

RISK MANAGEMENT...

managing risk with responsibility

Aston A. Henry, Supervisor
Risk Management Department

Telephone: 754 321-1900
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August 24, 2012

Signature on File

TO: Kathy Marlow, Principal
Seminole Middle School

FROM: Richard Rosa, Project Manager
Facilities Design and Construction

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
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On August 14, 2012, I conducted an assessment at **Seminole 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: Directors, School Performance & Accountability
Shelley Meloni, Executive Director, Facilities Design and Construction
Mark Dorsett, Manager, Zone 1, Physical Plant Operations Division
Roy Norton, Manager, Custodial/Grounds, Physical Plant Operations Division
Aston Henry, Supervisor, Risk Management
Sonja Coley, Senior Project Manager, Facilities Design and Construction
Broward Teachers Union
Federation of Public Employees

RR/tc
Enc.

IAQ Assessment

Seminole Middle

Evaluation Date August 14, 2012

Time of Day 12:30

Outdoor Conditions Temperature 89.7

Relative Humidity 58.8

Ambient CO2 419

Fish	Temperature	Range	Relative Humidity	Range	CO ²	Range	# Occupants
120	73.2	72 - 78	74.2	30% - 60%	449	MAX 700 > Ambient	
Noticeable Odor		Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
Ceiling		Walls		Floor			
No		No		No			
2' x 4'		Drywall		12" x 12" Vinyl			
No		No		No			

Ceiling Clean	<input type="checkbox"/> No	HVAC Supply Grills Clean	<input type="checkbox"/> Yes	HVAC Return Grills Clean	<input type="checkbox"/> Yes
Walls Clean	<input type="checkbox"/> Yes	Inside of Supply Duct Clean	<input type="checkbox"/> Yes	Inside of Return Duct Clean	<input type="checkbox"/> Yes
Flooring Clean	<input type="checkbox"/> Yes	Ceiling at Supply Grills Clean	<input type="checkbox"/> No		
Room Surfaces Clean	<input type="checkbox"/> No				

Trash Removed	<input type="checkbox"/> Yes	Exhaust Fans Working	<input type="checkbox"/> N/A	Unapproved Chemicals / Cleaners in Room	<input type="checkbox"/> No
Signs of Pests	<input type="checkbox"/> No	Drain Traps Wet	<input type="checkbox"/> N/A	Air Fresheners in Room	<input type="checkbox"/> No
Room Cluttered	<input type="checkbox"/> No	Food if Stored in Room is in Sealed Containers	<input type="checkbox"/> N/A		

Mechanical Equipment Location	Roof Top	Mechanical Room Clean	<input type="checkbox"/> N/A
Filters Installed Properly	<input type="checkbox"/> N/A	Filters Clean	<input type="checkbox"/> N/A
Condensate Pan Clean	<input type="checkbox"/> N/A	Cooling Coil Clean	<input type="checkbox"/> N/A
		Inside of HVAC Unit Clean	<input type="checkbox"/> N/A

Fresh Air Intake Location	Roof top	Fresh Air Intake Free of Obstruction	<input type="checkbox"/> N/A
Pollutant Sources Near Air Intake	Not Accessible		

Observations

Rusted ceiling grid adjacent to HVAC supply grills. Custodial staff informed me that microbial growth keeps reappearing in the storage closets. There are no supply or return grills in the storage closets. Custodial staff will continue to monitor and wipe microbial growth with wexcide until HVAC has been repaired. Per Daisy (custodial staff) I checked three other rooms that are controlled by different air handlers.

