

managing risk with responsibility

Aston A. Henry, Supervisor Risk Management Department Telephone: 754 321-1900 Fax:

754 321-1917

November 20,	2012	Signature on File	For C	Custodial Supervisor Use Only
TO:	James Cecil, Principal Sawgrass Springs Middle Scho	pol		Custodial Issues Addressed Custodial Issues Not Addressed
FROM:	Robert Krickovich, Coordinator Facilities Design and Construct	,		
SUBJECT:	Indoor Air Quality (IAQ) Asses	sment		

On November 7, 2012, I conducted an assessment at Sawgrass Springs 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.

Directors, School Performance & Accountability cc: 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

RK/tc Enc.

IAQ Assessment					
Sawgrass Spri	ngs Middle Evaluation Date	e November 7, 2012	Time of Day 1	1:30	
Outdoor Conditions Temperat	ture 74.8 Relative	Humidity 44.7	Ambient CO2 4	49	
		Range <u>CO</u> % - 60% 1112		ccupants 24	
Noticeable OdorNoCeiling2' X 2' Lay inWallsPlaster	Visible water damage / staining? No No	Visible microbial growth? No No	Amount of material affected		
Floor 12" x 12" Vinyl	No	No			
Ceiling CleanYesWalls CleanYesFlooring CleanYesRoom SurfacesYesCleanYes	HVAC Supply Grills Clean Inside of Supply Duct Clean Ceiling at Supply Grills Clean	Yes Yes No	HVAC Return Grills Clean Inside of Return Duct Clean	Yes	
Trash RemovedYesSigns of PestsNoRoom ClutteredNo	Exhaust Fans Working Drain Traps Wet Food if Stored in Room is in Sealed Containers	N/A N/A	Unapproved Chemicals / Cleaners in Room Air Fresheners in Room	No	
Mechanical Equipment Location Filters Installed Properly N/A Condensate Pan Clean N/A	-	N/A N/A	Mechanical Room Clean Inside of HVAC Unit Clean	Yes N/A	
Fresh Air Intake Location Pollutant Sources Near Air Intake	Outside of Room None	▼ ▼	Fresh Air Intake Free of Obstruction	Yes	
Observations Minor dust on elevated surfaces	- minor dust on ceiling tiles at	supply grills tools r	needed to access air filters	3	

Thoroughly clean elevated surfaces	▼
Clean ceilings around HVAC supply grills	▼
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	IAQ Assessn	nent		
Sawgrass Spr	rings Middle Evaluation Date	e November 7, 2012	2 Time of Day 1	1:30
Outdoor Conditions Tempera	ature 74.8 Relative	Humidity 44.7	Ambient CO2 4	49
		Range CO % - 60% 1394		26
Noticeable Odor No	Visible water damage / staining?	Visible microbial growth?	Amount of material affected	
Ceiling2' X 2' Lay inWallsPlasterFloor2' x 2' Tile Squares	No No No	No No		
Ceiling CleanYesWalls CleanYesFlooring CleanYesRoom SurfacesYesCleanYes	HVAC Supply Grills Clean Inside of Supply Duct Clean Ceiling at Supply Grills Clean	Yes Yes No	HVAC Return Grills Clean Inside of Return Duct Clean	No Yes
Trash RemovedYesSigns of PestsNoRoom ClutteredNo	Exhaust Fans Working Drain Traps Wet Food if Stored in Room is in Sealed Containers	N/A No N/A	Unapproved Chemicals / Cleaners in Room Air Fresheners in Room	No No
Mechanical Equipment Location Filters Installed Properly Yes Condensate Pan Clean N/A	-	No N/A	Mechanical Room Clean Inside of HVAC Unit Clean	No N/A
Fresh Air Intake Location Pollutant Sources Near Air Intake	Outside of Room None	▼	Fresh Air Intake Free of Obstruction	Yes
Observations Science lab - 10 sinks - most trap spill, soap bubbles on floor at sp drywall ceiling (water damaged)	pill - HVAC supply and return gr			

