

managing risk with responsibility

Aston A. Henry, Supervisor Risk Management Department Telephone:754 321-1900Fax:754 321-1917

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October 29, 201	12	Signature on File	Fo	r Custodial Supervisor Use Only
TO:	Laurel Crowle, Principal			Custodial Issues Addressed
	Morrow Elementary School			Custodial Issues Not Addressed
FROM:	Robert Krickovich, Coordinator Facilities Design and Construct	,		
SUBJECT:	Indoor Air Quality (IAQ) Asses	sment		

On October 25, 2012, I conducted an assessment at **Morrow Elementary 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

RK/tc Enc.

	IAQ Assess	ment		
Morrow	Elementary Evaluation Dat	te October 25, 2012	Time of Day 1	:15
Outdoor Conditions Tempera	ture 83.3 Relative	e Humidity 73.7	Ambient CO2 46	8
		Range CO ² % - 60% 880		cupants
Noticeable Odor No	Visible water damage / staining?	Visible microbial growth?	Amount of material affected	
Ceiling 2' X 4' Lay in Walls Tack Board	No	No No		
Floor 12" x 12" Vinyl	No	No		
Ceiling Clean Yes Walls Clean Yes	HVAC Supply Grills Clean	Yes	HVAC Return Grills Clean	N/a
Flooring Clean Yes	Inside of Supply Duct Clean	Yes	Inside of Return Duct Clean	N/A
Room Surfaces Yes Clean	Ceiling at Supply Grills Clean	Νο		
Trash Removed Yes	Exhaust Fans Working	N/A	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	N/A	Air Fresheners in Room	No
Mechanical Equipment Location	FISH 104		Mechanical Room Clean	Yes
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	None	▼	01003000000	
Observations				
No room 108 - 108A, B, & C are a Ceilings at supply grills dirty (3 -		partitions - Plenum ai	r return through light fixtu	res -
3 stained ceiling tiles in corridor	outside of room 127 - 3 staine	d ceiling tiles in center	r of room 125	

Corrective Actions to be Completed by Site Based Staff

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Remove and replace ceiling tiles at HVAC	▼
supply grills - require cuts	▼
Evaluate and repair cause of stained ceiling tiles	▼
in corridor outside of room 127 and in room 125	▼
Remove and replace stained ceiling tiles in room	▼
125 and 127	▼
	▼
	▼

	IAQ Assessr	ment		
Morrow	Elementary Evaluation Dat	te October 25, 2012	Time of Day 1	:15
Outdoor Conditions Tempera	ature 83.3 Relative	e Humidity 73.7	Ambient CO2 46	8
		Range CO ² % - 60% 877	Range # Oc MAX 700 > Ambient	cupants
Noticeable Odor Yes Ceiling 2' X 4' Lay in	Visible water damage / staining?	Visible microbial growth?	Amount of material affected	
Walls Tack Board Floor 12" x 12" Vinyl	No No	No		
Ceiling Clean Yes Walls Clean Yes	HVAC Supply Grills Clean Inside of Supply	No	HVAC Return Grills Clean Inside of Return	N/a
Flooring Clean Yes Room Surfaces Yes Clean	Duct Clean Ceiling at Supply Grills Clean	No	Duct Clean	N/A
Trash Removed Yes	Exhaust Fans Working Drain Traps Wet	No	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 104		Mechanical Room Clean	Yes
Filters Installed Properly Yes Condensate Pan Clean Yes		Yes I Yes	Inside of HVAC Unit Clean	Yes
Fresh Air Intake Location Pollutant Sources Near Air Intake	Roof top None	▼	Fresh Air Intake Free of Obstruction	Yes
Observations				
Stale odor in room - Plenum air Supply grills dirty - exhaust fan			dirty (4 - need cuts PPO)	

Corrective Actions to be Completed by Site Based Staff

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Clean HVAC supply grills with Wexcide	▼
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Remove and replace ceiling tiles at HVAC	▼
supply grills - require cuts	▼
Evaluate and repair exhaust fan	▼
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	IAQ Assess	ment		
Morrow	Elementary Evaluation Date	te October 25, 2012	Time of Day 1	:15
Outdoor Conditions Tempera	ature 83.3 Relative	e Humidity 73.7	Ambient CO2 46	68
		Range CO ² % - 60% 866		cupants
Noticeable OdorYesCeiling2' X 4' Lay inWallsTack BoardFloor12" 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	No Yes No	HVAC Return Grills Clean Inside of Return Duct Clean	N/a N/A
Trash RemovedYesSigns of PestsNoRoom ClutteredNo	Exhaust Fans Working Drain Traps Wet Food if Stored in Room is in Sealed Containers	No Yes N/A	Unapproved Chemicals / Cleaners in Room Air Fresheners in Room	No No
Mechanical Equipment Location Filters Installed Properly Yes Condensate Pan Clean Yes		Yes Yes	Mechanical Room Clean Inside of HVAC Unit Clean	Yes Yes
Fresh Air Intake Location Pollutant Sources Near Air Intake	Roof top None	▼	Fresh Air Intake Free of Obstruction	Yes
Observations				
Stale odor in room - Plenum air Supply grills dirty - exhaust fan			i dirty (4 - need cuts PPO)	

