appropriate"/> |
| Flooring | <input type="text" value="No"/> | <input type="text" value="Yes"/> | <input type="text" value="Yes"/> | <input type="text" value="Evaluate carpet for replacement"/> |
| HVAC Supply Grills | <input type="text" value="No"/> | <input type="text" value="Yes"/> | <input type="text" value="Yes"/> | <input type="text" value="Clean with Wexcide disinfectant"/> |
| 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" value="No"/> | <input type="text" value="Yes"/> | <input type="text" value="Yes"/> | <input type="text" value="Clean as appropriate"/> |
| 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:

- Carpet is severely water damaged, stained, rippled and torn from FISH 101 to 103 through the corridor 101M
- Physical Plant Operations is currently working on the removal of the wood paneling
- Dust build up on ceiling tiles
- Dust and debris on HVAC supply and return grills
- Dust build up on ceiling at HVAC supply grills
- Dust build up on environmental surfaces throughout the room

Recommendations:

Site Based Maintenance:

- Clean ceiling tiles to remove dust
- Clean HVAC supply and return grills with Wexcide disinfectant solution
- Clean ceiling at HVAC supply grills
- Thoroughly clean all surfaces throughout the room
- 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:

- Evaluate carpet from FISH 101 to 103 and through to corridor 101M for replacement. Coordinate replacement in FISH 101 with Facilities and Construction Management Environmental Division.
- Continue to remove paneling and repair/replace wall material as necessary

IAQ Assessment

Location Number
 Evaluation Requested
 Evaluation Date

Northeast High School

Time of Day

Outdoor Conditions Temperature Relative Humidity Ambient CO2

| | | | | | | | |
|-----------------------------------|--|--------------------------------------|-----------------------------------|--|----------------------------------|---|-------------------------------------|
| Fish | Temperature | Range | Relative Humidity | Range | CO2 | Range | # Occupants |
| <input type="text" value="101A"/> | <input type="text" value="71.8"/> | <input type="text" value="72 - 78"/> | <input type="text" value="59.9"/> | <input type="text" value="30% - 60%"/> | <input type="text" value="615"/> | <input type="text" value="Max 700 > Ambient"/> | <input type="text" value="2"/> |
| Noticeable Odor | <input type="text" value="Yes"/> | | Visible water damage / staining? | | Visible microbial growth? | | Amount of material affected |
| 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="Wood Paneling"/> | | <input type="text" value="No"/> | | <input type="text" value="No"/> | | <input type="text" value="None"/> |
| Flooring | <input type="text" value="Carpet"/> | | <input type="text" value="Yes"/> | | <input type="text" value="No"/> | | <input type="text" value="entire"/> |

| | 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="Evaluate carpet for replacement"/> |
| HVAC Supply Grills | <input type="text" value="No"/> | <input type="text" value="Yes"/> | <input type="text" value="Yes"/> | <input type="text" value="Clean with Wexcide disinfectant"/> |
| HVAC Return Grills | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text" value="N/A"/> |
| 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"/> | <input type="text"/> | <input type="text"/> | <input type="text" value="Room is currently empty"/> |

Observations

Findings:

- Carpet is severely water damaged, stained, rippled and torn from FISH 101 to 103 through the corridor 101M
- Elevated moisture in base of wood bookcase
- Room is currently being painted
- Dust and debris on HVAC supply grills

Recommendations:

Site Based Maintenance:

- Clean HVAC supply grills with Wexcide disinfectant solution
- 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:

- Evaluate carpet from FISH 101 to 103 and through to corridor 101M for replacement. Coordinate replacement in FISH 101 with Facilities and Construction Management Environmental Division.
- Remove wood bookcase and evaluate wall for damage. Repair/replace bookcase and wall material as appropriate.