

managing risk with responsibility

| Aston A. Henry, Supervisor | Telephone: | 754 321-1900 |
|----------------------------|------------|--------------|
| Risk Management Department | Fax: | 754 321-1917 |

September 21, 2009 Signature on File

TO: Dr. Ricardo Garcia, Principal

Nova Middle School

FROM: Robert Krickovich, Coordinator, LEA

Facilities and Construction Management

SUBJECT: Indoor Air Quality (IAQ) Assessment

FISH 3923 and 3935

| Fo | r Custodial Supervisor Use Only |
|----|---------------------------------|
| | Custodial Issues Addressed |
| | Custodial Issues Not Addressed |
| | |
| - | |
| | |

On August 16, 2009 I conducted an assessment of FISH 3923 and 3935 at **Nova Middle 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. 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 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. Joel Herbst, Area Superintendent

Steven Friedman, Area Director

Jeffrey S. Moquin, Executive Director, Support Operations

Aston Henry, Supervisor, Risk Management

Scott Gillen, Project Manager, Facilities and Construction Management

Diane Watts, 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.

| | | Nova Middle | e School | Evaluat | ion Requested | September 15, 2009 |
|---------------------------|------------|------------------------|----------------------------------|----------------------------|--------------------------|---------------------------------|
| Time of Day | 10:30 am |] | | E | Evaluation Date | September 16, 2009 |
| Outdoor Condit | ions Ter | mperature 8 | 86.9 R | Relative Humidity 62.2 | 2 Ambie | ent CO2 476 |
| Fish T 3923 | | Range Relat | 51.5 3 | Range CO2 80% - 60% 713 | Rar Max 700 | nge # Occupants > Ambient 23 |
| Noticeable Odd | or No | | /isible water age / staining? | Visible microbial growth? | Amount o material affect | = |
| Ceiling Type | 2 x 4 Lay | ' in | No | No | | None |
| Wall Type | Drywal | I | No | No | | None |
| Flooring | 12 x 12 V | inyl | No | No | | None |
| | Clean | Minor Dust / Debris | Needs Cleaning | Corre | ctive Action Re | equired |
| Ceiling | Yes | No | No | | | |
| Walls | Yes | No | No | | | |
| Flooring | Yes | No | No | | | |
| HVAC Supply (| Grills Yes | No | No | | | |
| HVAC Return C | Grills Yes | No | No | | | |
| Ceiling at Supp Grills | oly Yes | No | No | | | |
| | | | | | | |

IAQ Assessment

1311

Location Number

Observations

Findings:

- Room is heavily pressurized - door will not close on its own

No

Yes

- Chemical odor in exterior walkway of building. Contractor was painting walls on walkway. FISH 3928 (storage room) being utilized as contractor's office and storage area. Three open five gallon cans of paint were in the room.

No

- Heavy dust and debris on A/C filters in FISH 3927 (AHU)
- Minor dust and debris on HVAC coils and debris on surface

Recommendations:

Surfaces in Room

Site Based Maintenance:

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

Facilities and Construction Management - Contractor:

- Seal or remove all stored paint containers from FISH 3928
- Cease and desist all activities that involve high VOC materials when school is occupied
- Remove and replace A/C filters
- Clean coils and interior of air handler units
- Correct over pressurization problem in building

Re-inspection will be conducted within 14 days to verify corrections have been made

| | | Nova Middl | e School | | Evaluation F | Requested | Septemb | er 15, 2009 |
|---------------------------|------------|------------------------|---------------------------------|------------------------|--------------|------------|----------|-------------|
| Time of Day | 10:30 am |] | | | Evalu | ation Date | Septemb | er 16, 2009 |
| Outdoor Condit | tions Ter | nperature 8 | 36.9 | Relative Humidit | y 62.2 | Ambie | nt CO2 | 476 |
| Fish T | emperature | Range Rela | ive Humidity | Range | CO2 | Rar | ige # | Occupants |
| 3935 | 76 | 72 - 78 | 49.9 | 30% - 60% | 762 | Max 700 | > Ambien | t 27 |
| Noticeable Ode | or No | | /isible water age / staining | Visible micr growth | | Amount o | = | |
| Ceiling Type | 2 x 4 Lay | ' in | No | No | | | None | |
| Wall Type | Drywal | I | No | No | | | None | |
| Flooring | 12 x 12 V | inyl | No | No | | | None | |
| | Clean | Minor Dust / Debris | Needs Cleaning | | Corrective | Action Re | equired | |
| Ceiling | Yes | No | No | | | | | |
| Walls | Yes | No | No | | | | | |
| Flooring | Yes | No | No | | | | | |
| HVAC Supply | Grills Yes | No | No | | | | | |
| HVAC Return (| Grills Yes | No | No | | | | | |
| Ceiling at Supp Grills | ply Yes | No | No | | | | | |
| Surfaces in Ro | om Yes | No | No | | | | | |

IAQ Assessment

1311

Location Number

Observations

Findings:

- Room is heavily pressurized - door will not close on its own

No |

Yes

- Chemical odor in exterior walkway of building. Contractor was painting walls on walkway. FISH 3928 (storage room) being utilized as contractor's office and storage area. Three open five gallon cans of paint were in the room.

No

- Heavy dust and debris on A/C filters in FISH 3927 (AHU)
- Minor dust and debris on HVAC coils and debris on surface

Recommendations:

Site Based Maintenance:

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

Facilities and Construction Management - Contractor:

- Seal or remove all stored paint containers from FISH 3928
- Cease and desist all activities that involve high VOC materials when school is occupied
- Remove and replace A/C filters
- Clean coils and interior of air handler units
- Correct over pressurization problem in building

Re-inspection will be conducted within 14 days to verify corrections have been made