

Aston A. Henry, Supervisor Risk Management Department

# managing risk with responsibility

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August 28, 2	012 Sign	ture on File For Custodial Supervisor Use On	<u>ly</u>
TO:	David Basile, Principal South Plantation High Schoo	Custodial Issues Addressed Custodial Issues Not Addressed	
FROM:	Richard Rosa, Project Manager Facilities Design and Construc		
SUBJECT:	Indoor Air Quality (IAQ) Asse	ssment	

On August 21, 2012, I conducted an assessment at **South Plantation High 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 Assessi	ment			
South Plan	ntation High Evaluation Dat	te August 21, 2012	Time of Day 1	1:45	
Outdoor Conditions Tempera	ature 87.9 Relative	e Humidity 65.3	Ambient CO2 44	48	
		Range         CO <sup>2</sup> % - 60%         476		ccupants	
Noticeable Odor No	Visible water damage / staining?	Visible microbial growth?	Amount of material affected		
Ceiling2' x 2'WallsCeramic TileFloorPainted Concrete	No No No	No No			
Ceiling Clean Yes Walls Clean Yes	HVAC Supply Grills Clean Inside of Supply	Yes	HVAC Return Grills Clean Inside of Return	Yes	
Flooring Clean Yes Room Surfaces Yes Clean	Duct Clean Ceiling at Supply Grills Clean	Yes	Duct Clean	Yes	
Trash Removed Yes	Exhaust Fans Working Drain Traps Wet	Yes	Unapproved Chemicals / Cleaners in Room	No	
Room Cluttered No	Food if Stored in Room is in Sealed Containers	N/A	Air Fresheners in Room	No	
Mechanical Equipment Location	FISH 165		Mechanical Room Clean	Yes	
Filters Installed Properly Yes	-	Yes	Inside of HVAC Unit Clean	Yes	
Condensate Pan Clean Yes	Cooling Coil Clean	Yes			
Fresh Air Intake Location	Exterior corridor at 165	▼	Fresh Air Intake Free of Obstruction	Yes	
Pollutant Sources Near Air Intake	Student Drop Off Drive	•			
Observations F-161-Kitchen training room					
HFSP states that microbial growth is visible at times on the adjoining metal door frames between 161 and 162. It is due to the differential of temperature between the two rooms. Both rooms are on different HVAC systems. Raise temperature in 161 to be within SBBC temperature range. Continue to wipe with wexcide until temperature has been					

adjusted.

Corrective Actions to be Completed by Site Based Staff
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Continue to monitor and wipe surfaces w/ wexcide	▼
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Set temperature to 72 - 78 degrees	▼
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	IAQ Assessi	ment			
South Plar	ntation High Evaluation Dat	te August 21, 2012	Time of Day	2:30	
Outdoor Conditions Tempera	ature 87.9 Relative	e Humidity 65.3	Ambient CO2 4	48	
		Range <u>CO</u> % - 60% 471		cupants	
Noticeable Odor No	Visible water damage / staining?	Visible microbial growth?	Amount of material affected		
Ceiling2' x 2'WallsDrywall/Ceramic tileFloorVCT/coated concrete	No           No           No	No No			
Ceiling Clean Yes Walls Clean Yes	HVAC Supply Grills Clean Inside of Supply	Yes	HVAC Return Grills Clean Inside of Return	N/a	
Flooring Clean Yes	Duct Clean	Yes	Duct Clean	N/A	
Room Surfaces Yes Clean	Ceiling at Supply Grills Clean	Yes			
Trash Removed Yes	Exhaust Fans Working	Yes	Unapproved Chemicals / Cleaners in Room	No	
Signs of Pests No Room Cluttered No	Drain Traps Wet Food if Stored in Room is in Sealed Containers	Yes N/A	Air Fresheners in Room	No	
Mechanical Equipment Location	Roof Top		Mechanical Room Clean	N/A	
Filters Installed Properly Yes	Filters Clean	Yes	Inside of HVAC Unit Clean	Yes	
Condensate Pan Clean Yes	Cooling Coil Clean	Yes			
Fresh Air Intake Location	Roof top	▼	Fresh Air Intake Free of Obstruction	Yes	
Pollutant Sources Near Air Intake	No	▼			
Observations					
HFSP states that the school is waiting on ordered HVAC compressors for the AONE HVAC unit. Also he states the AONE unit is leaking into a storage area F-238 and F-164A. Maintenance has a work order.					

