

managing risk with responsibility

Aston A. Henry, Task Assigned Director Risk Management Department		Telephone: Fax:	754 321-1900 754 321-1917
May 20, 2013	Signature on File	For Custodial St	upervisor Use Only
TO:	Melissa Holtz, Principal Wilton Manors Elementary School		ues Addressed ues Not Addressed
FROM:	Robert Krickovich, Coordinator I, LEA Facilities Design and Construction		
SUBJECT:	Indoor Air Quality (IAQ) Assessment		

On April 24, 2013, I conducted an assessment at **Wilton Manors 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: 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, Task Assigned Director, Risk Management Sonja Coley, Senior Project Manager, Facilities Design and Construction Broward Teachers Union Federation of Public Employees

RK/tc Enc.

	IAQ Asses	ssment	
Wilton Mar	nors Elementary Evaluation I	Date April 24, 2013	Time of Day 1:00
Outdoor Conditions Tem	perature 82.4 Relat	ive Humidity 54.1	Ambient CO2 452
FishTemperature30274.1	RangeRelative Humidity72 - 7847.2	Range CO 30% - 60% 939	
Noticeable Odor No Ceiling 2' X 4' Lay in	Visible water damage / staining?	Visible microbial growth?	Amount of material affected
Walls Drywall Floor 12" x 12" Vinyl	No No	Yes	Spotty on all walls
Ceiling CleanYesWalls CleanNoFlooring CleanYesRoom SurfacesYesCleanYes	HVAC Supply Grills Clean Inside of Supply Duct Clean Ceiling at Supply Grills Clean	Yes	HVAC Return Grills Clean No Inside of Return Duct Clean No
Trash RemovedYesSigns of PestsNoRoom ClutteredNo	Exhaust Fans Working Drain Traps We Food if Stored in Room in Sealed Containers	et Yes	Unapproved Chemicals / Cleaners in Room Air Fresheners in Room
Mechanical Equipment Locat Filters Installed Properly Condensate Pan Clean	ion FISH 307 Yes Filters Clear No Cooling Coil Clear		Mechanical Room Clean Yes Inside of HVAC Unit Clean No
Fresh Air Intake Location Pollutant Sources Near Air Intake	Roof top None	▼	Fresh Air Intake Free Yes of Obstruction

Observations

Spotty microbial growth on walls (wipes off) - Walls dusty - FISH 307 2" filters just changed old filters still in room have date of 8/31/12 on them - several boxes of filters stored in Mechanical room (not changing air filters will cause dust to be deposited on walls and surfaces in rooms, when humidity gets above 65% microbial growth can begin in the dust) - Fresh air duct removed from unit - HFSP says they were having HVAC problems in the rooms and called in a work order and the duct work was removed.

Corrective Actions to be Completed by Site Based Staff

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Repair HVAC to reduce humidity level	▼
Repair HVAC to install fresh air duct as required	▼
with dampers	▼
Clean HVAC return drops	▼
Clean HVAC Coils and inside of unit	▼
	▼
	▼
	▼

	IAQ Assessi	ment		
Wilton Manors Ele	ementary Evaluation Dat	te April 24, 2013	Time of Day	1:00
Outdoor Conditions Temperatur	re 82.4 Relative	e Humidity 54.1	Ambient CO2 4	52
FishTemperatureRange302A71.972 - 78		Range CO % - 60% 936		ccupants 1
Noticeable Odor No	Visible water damage / staining?	Visible microbial growth?	Amount of material affected	
Ceiling 2' X 4' Lay in Walls Drywall	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	Yes		
Trash Removed Yes	Exhaust Fans Working	N/A	Unapproved Chemicals / Cleaners in Room	No
Signs of Pests No	Drain Traps Wet	N/A	Air Fresheners	
Room Cluttered No	Food if Stored in Room is in Sealed Containers	N/A	Air Fresheners in Room	No
Mechanical Equipment Location FI	SH 307		Mechanical Room Clean	Yes
Filters Installed Properly Yes	Filters Clean	Yes	Inside of HVAC Unit Clean	No
Condensate Pan Clean No	Cooling Coil Clean	No		
Fresh Air Intake Location	oof top	▼	Fresh Air Intake Free	Yes
Pollutant Sources Near Air No	one	▼	of Obstruction	
Observations				
Ceiling grid in room rusty (sign of p	reviously high humidity) -			