Corrective Actions to be Completed by Site Based Staff

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Remove and replace ceiling tiles at HVAC	▼
supply grills - require cuts	▼
Evaluate and repair exhaust fan	▼
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IAQ Assessment					
Morrow	Elementary Evaluation Date	October 25, 2012	Time of Day	1:15	
Outdoor Conditions Tempera	ture 83.3 Relative	Humidity 73.7	Ambient CO2 4	68	
		Range CO ² % - 60% 872	Range # Oc MAX 700 > Ambient	ccupants 1	
Noticeable Odor Yes	Visible water damage / staining?	Visible microbial growth?	Amount of material affected		
Ceiling 2' X 4' Lay in Walls Tack Board Floor 12" x 12" Vinyl	No No	No 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	No Yes	HVAC Return Grills Clean Inside of Return Duct Clean	N/a N/A	
Clean Trash Removed Yes	Grills Clean Exhaust Fans Working	No	Unapproved Chemicals /	No	
Signs of Pests No Room Cluttered No	Drain Traps Wet Food if Stored in Room is in Sealed Containers	Yes N/A	Cleaners in Room Air Fresheners in Room	No	
Mechanical Equipment Location Filters Installed Properly	FISH 104 Filters Clean	Yes	Mechanical Room Clean Inside of HVAC Unit Clean	Yes Yes	
Condensate Pan Clean Yes	Cooling Coil Clean	Yes			
Fresh Air Intake Location Pollutant Sources Near Air Intake	Roof top None	▼ ▼	Fresh Air Intake Free of Obstruction	Yes	
Observations Stale odor in room -Plenum air re grills dirty - exhaust fan in 118A			dirty (4 - need cuts PPO)	- Supply	

Corrective Actions to be Completed by Site Based Staff

Clean HVAC supply grills with Wexcide	▼
Ensure toilets are flushed after use	▼
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Remove and replace ceiling tiles at HVAC	▼
supply grills - require cuts	▼
Evaluate and repair exhaust fan	▼
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	IAQ Assess	ment		
Morrow	Elementary Evaluation Dat	te October 25, 2012	Time of Day 1:	15
Outdoor Conditions Tempera	ature 83.3 Relative	e Humidity 73.7	Ambient CO2 468	3
		Range CO ² % - 60% 865		upants 1
Noticeable OdorYesCeiling2' X 4' Lay inWallsTack Board	Visible water damage / staining? No No	Visible microbial growth? No	Amount of material affected	
Floor 12" x 12" Vinyl		No		
Ceiling Clean Yes Walls Clean Yes Flooring Clean Yes	HVAC Supply Grills Clean Inside of Supply Duct Clean	No Yes	HVAC Return Grills Clean Inside of Return Duct Clean	N/a N/A
Room Surfaces Yes Clean	Ceiling at Supply Grills Clean	Νο		
Trash RemovedYesSigns of PestsNoRoom ClutteredNo	Exhaust Fans Working Drain Traps Wet Food if Stored in Room is in Sealed Containers	No Yes N/A	Unapproved Chemicals / Cleaners in Room Air Fresheners in Room	No No
Mechanical Equipment Location	FISH 104		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 None	▼	Fresh Air Intake Free of Obstruction	Yes
Observations				
Stale odor in room - Plenum air Supply grills dirty - exhaust fan			dirty (4 - need cuts PPO) -	

Corrective Actions to be Completed by Site Based Staff

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Clean HVAC supply grills with Wexcide	▼
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Remove and replace ceiling tiles at HVAC	▼
supply grills - require cuts	▼
Evaluate and repair exhaust fan	▼
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	IAQ Assessi	ment		
Morrow	Elementary Evaluation Dat	te October 25, 2012	Time of Day 1	:15
Outdoor Conditions Tempera	ature 83.3 Relative	e Humidity 73.7	Ambient CO2 46	38
		Range CO ² % - 60% 909	Range # Oc MAX 700 > Ambient	2
Noticeable Odor Yes	Visible water damage / staining?	Visible microbial growth?	Amount of material affected	
Ceiling 2' X 4' Lay in Walls Tack Board	No No	No		
Floor 12" x 12" Vinyl	No	No		
Ceiling Clean Yes Walls Clean Yes	HVAC Supply Grills Clean	Yes	HVAC Return Grills Clean	N/a
Flooring Clean Yes	Inside of Supply Duct Clean	Yes	Inside of Return Duct Clean	N/A
Room Surfaces Yes Clean	Ceiling at Supply Grills Clean	No		
Trash Removed Yes	Exhaust Fans Working	N/A	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	FISH 104		Mechanical Room Clean	Yes
Filters Installed Properly Yes			Inside of HVAC Unit Clean	Yes
Condensate Pan Clean Yes	S Cooling Coil Clean	Yes		
Fresh Air Intake Location	Roof top	▼	Fresh Air Intake Free of Obstruction	Yes
Pollutant Sources Near Air Intake	None	▼		
Observations				
Stale odor in room - Plenum air	return through light fixtures - C	ceilings at supply grills	dirty (4 - need cuts PPO)	

Corrective Actions to be Completed by Site Based Staff

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Remove and replace ceiling tiles at HVAC	▼
supply grills - require cuts	▼
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