

Aston A. Henry, Director  
Risk Management Department

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October 8, 2013

Signature on File

TO: Mark Kaplan, Principal  
**Falcon Cove Middle School**

FROM: Richard Rosa, Project Manager  
Risk Management Department

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 September 24, 2013, I conducted an assessment at **Falcon Cove Middle 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: Shelley Meloni, Task Assigned Chief Facilities & Construction Officer, Facilities & Construction  
Mark Dorsett, Manager, Zone 1, Physical Plant Operations Division  
Roy Norton, Manager, Custodial/Grounds, Physical Plant Operations Division  
Aston Henry, Director, Risk Management  
Sonja Coley, Senior Project Manager, Facilities & Construction  
Broward Teachers Union  
Federation of Public Employees

RR/tc  
Enc.









# IAQ Assessment

Falcon Cove Middle

Evaluation Date September 24, 2013

Time of Day 11:15

Outdoor Conditions    Temperature 84.9

Relative Humidity 83.4

Ambient CO2 483

Fish	Temperature	Range	Relative Humidity	Range	CO <sup>2</sup>	Range	# Occupants
<span style="border: 1px solid black; padding: 2px;">127</span>	<span style="border: 1px solid black; padding: 2px;">70.7</span>	<span style="border: 1px solid black; padding: 2px;">72 - 78</span>	<span style="border: 1px solid black; padding: 2px;">58.7</span>	<span style="border: 1px solid black; padding: 2px;">30% - 60%</span>	<span style="border: 1px solid black; padding: 2px;">812</span>	<span style="border: 1px solid black; padding: 2px;">MAX 700 &gt; Ambient</span>	<span style="border: 1px solid black; padding: 2px;"></span>
Noticeable Odor		<span style="border: 1px solid black; padding: 2px;">No</span>	Visible water damage / staining?		Visible microbial growth?		Amount of material affected
Ceiling	<span style="border: 1px solid black; padding: 2px;">2' x 4'</span>		<span style="border: 1px solid black; padding: 2px;">No</span>		<span style="border: 1px solid black; padding: 2px;">No</span>		<span style="border: 1px solid black; padding: 2px;"></span>
Walls	<span style="border: 1px solid black; padding: 2px;">Folding/drywall</span>		<span style="border: 1px solid black; padding: 2px;">No</span>		<span style="border: 1px solid black; padding: 2px;">No</span>		<span style="border: 1px solid black; padding: 2px;"></span>
Floor	<span style="border: 1px solid black; padding: 2px;">12" x 12" Vinyl</span>		<span style="border: 1px solid black; padding: 2px;">No</span>		<span style="border: 1px solid black; padding: 2px;">No</span>		<span style="border: 1px solid black; padding: 2px;"></span>

Ceiling Clean	<span style="border: 1px solid black; padding: 2px;">Yes</span>	HVAC Supply Grills Clean	<span style="border: 1px solid black; padding: 2px;">No</span>	HVAC Return Grills Clean	<span style="border: 1px solid black; padding: 2px;">No</span>
Walls Clean	<span style="border: 1px solid black; padding: 2px;">Yes</span>	Inside of Supply Duct Clean	<span style="border: 1px solid black; padding: 2px;">Yes</span>	Inside of Return Duct Clean	<span style="border: 1px solid black; padding: 2px;">No</span>
Flooring Clean	<span style="border: 1px solid black; padding: 2px;">Yes</span>	Ceiling at Supply Grills Clean	<span style="border: 1px solid black; padding: 2px;">No</span>		
Room Surfaces Clean	<span style="border: 1px solid black; padding: 2px;">Yes</span>				

Trash Removed	<span style="border: 1px solid black; padding: 2px;">Yes</span>	Exhaust Fans Working	<span style="border: 1px solid black; padding: 2px;">N/A</span>	Unapproved Chemicals / Cleaners in Room	<span style="border: 1px solid black; padding: 2px;">No</span>
Signs of Pests	<span style="border: 1px solid black; padding: 2px;">No</span>	Drain Traps Wet	<span style="border: 1px solid black; padding: 2px;">N/A</span>	Air Fresheners in Room	<span style="border: 1px solid black; padding: 2px;">No</span>
Room Cluttered	<span style="border: 1px solid black; padding: 2px;">No</span>	Food if Stored in Room is in Sealed Containers	<span style="border: 1px solid black; padding: 2px;">N/A</span>		