Ensure water is poured down drains monthly	▼
Call in a work order to clean debris from drains	▼
Ensure spills are cleaned up immediately	▼
Clean HVAC supply and return grills with Wexcide	▼
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epair HVAC to reduce CO2 levels	
cause of water damaged ceiling in 341	R
water damaged ceiling material in 341	R
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	IAQ Assessr	nent		
Sawgrass Spr	rings Middle Evaluation Date	November 7, 2012	Time of Day	1:30
Outdoor Conditions Tempera	ature 74.8 Relative	Humidity 44.7	Ambient CO2 4	49
		Range CO ² % - 60% 883		cupants
Noticeable Odor No	Visible water damage / staining?	Visible microbial growth?	Amount of material affected	
Ceiling2' X 2' Lay inWallsPlasterFloor2' x 2' Tile Squares	No No No	No No No		
Ceiling CleanYesWalls CleanYesFlooring CleanYesRoom SurfacesYesCleanYes	HVAC Supply Grills Clean Inside of Supply Duct Clean Ceiling at Supply Grills Clean	No Yes No	HVAC Return Grills Clean Inside of Return Duct Clean	No Yes
Trash RemovedYesSigns of PestsNoRoom ClutteredNo	Exhaust Fans Working Drain Traps Wet Food if Stored in Room is in Sealed Containers	N/A N/A	Unapproved Chemicals / Cleaners in Room Air Fresheners in Room	No No
Mechanical Equipment Location Filters Installed Properly Yes Condensate Pan Clean No	-	No	Mechanical Room Clean Inside of HVAC Unit Clean	No No
Fresh Air Intake Location Pollutant Sources Near Air Intake	Roof top None	▼ ▼	Fresh Air Intake Free of Obstruction	Yes
Observations Cafeteria - 20 foot ceilings - Sup open - Mechanical room 409 use				locked

Clean ceilings around HVAC supply grills	▼
Clean HVAC supply and return grills with Wexcide	▼
Ensure doors and windows remain closed	▼
Remove storage items from mechanical room	▼
Do not use mechanical room for storage	▼
Remove and replace A/C filters	▼
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Clean interior of both HVAC units in room 409	▼
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IAQ Assessment					
Sawgrass Springs	Middle Evaluation Dat	November 7, 2012	Time of Day 1	1:30	
Outdoor Conditions Temperature	e 74.8 Relative	Humidity 44.7	Ambient CO2 4	49	
Fish Temperature Range 413 71.7 72 - 78		Range CO % - 60% 1063		ccupants 24	
Noticeable OdorNoCeiling2' X 2' Lay inWallsPlaster	Visible water damage / staining? No No	Visible microbial growth? No No	Amount of material affected		
Floor Carpet	No	No			
Ceiling CleanYesWalls CleanYesFlooring CleanNoRoom SurfacesNoCleanNo	HVAC Supply Grills Clean Inside of Supply Duct Clean Ceiling at Supply Grills Clean	No Yes Yes	HVAC Return Grills Clean Inside of Return Duct Clean	No Yes	
Trash RemovedYesSigns of PestsNoRoom ClutteredNo	Exhaust Fans Working Drain Traps Wet Food if Stored in Room is in Sealed Containers	N/A Yes N/A	Unapproved Chemicals / Cleaners in Room Air Fresheners in Room	No No	
Mechanical Equipment Location FIS Filters Installed Properly Yes Condensate Pan Clean No	SH 409 Filters Clean Cooling Coil Clean	No	Mechanical Room Clean Inside of HVAC Unit Clean	No No	
Fresh Air Intake Location Ro Pollutant Sources Near Air Intake No	of top ne	▼ ▼	Fresh Air Intake Free of Obstruction	Yes	
Observations					
Band Room - Carpet dirty / stained / walls - HVAC supply and return grills inside of units dirty.					

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Thoroughly clean all surfaces	▼
Thoroughly clean stained carpet	▼
Clean HVAC supply and return grills with Wexcide	▼
Remove and replace A/C filters	▼
Remove storage items from mechanical room	▼
Do not use mechanical room for storage	▼
	▼
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Clean interior of both HVAC units in room 409	▼
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	IAQ Assess	ment		
Sawgrass Sp	rings Middle Evaluation Dat	te November 7, 2012	Time of Day 1	1:30
Outdoor Conditions Tempera	ature 74.8 Relative	e Humidity 44.7	Ambient CO2 4	49
		Range CO ² % - 60% 1173		24
Noticeable OdorNoCeiling2' X 2' Lay inWallsPlasterFloor12" x 12" Vinyl	Visible water damage / staining? No No No	Visible microbial growth? No No	Amount of material affected	
Ceiling CleanYesWalls CleanYesFlooring CleanYesRoom SurfacesYesCleanYes	HVAC Supply Grills Clean Inside of Supply Duct Clean Ceiling at Supply Grills Clean	Yes Yes No	HVAC Return Grills Clean Inside of Return Duct Clean	Yes
Trash RemovedYesSigns of PestsNoRoom ClutteredN/A	Exhaust Fans Working Drain Traps Wet Food if Stored in Room is in Sealed Containers	N/A N/A N/A	Unapproved Chemicals / Cleaners in Room Air Fresheners in Room	No No
Mechanical Equipment Location Filters Installed Properly N/A Condensate Pan Clean N/A		N/A N/A	Mechanical Room Clean Inside of HVAC Unit Clean	Yes N/A
Fresh Air Intake Location Pollutant Sources Near Air Intake	Outside of Room None	▼	Fresh Air Intake Free of Obstruction	Yes
Observations				
Ceilings at supply grills minor d	ust - tools needed to access ai	r filters - CO2 slightly (elevated	