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

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Repair HVAC to reduce humidity level	V
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	IAQ Assess	ment		
South Plar	tation High Evaluation Da	te August 21, 2012	Time of Day	:10
Outdoor Conditions Tempera	ture 87.9 Relative	e Humidity 65.3	Ambient CO2 4	48
		Range CO % - 60% 662		cupants
Noticeable Odor No	Visible water damage / staining?	Visible microbial growth?	Amount of material affected	
Ceiling2' x 4'WallsHomasote / TackboardFloorCarpet	No No	No No		
Ceiling Clean Yes Walls Clean Yes Flooring Clean Yes	HVAC Supply Grills Clean Inside of Supply Duct Clean	Yes	HVAC Return Grills Clean Inside of Return Duct Clean	N/a
Room Surfaces Yes Clean	Ceiling at Supply Grills Clean	Yes	Ductoreal	
Trash Removed Yes Signs of Pests No	Exhaust Fans Working Drain Traps Wet	N/A	Unapproved Chemicals / Cleaners in Room	No
Room Cluttered No	Food if Stored in Room is in Sealed Containers	N/A	Air Fresheners in Room	No
Mechanical Equipment Location	FISH 315		Mechanical Room Clean	Yes
Filters Installed Properly Yes Condensate Pan Clean Yes		Yes Yes	Inside of HVAC Unit Clean	Yes
Fresh Air Intake Location Pollutant Sources Near Air Intake	Roof top No	▼ ▼	Fresh Air Intake Free of Obstruction	Yes
Observations				

Corrective Actions to be Completed by Site Based Staff

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Repair HVAC to reduce humidity level	▼
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	IAQ Ass	essment	
South	Plantation High Evaluatio	n Date August 21, 2012	Time of Day 1:10
Outdoor Conditions Tem	perature 87.9 Rel	ative Humidity 65.3	Ambient CO2 448
FishTemperature29871.6	RangeRelative Humidity72 - 7864.6	Range         CO           30% - 60%         649	-
Noticeable OdorNoCeiling2' x 4'WallsHomasote / Tackbox	Visible water damage staining? Yes oard No	y Visible microbial growth? No No	Amount of material affected
Floor Carpet	Yes	No	24 sq ft
Ceiling CleanNoWalls CleanNoFlooring CleanNoRoom Surfaces CleanNo	HVAC Supply Grills Clean Inside of Supp Duct Clean Ceiling at Sup Grills Clean	ΝΟ	HVAC Return Grills Clean No Inside of Return Duct Clean No
Trash RemovedYesSigns of PestsNoRoom ClutteredNo	Exhaust Fans Work Drain Traps V Food if Stored in Room in Sealed Containers	Net Yes	Unapproved Chemicals / Cleaners in Room Air Fresheners in Room
Mechanical Equipment Locat Filters Installed Properly Condensate Pan Clean	tion FISH 315 Yes Filters Cle Yes Cooling Coil Cle		Mechanical Room Clean Yes Inside of HVAC Unit Clean Yes
Fresh Air Intake Location Pollutant Sources Near Air Intake	Roof top No	<ul><li>▼</li></ul>	Fresh Air Intake Free Yes

#### Observations

There is a work order for the ceiling tiles to be replaced. The HFSP states one section of stained carpet is from a ceiling leak. Another section of stained carpet is due to a plumbing leak from under the sink. The base of the cabinetry has been replaced under the sink. Shampooing the carpet is not removing the stains. There is a section of wall in the back of the room without wall board exposing fiberglass. HFSP states maintenance started but left due to summer priorities. Do not occupy classroom until the wallboard replacement has been completed. The room was unoccupied at the time of the assessment.

Corrective Actions to be Completed by Site Based Staff

Classroom is due for a summer cleaning	▼
Clean HVAC supply grills with Wexcide	▼
Vacuum HVAC return grills	▼
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Repair HVAC to reduce humidity level	▼
Replace ceiling tiles per existing work order	▼
Complete the replacement of wallboard	▼
Evaluate carpet for replacement	▼
Clean HVAC supply drops	▼
Clean HVAC return drops	▼
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