Corrective Actions to be Completed by Site Based Staff

Thoroughly clean elevated surfaces	▼
Clean ceilings around HVAC supply grills	▼
Continue to monitor and wipe surfaces w/ wexcide	▼
	▼
	▼
	▼
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Corrective Actions to be Completed by PPO

Repair HVAC to reduce humidity level	▼
	▼
	▼
	▼
Work order EQ07382 generated 8-14-12	▼
	▼
	▼
	▼

IAQ Assessment

Seminole Middle

Evaluation Date August 14, 2012

Time of Day 1:15

Outdoor Conditions Temperature 89.7

Relative Humidity 58.8

Ambient CO2 419

Fish	Temperature	Range	Relative Humidity	Range	CO ²	Range	# Occupants
129	75.2	72 - 78	75.9	30% - 60%	436	MAX 700 > Ambient	
Noticeable Odor		Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
Ceiling		Ceiling		Ceiling			
Walls		Walls		Walls			
Floor		Floor		Floor			
Ceiling Clean	<input type="checkbox"/> No	HVAC Supply Grills Clean	<input type="checkbox"/> Yes	HVAC Return Grills Clean	<input type="checkbox"/> Yes		
Walls Clean	<input type="checkbox"/> Yes	Inside of Supply Duct Clean	<input type="checkbox"/> Yes	Inside of Return Duct Clean	<input type="checkbox"/> Yes		
Flooring Clean	<input type="checkbox"/> Yes	Ceiling at Supply Grills Clean	<input type="checkbox"/> No				
Room Surfaces Clean	<input type="checkbox"/> No						
Trash Removed	<input type="checkbox"/> Yes	Exhaust Fans Working	<input type="checkbox"/> N/A	Unapproved Chemicals / Cleaners in Room	<input type="checkbox"/> No		
Signs of Pests	<input type="checkbox"/> No	Drain Traps Wet	<input type="checkbox"/> N/A	Air Fresheners in Room	<input type="checkbox"/> No		
Room Cluttered	<input type="checkbox"/> No	Food if Stored in Room is in Sealed Containers	<input type="checkbox"/> N/A				
Mechanical Equipment Location	Roof Top				Mechanical Room Clean	<input type="checkbox"/> N/A	
Filters Installed Properly	<input type="checkbox"/> N/A	Filters Clean	<input type="checkbox"/> N/A	Inside of HVAC Unit Clean	<input type="checkbox"/> N/A		
Condensate Pan Clean	<input type="checkbox"/> N/A	Cooling Coil Clean	<input type="checkbox"/> N/A				
Fresh Air Intake Location	Roof top ▼				Fresh Air Intake Free of Obstruction	<input type="checkbox"/> N/A	
Pollutant Sources Near Air Intake	Not Accessible ▼						

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Seminole Middle

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Relative Humidity 58.8

Ambient CO2 419

Fish	Temperature	Range	Relative Humidity	Range	CO ²	Range	# Occupants	
131	75.1	72 - 78	74.7	30% - 60%	425	MAX 700 > Ambient		
Noticeable Odor		No	Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
Ceiling	2' x 4'		No		No			
Walls	Drywall		No		No			
Floor	12" x 12" Vinyl		No		No			
Ceiling Clean		No	HVAC Supply Grills Clean		Yes	HVAC Return Grills Clean		Yes
Walls Clean		Yes	Inside of Supply Duct Clean		Yes	Inside of Return Duct Clean		Yes
Flooring Clean		Yes	Ceiling at Supply Grills Clean		No			
Room Surfaces Clean		No						
Trash Removed		Yes	Exhaust Fans Working		N/A	Unapproved Chemicals / Cleaners in Room		No
Signs of Pests		No	Drain Traps Wet		N/A	Air Fresheners in Room		No
Room Cluttered		No	Food if Stored in Room is in Sealed Containers		N/A			
Mechanical Equipment Location			Roof Top			Mechanical Room Clean		N/A
Filters Installed Properly		N/A	Filters Clean		N/A	Inside of HVAC Unit Clean		N/A
Condensate Pan Clean		N/A	Cooling Coil Clean		N/A			
Fresh Air Intake Location			Roof top ▼			Fresh Air Intake Free of Obstruction		N/A
Pollutant Sources Near Air Intake			Not Accessible ▼					

Observations

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Condensate Pan Clean	<input type="checkbox"/> N/A	Cooling Coil Clean	<input type="checkbox"/> N/A

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