Mechanical Equipment Location	<span style="border: 1px solid black; padding: 2px;">FISH 130 Air handler unit 1-8</span>		Mechanical Room Clean	<span style="border: 1px solid black; padding: 2px;">Yes</span>	
Filters Installed Properly	<span style="border: 1px solid black; padding: 2px;">No</span>	Filters Clean	<span style="border: 1px solid black; padding: 2px;">Yes</span>	Inside of HVAC Unit Clean	<span style="border: 1px solid black; padding: 2px;">Yes</span>
Condensate Pan Clean	<span style="border: 1px solid black; padding: 2px;">Yes</span>	Cooling Coil Clean	<span style="border: 1px solid black; padding: 2px;">No</span>		

Fresh Air Intake Location	<span style="border: 1px solid black; padding: 2px;">Thru exterior wall</span> ▼	Fresh Air Intake Free of Obstruction	<span style="border: 1px solid black; padding: 2px;">Yes</span>
Pollutant Sources Near Air Intake	<span style="border: 1px solid black; padding: 2px;">Student Drop Off Drive</span> ▼		

**Observations**

There are two return grills; the cross thru grill adjacent to the door is dirty. Two germ Guard air cleaners are in the classroom.

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- Corrective Actions to be Completed by Site Based Staff**
- |                                       |   |
|---------------------------------------|---|
|                                       | ▼ |
| Clean HVAC supply grills with Wexcide | ▼ |
| Vacuum/wipe return grill              | ▼ |
| Tape and date HVAC filters            | ▼ |
|                                       | ▼ |
|                                       | ▼ |
|                                       | ▼ |
|                                       | ▼ |

- Corrective Actions to be Completed by PPO**
- |                                    |   |
|------------------------------------|---|
| Clean the HVAC coil                | ▼ |
| Set temperature to 72 - 78 degrees | ▼ |
| Evaluate cleaning HVAC return drop | ▼ |
|                                    | ▼ |
|                                    | ▼ |
|                                    | ▼ |
|                                    | ▼ |



# IAQ Assessment

Falcon Cove Middle

Evaluation Date September 24, 2013

Time of Day 11:45

Outdoor Conditions    Temperature 84.9    Relative Humidity 83.4    Ambient CO2 483

Fish	Temperature	Range	Relative Humidity	Range	CO <sup>2</sup>	Range	# Occupants
<span style="border: 1px solid black; padding: 2px;">129</span>	<span style="border: 1px solid black; padding: 2px;">69.0</span>	<span style="border: 1px solid black; padding: 2px;">72 - 78</span>	<span style="border: 1px solid black; padding: 2px;">58.9</span>	<span style="border: 1px solid black; padding: 2px;">30% - 60%</span>	<span style="border: 1px solid black; padding: 2px;">842</span>	<span style="border: 1px solid black; padding: 2px;">MAX 700 &gt; Ambient</span>	<span style="border: 1px solid black; padding: 2px;"></span>
Noticeable Odor		<span style="border: 1px solid black; padding: 2px;">No</span>	Visible water damage / staining?		Visible microbial growth?		Amount of material affected
Ceiling	<span style="border: 1px solid black; padding: 2px;">2' x 4'</span>		<span style="border: 1px solid black; padding: 2px;">No</span>		<span style="border: 1px solid black; padding: 2px;">No</span>		<span style="border: 1px solid black; padding: 2px;"></span>
Walls	<span style="border: 1px solid black; padding: 2px;">Drywall</span>		<span style="border: 1px solid black; padding: 2px;">No</span>		<span style="border: 1px solid black; padding: 2px;">No</span>		<span style="border: 1px solid black; padding: 2px;"></span>
Floor	<span style="border: 1px solid black; padding: 2px;">12" x 12" Vinyl</span>		<span style="border: 1px solid black; padding: 2px;">No</span>		<span style="border: 1px solid black; padding: 2px;">No</span>		<span style="border: 1px solid black; padding: 2px;"></span>

