

Aston A. Henry, Supervisor
Risk Management Department

Telephone: 754 321-1900
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April 17, 2012

Signature on File

TO: Robert Schneider, Principal
Davie Elementary School

FROM: Richard Rosa, Project Manager
Facilities and Construction Management

SUBJECT: Indoor Air Quality (IAQ) Assessment

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

On January 25, 2012, I conducted an assessment at **Davie Elementary School**. Attached are findings and recommendations for further assessment, remediation, or corrective actions needed.

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. In an attempt to separate IAQ issues from general maintenance items, the attached assessment may contain direction for site based staff to generate a work order through COMPASS. Within two weeks a representative from the Custodial/Grounds Department will conduct a follow-up visit to ensure that all site based custodial 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 us at 754-321-1907.

cc: Area Superintendent
Area Directors
Shelley Meloni, Executive Director, Facilities and Construction Management
Mark Dorsett, Acting Director, Physical Plant Operations Division, Maintenance
Sonja Coley, Project Manager III, Facilities and Construction Management
Roy Norton, Manager Custodial/Grounds, Physical Plant Operations Division
Aston Henry, Supervisor, Risk Management
Broward Teachers Union
Federation of Public Employees

RR/tc
Enc.

IAQ Assessment

Davie Elementary School

Location Number
 Evaluation Requested
 Evaluation Date

Time of Day

Outdoor Conditions Temperature Relative Humidity Ambient CO2

| | | | | | | | |
|--------------------------------------|--|--------------------------------------|-----------------------------------|--|-----------------------------------|---|--|
| Fish | Temperature | Range | Relative Humidity | Range | CO2 | Range | # Occupants |
| <input type="text" value="116/117"/> | <input type="text" value="74.8"/> | <input type="text" value="72 - 78"/> | <input type="text" value="47.1"/> | <input type="text" value="30% - 60%"/> | <input type="text" value="1085"/> | <input type="text" value="Max 700 > Ambient"/> | <input type="text" value="42"/> |
| Noticeable Odor | <input type="text" value="No"/> | | 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="Yes"/> | | <input type="text" value="No"/> | | <input type="text" value="less than 2 square feet"/> |
| Wall Type | <input type="text" value="Various"/> | | <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="No"/> | <input type="text" value="Yes"/> | <input type="text" value="Yes"/> | <input type="text" value="Remove and replace"/> |
| Walls | <input type="text" value="Yes"/> | <input type="text" value="No"/> | <input type="text" value="No"/> | <input type="text" value=""/> |
| Flooring | <input type="text" value="No"/> | <input type="text" value="Yes"/> | <input type="text" value="Yes"/> | <input type="text" value="Clean as appropriate"/> |
| HVAC Supply Grills | <input type="text" value="No"/> | <input type="text" value="Yes"/> | <input type="text" value="Yes"/> | <input type="text" value="Clean as appropriate"/> |
| HVAC Return Grills | <input type="text" value="No"/> | <input type="text" value="Yes"/> | <input type="text" value="Yes"/> | <input type="text" value="Clean as appropriate"/> |
| 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

- Dust build up on surfaces
- Dust build up on HVAC supply and return grills and on ceiling at supply grills
- Cobwebs and dust build up on flooring in corners
- Stained ceiling tiles

Site Based Maintenance:

- Thoroughly clean all surfaces throughout the room
- Remove and replace stained ceiling tiles
- Clean HVAC supply and return grills with Wexcide and clean ceiling at supply grills.
- Generate a work order through COMPASS for pest control
- Clean and sanitize floor
- 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 cause of stained ceiling tiles (possible roof leak) and repair as appropriate. Remove and replace ceiling tiles as necessary.

- NOTE: Work order EQ02289 and EQ02290 generated 1-26-12

IAQ Assessment

Davie Elementary School

Location Number
 Evaluation Requested
 Evaluation Date

Time of Day

Outdoor Conditions Temperature Relative Humidity Ambient CO2

| | | | | | | | |
|----------------------------------|--|--------------------------------------|-----------------------------------|--|-----------------------------------|--|---------------------------------|
| Fish | Temperature | Range | Relative Humidity | Range | CO2 | Range | # Occupants |
| <input type="text" value="118"/> | <input type="text" value="75.8"/> | <input type="text" value="72 - 78"/> | <input type="text" value="47.2"/> | <input type="text" value="30% - 60%"/> | <input type="text" value="1232"/> | <input type="text" value="Max 700 > Ambient"/> | <input type="text" value="22"/> |
| Noticeable Odor | | Visible water damage / staining? | | Visible microbial growth? | | Amount of material affected | |
| <input type="text" value="No"/> | | <input type="text" value="Yes"/> | | <input type="text" value="No"/> | | <input type="text" value="less than 2 square feet"/> | |
| Ceiling Type | <input type="text" value="2 x 4 Lay In"/> | | <input type="text" value="Yes"/> | <input type="text" value="No"/> | | <input type="text" value="None"/> | |
| Wall Type | <input type="text" value="Various"/> | | <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="No"/> | <input type="text" value="Yes"/> | <input type="text" value="Yes"/> | <input type="text" value="Remove and replace"/> |
| Walls | <input type="text" value="Yes"/> | <input type="text" value="No"/> | <input type="text" value="No"/> | <input type="text" value=""/> |
| Flooring | <input type="text" value="No"/> | <input type="text" value="Yes"/> | <input type="text" value="Yes"/> | <input type="text" value="Clean as appropriate"/> |
| HVAC Supply Grills | <input type="text" value="No"/> | <input type="text" value="Yes"/> | <input type="text" value="Yes"/> | <input type="text" value="Clean as appropriate"/> |
| HVAC Return Grills | <input type="text" value="No"/> | <input type="text" value="Yes"/> | <input type="text" value="Yes"/> | <input type="text" value="Clean as appropriate"/> |
| 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

- Dust build up on surfaces
- Dust build up on HVAC supply and return grills and on ceiling at supply grills
- Cobwebs and dust build up on flooring in corners
- Stained ceiling tiles
- Non-approved chemicals (Lysol and Goo Gone)
- Dust build up - HVAC return drops

Site Based Maintenance:

- Thoroughly clean all surfaces throughout the room
- Remove and replace stained ceiling tiles
- Clean HVAC supply and return grills with Wexcide and clean ceiling at supply grills.
- Clean and sanitize floor
- Remove non-approved chemicals
- 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 cause of stained ceiling tiles (possible roof leak) and repair as appropriate. Remove and replace ceiling tiles as necessary.
- Clean HVAC return drops

- NOTE: Work order EQ02289 and EQ02290 generated 1-26-12