Clean ceilings around HVAC supply grills	▼
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CO2 levels	Repair HVAC to redu
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	IAQ Assessi	ment		
Sawgrass Sp	brings Middle Evaluation Dat	te November 7, 2012	Time of Day	1:30
Outdoor Conditions Tempera	ature 74.8 Relative	e Humidity 44.7	Ambient CO2 44	49
		Range CO ² % - 60% 2072		23
Noticeable OdorNoCeiling2' X 2' Lay inWallsPlaster	Visible water damage / staining? No No	Visible microbial growth? No No	Amount of material affected	
Floor 12" x 12" Vinyl		No		
Ceiling Clean Yes Walls Clean Yes Flooring Clean Yes Room Surfaces Yes	HVAC Supply Grills Clean Inside of Supply Duct Clean Ceiling at Supply	Yes	HVAC Return Grills Clean Inside of Return Duct Clean	Yes
Clean	Grills Clean	No		
Trash RemovedYesSigns of PestsNoRoom ClutteredNo	Exhaust Fans Working Drain Traps Wet Food if Stored in Room is	N/A N/A	Unapproved Chemicals / Cleaners in Room Air Fresheners in Room	No No
	in Sealed Containers			
Mechanical Equipment Location			Mechanical Room Clean	Yes
Filters Installed Properly N/A Condensate Pan Clean N/A		N/A	Inside of HVAC Unit Clean	N/A
Fresh Air Intake Location Pollutant Sources Near Air Intake	Outside of Room	▼	Fresh Air Intake Free of Obstruction	Yes
Observations				
Ceilings at supply grills minor d	lust - tools needed to access ai	r filters - CO2 Elevated		

Clean ceilings around HVAC supply grills	▼
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Repair HVAC to reduce CO2 levels	▼
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	IAQ Assessr	nent		
Sawgrass Spi	rings Middle Evaluation Date	e November 7, 2012	Time of Day 1	1:30
Outdoor Conditions Tempera	ature 74.8 Relative	Humidity 44.7	Ambient CO2 4	49
		Range CO ² % - 60% 1628		28
Noticeable Odor No	Visible water damage / staining?	Visible microbial growth?	Amount of material affected	
Ceiling2' X 2' Lay inWallsPlasterFloor12" x 12" Vinyl	No No No No	No No No		
Ceiling CleanYesWalls CleanYesFlooring CleanYesRoom SurfacesYesCleanYes	HVAC Supply Grills Clean Inside of Supply Duct Clean Ceiling at Supply Grills Clean	Yes Yes No	HVAC Return Grills Clean Inside of Return Duct Clean	Yes
Trash RemovedYesSigns of PestsNoRoom ClutteredNo	Exhaust Fans Working Drain Traps Wet Food if Stored in Room is in Sealed Containers	N/A N/A	Unapproved Chemicals / Cleaners in Room Air Fresheners in Room	No No
Mechanical Equipment Location Filters Installed Properly N/A Condensate Pan Clean N/A		N/A N/A	Mechanical Room Clean Inside of HVAC Unit Clean	Yes N/A
Fresh Air Intake Location Pollutant Sources Near Air Intake	Outside of Room None	▼ ▼	Fresh Air Intake Free of Obstruction	Yes
Observations				
Ceilings at supply grills minor dust - tools needed to access air filters - CO2 Elevated - HVAC supply grill in 846A dirty / rusty				

Clean ceilings around HVAC supply grills	
Clean HVAC supply grills with Wexcide in 846A	▼
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