Ceiling Clean	<span style="border: 1px solid black; padding: 2px;">No</span>	HVAC Supply Grills Clean	<span style="border: 1px solid black; padding: 2px;">No</span>	HVAC Return Grills Clean	<span style="border: 1px solid black; padding: 2px;">Yes</span>
Walls Clean	<span style="border: 1px solid black; padding: 2px;">Yes</span>	Inside of Supply Duct Clean	<span style="border: 1px solid black; padding: 2px;">Yes</span>	Inside of Return Duct Clean	<span style="border: 1px solid black; padding: 2px;">No</span>
Flooring Clean	<span style="border: 1px solid black; padding: 2px;">Yes</span>	Ceiling at Supply Grills Clean	<span style="border: 1px solid black; padding: 2px;">No</span>		
Room Surfaces Clean	<span style="border: 1px solid black; padding: 2px;">No</span>				

Trash Removed	<span style="border: 1px solid black; padding: 2px;">Yes</span>	Exhaust Fans Working	<span style="border: 1px solid black; padding: 2px;">N/A</span>	Unapproved Chemicals / Cleaners in Room	<span style="border: 1px solid black; padding: 2px;">No</span>
Signs of Pests	<span style="border: 1px solid black; padding: 2px;">No</span>	Drain Traps Wet	<span style="border: 1px solid black; padding: 2px;">N/A</span>	Air Fresheners in Room	<span style="border: 1px solid black; padding: 2px;">No</span>
Room Cluttered	<span style="border: 1px solid black; padding: 2px;">No</span>	Food if Stored in Room is in Sealed Containers	<span style="border: 1px solid black; padding: 2px;">N/A</span>		

Mechanical Equipment Location	<span style="border: 1px solid black; padding: 2px;">FISH 130 Air handler unit 1-8</span>		Mechanical Room Clean	<span style="border: 1px solid black; padding: 2px;">Yes</span>	
Filters Installed Properly	<span style="border: 1px solid black; padding: 2px;">No</span>	Filters Clean	<span style="border: 1px solid black; padding: 2px;">Yes</span>	Inside of HVAC Unit Clean	<span style="border: 1px solid black; padding: 2px;">Yes</span>
Condensate Pan Clean	<span style="border: 1px solid black; padding: 2px;">Yes</span>	Cooling Coil Clean	<span style="border: 1px solid black; padding: 2px;">No</span>		

Fresh Air Intake Location	<span style="border: 1px solid black; padding: 2px;">Thru exterior wall</span> ▼	Fresh Air Intake Free of Obstruction	<span style="border: 1px solid black; padding: 2px;">Yes</span>
Pollutant Sources Near Air Intake	<span style="border: 1px solid black; padding: 2px;">Student Drop Off Drive</span> ▼		

**Observations**

There was an American flag installed on the wall, heavy dust build up on upper surface of flag.

- Corrective Actions to be Completed by Site Based Staff**
- |   |   |
|---|---|
| Replace ceiling tiles around HVAC supply grills | ▼ |
| Clean HVAC supply grills with Wexcide           | ▼ |
| Vacuum/wipe return grill                        | ▼ |
| Tape and date HVAC filters                      | ▼ |
| Clean cobwebs from elevated corners             | ▼ |
| Thoroughly clean elevated surfaces              | ▼ |
|   | ▼ |
|   | ▼ |

- Corrective Actions to be Completed by PPO**
- |                                    |   |
|------------------------------------|---|
| Clean the HVAC coil                | ▼ |
| Set temperature to 72 - 78 degrees | ▼ |
| Evaluate cleaning HVAC return drop | ▼ |
|                                    | ▼ |
|                                    | ▼ |
|                                    | ▼ |
|                                    | ▼ |



