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Risk Management Department

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July 30, 2013

Signature on File

TO: Sarah Hausman, Principal  
**Wingate Oaks Center**

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 July 24, 2013, I conducted an assessment at **Wingate Oaks Center**. 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

Wingate Oaks Center

Evaluation Date July 24, 2013

Time of Day 12:00

Outdoor Conditions    Temperature 85.4    Relative Humidity 78.9    Ambient CO2 417

Fish	Temperature	Range	Relative Humidity	Range	CO <sup>2</sup>	Range	# Occupants
<span style="border: 1px solid black; padding: 2px;">806</span>	<span style="border: 1px solid black; padding: 2px;">70.8</span>	<span style="border: 1px solid black; padding: 2px;">72 - 78</span>	<span style="border: 1px solid black; padding: 2px;">63.2</span>	<span style="border: 1px solid black; padding: 2px;">30% - 60%</span>	<span style="border: 1px solid black; padding: 2px;">429</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;">Yes</span>	<span style="border: 1px solid black; padding: 2px;">Yes</span>	<span style="border: 1px solid black; padding: 2px;">3 stained tiles &lt; 10 sq ft</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;">Yes</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;">No</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;">Yes</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;">Yes</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;">Yes</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;">Yes</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;">Above Ceiling</span>	Mechanical Room Clean	<span style="border: 1px solid black; padding: 2px; color: red;">n/a</span>
Filters Installed Properly	<span style="border: 1px solid black; padding: 2px;">N/A</span>	Filters Clean	<span style="border: 1px solid black; padding: 2px;">N/A</span>
Condensate Pan Clean	<span style="border: 1px solid black; padding: 2px;">N/A</span>	Cooling Coil Clean	<span style="border: 1px solid black; padding: 2px;">N/A</span>
		Inside of HVAC Unit Clean	<span style="border: 1px solid black; padding: 2px;">N/A</span>

Fresh Air Intake Location	<span style="border: 1px solid black; padding: 2px;">Not accessible</span> ▼	Fresh Air Intake Free of Obstruction	<span style="border: 1px solid black; padding: 2px;">N/A</span>
Pollutant Sources Near Air Intake	<span style="border: 1px solid black; padding: 2px;">Not Accessible</span> ▼		

**Observations**

The HVAC system is located above the drop ceiling. Small wall stain under the stained ceiling tiles. One small ceiling stain has visible microbial growth. Cobwebs were found under instructor's desk. Bug droppings were found on window sill, terminex traps are visible throughout classroom. Ceiling stains located at North end of classroom.

n/a - not applicable

N/A-not accessible

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

Thoroughly clean horizontal surfaces	▼
Replace stained ceiling tiles after roofing repairs	▼
Wipe wall staining under ceiling stains	▼
	▼
	▼
	▼
	▼
	▼

**Corrective Actions to be Completed by PPO**

Evaluate and repair cause of stained ceiling tiles -	▼
Roofing	▼
Set temperature to 72 - 78 degrees	▼
Repair HVAC to reduce humidity level	▼
	▼
	▼
	▼

# IAQ Assessment

Wingate Oaks Center

Evaluation Date July 24, 2013

Time of Day 11:30

Outdoor Conditions    Temperature 85.4

Relative Humidity 78.9

Ambient CO2 417

Fish	Temperature	Range	Relative Humidity	Range	CO <sup>2</sup>	Range	# Occupants	
<span style="border: 1px solid black; padding: 2px;">807</span>	<span style="border: 1px solid black; padding: 2px;">75.7</span>	<span style="border: 1px solid black; padding: 2px;">72 - 78</span>	<span style="border: 1px solid black; padding: 2px;">65.8</span>	<span style="border: 1px solid black; padding: 2px;">30% - 60%</span>	<span style="border: 1px solid black; padding: 2px;">446</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;">Yes</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;">Yes</span>		<span style="border: 1px solid black; padding: 2px;">No</span>		<span style="border: 1px solid black; padding: 2px;">&lt; 1 sq ft</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;">Yes</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;">No</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;">Yes</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;">Yes</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;">Above Ceiling</span>			Mechanical Room Clean		<span style="border: 1px solid black; padding: 2px; color: red;">n/a</span>
Filters Installed Properly		<span style="border: 1px solid black; padding: 2px;">N/A</span>	Filters Clean		<span style="border: 1px solid black; padding: 2px;">N/A</span>	Inside of HVAC Unit Clean		<span style="border: 1px solid black; padding: 2px;">N/A</span>
Condensate Pan Clean		<span style="border: 1px solid black; padding: 2px;">N/A</span>	Cooling Coil Clean		<span style="border: 1px solid black; padding: 2px;">N/A</span>			
Fresh Air Intake Location			<span style="border: 1px solid black; padding: 2px;">Not accessible</span>			Fresh Air Intake Free of Obstruction		<span style="border: 1px solid black; padding: 2px;">N/A</span>
Pollutant Sources Near Air Intake			<span style="border: 1px solid black; padding: 2px;">Not Accessible</span>					

**Observations**

Clean wall adjacent to the range i.e. food. The room appears to be used for physical therapy, equipment is cluttered throughout the room. The HVAC system is located above the drop ceiling, check the coil and condensate pan for cleaning, musty smell in the room. Humidity level elevated.

n/a - not applicable

N/A-not accessible

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

Thoroughly clean horizontal surfaces	▼
Replace stained ceiling tile after repair	▼
Wipe wall staining adjacent to electric range	▼
Clean ceilings around HVAC supply grills	▼
	▼
	▼
	▼
	▼

**Corrective Actions to be Completed by PPO**

Evaluate and repair cause of stained ceiling tiles	▼
Evaluate and clean the HVAC coil & pan	▼
Repair HVAC to reduce humidity level	▼
	▼
	▼
	▼
	▼