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Risk Management Department

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October 10, 2013

Signature on File

TO: Kathryn Marlow, Principal  
**Seminole 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 October 7, 2013, 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: 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

Seminole Middle

Evaluation Date October 7, 2013

Time of Day 10:00

Outdoor Conditions Temperature 80.7

Relative Humidity 82.9

Ambient CO2 443

Fish	Temperature	Range	Relative Humidity	Range	CO <sup>2</sup>	Range	# Occupants
<span style="border: 1px solid black; padding: 2px;">101E</span>	<span style="border: 1px solid black; padding: 2px;">72.4</span>	<span style="border: 1px solid black; padding: 2px;">72 - 78</span>	<span style="border: 1px solid black; padding: 2px;">70.1</span>	<span style="border: 1px solid black; padding: 2px;">30% - 60%</span>	<span style="border: 1px solid black; padding: 2px;">685</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;">Yes</span>	<span style="border: 1px solid black; padding: 2px;">20 sq ft</span>	
Floor	<span style="border: 1px solid black; padding: 2px;">Carpet</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;">No</span>	
Walls Clean		<span style="border: 1px solid black; padding: 2px;">No</span>	Inside of Supply Duct Clean		<span style="border: 1px solid black; padding: 2px;">N/A</span>	Inside of Return Duct Clean <span style="border: 1px solid black; padding: 2px;">N/A</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;">Yes</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;">Roof Top Unit # 18</span>			Mechanical Room Clean <span style="border: 1px solid black; padding: 2px;">N/A</span>	
Filters Installed Properly		<span style="border: 1px solid black; padding: 2px;">Yes</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;">Yes</span>		
Fresh Air Intake Location			<span style="border: 1px solid black; padding: 2px;">Roof top</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;">No</span> ▼				

**Observations**

Surface microbial growth behind movable shelving, cabinetry and walls. Continue to wipe with Wexcide until the HVAC repairs have been made. The office manager states the evening cleaning crew are not able to enter her space due to confidential records. The department making the ceiling cuts, coordinate with school staff to acquire ceiling tiles.

**Corrective Actions to be Completed by Site Based Staff**

Continue to monitor and wipe surfaces w/ wexcide	▼
Coordinate a schedule to clean properly	▼
Clean dust from ceiling tiles or replace	▼
Clean HVAC supply grills with Wexcide	▼
Vacuum/wipe return grill	▼
	▼
	▼
	▼
	▼

**Corrective Actions to be Completed by PPO**

Ceiling tile cuts needed around supply vents	▼
Evaluate fresh air damper to RTU # 18	▼
Repair HVAC to reduce humidity level	▼
	▼
	▼
	▼
	▼

# IAQ Assessment

Seminole Middle

Evaluation Date

Time of Day

Outdoor Conditions Temperature

Relative Humidity

Ambient CO2

Fish	Temperature	Range	Relative Humidity	Range	CO <sup>2</sup>	Range	# Occupants
<input type="text" value="116C"/>	<input type="text" value="70.5"/>	<input type="text" value="72 - 78"/>	<input type="text" value="68.3"/>	<input type="text" value="30% - 60%"/>	<input type="text" value="750"/>	<input type="text" value="MAX 700 &gt; Ambient"/>	<input type="text"/>
Noticeable Odor		<input type="text" value="No"/>	Visible water damage / staining?		Visible microbial growth?		Amount of material affected
Ceiling	<input type="text" value="2' x 4'"/>	<input type="text" value="No"/>	<input type="text" value="No"/>		<input type="text"/>		<input type="text"/>
Walls	<input type="text" value="Drywall"/>	<input type="text" value="No"/>	<input type="text" value="No"/>		<input type="text"/>		<input type="text"/>
Floor	<input type="text" value="Carpet"/>	<input type="text" value="No"/>	<input type="text" value="No"/>		<input type="text"/>		<input type="text"/>

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

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

Mechanical Equipment Location	<input type="text" value="Roof Top Unit # 5"/>		Mechanical Room Clean	<input type="text" value="N/A"/>	
Filters Installed Properly	<input type="text" value="Yes"/>	Filters Clean	<input type="text" value="Yes"/>	Inside of HVAC Unit Clean	<input type="text" value="Yes"/>
Condensate Pan Clean	<input type="text" value="Yes"/>	Cooling Coil Clean	<input type="text" value="Yes"/>		

Fresh Air Intake Location	<input type="text" value="Roof top"/>	Fresh Air Intake Free of Obstruction	<input type="text" value="Yes"/>
Pollutant Sources Near Air Intake	<input type="text" value="No"/>		

**Observations**

This room is a computer laptop storage room. The HVAC coils are frozen in the RTU # 5.

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**Corrective Actions to be Completed by Site Based Staff**

Thoroughly clean horizontal surfaces	▼
Clean cobwebs from low corners	▼
Clean dust from ceiling tiles or replace	▼
Clean HVAC supply grills with Wexcide	▼
	▼
	▼
	▼
	▼

**Corrective Actions to be Completed by PPO**

Set temperature to 72 - 78 degrees	▼
Evaluate fresh air damper to RTU # 5	▼
Repair HVAC to reduce humidity level	▼
	▼
	▼
	▼
	▼