Corrective Actions to be Completed by Site Based Staff

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Repair HVAC to reduce humidity level	▼
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	IAQ As	sessment	
Wilton Ma	anors Elementary Evaluat	ion Date April 24, 20	13 Time of Day 1:00
Outdoor Conditions Ten	nperature 82.4 R	elative Humidity 54	.1 Ambient CO2 452
FishTemperature30474.1	RangeRelative Humidi72 - 7845.5	ty Range 30% - 60%	CO2Range# Occupants911MAX 700 >8Ambient8
Noticeable Odor No Ceiling 2' X 4' Lay in	Visible water dama staining?	ige / Visible microbi growth?	al Amount of material affected
Walls Drywall Floor 12" x 12" Vinyl	No No	Yes	Spotty on all walls
Ceiling CleanYesWalls CleanNoFlooring CleanYesRoom Surfaces CleanYes	HVAC Supp Grills Clean Inside of Su Duct Clean Ceiling at S Grills Clean	Ipply Yes	HVAC Return Grills Clean No Inside of Return Duct Clean No
Trash RemovedYesSigns of PestsNoRoom ClutteredNo	Exhaust Fans Wo Drain Trap Food if Stored in Ro in Sealed Container	s Wet Yes	Unapproved Chemicals / Cleaners in Room Air Fresheners in Room
Mechanical Equipment Loca Filters Installed Properly Condensate Pan Clean	ation FISH 307 Yes Filters C No Cooling Coil C		Mechanical Room Clean Yes Inside of HVAC Unit Clean No
Fresh Air Intake Location Pollutant Sources Near Air Intake	Roof top None		 Fresh Air Intake Free of Obstruction Yes

Observations

Heavy dust on walls near supply grill over door to 304A - Dust and spotty microbial on all walls (wipes off) - HVAC supply & return grills dusty - FISH 307 2" filters just changed old filters still in room have date of 8/31/12 on them several boxes of filters stored in Mechanical room (not changing air filters will cause dust to be deposited on walls and surfaces in rooms, when humidity gets above 65% microbial growth can begin in the dust) - Fresh air duct removed from unit - HFSP says they were having HVAC problems in the rooms and called in a work order and the duct work was removed.

Corrective Actions to be Completed by Site Based Staff

Clean dust from wall surfaces	▼
Clean HVAC supply and return grills with Wexcide	▼
Change filters per District schedule	▼
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	▼
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Repair HVAC to reduce humidity level	▼
Repair HVAC to install fresh air duct as required	▼
with dampers	▼
Clean HVAC return drops	▼
Clean HVAC Coils and inside of unit	▼
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	IAQ Asse	ssment	
Wilton Ma	anors Elementary Evaluation	Date April 24, 2013	Time of Day 1:00
Outdoor Conditions Ten	nperature 82.4 Rela	tive Humidity 54.1	Ambient CO2 452
FishTemperature30872.3	RangeRelative Humidity72 - 7849.2	Range CO 30% - 60% 920	
Noticeable Odor No Ceiling 2' X 4' Lay in	Visible water damage / staining?	v Visible microbial growth? No	Amount of material affected
Walls Drywall Floor 12" x 12" Vinyl	No No	Yes	Spotty on walls
Ceiling CleanYesWalls CleanNoFlooring CleanYesRoom SurfacesYesCleanYes	HVAC Supply Grills Clean Inside of Supply Duct Clean Ceiling at Supp Grills Clean	Yes	HVAC Return Grills Clean No Inside of Return Duct Clean No
Trash RemovedYesSigns of PestsNoRoom ClutteredNo	Exhaust Fans Workir Drain Traps W Food if Stored in Room in Sealed Containers	et Yes	Unapproved Chemicals / Cleaners in Room Air Fresheners in Room
Mechanical Equipment Loca Filters Installed Properly Condensate Pan Clean	tion FISH 307 Yes Filters Clea No Cooling Coil Clea		Mechanical Room Clean Yes Inside of HVAC Unit Clean No
Fresh Air Intake Location Pollutant Sources Near Air Intake	Roof top None	▼▼	Fresh Air Intake Free Yes

Observations

Heavy dust on walls near supply grill over door to 308A - Dust and spotty microbial on all walls (wipes off) - HVAC Supply & Return grills dusty - FISH 307 2" filters just changed old filters still in room have date of 8/31/12 on them several boxes of filters stored in Mechanical room (not changing air filters will cause dust to be deposited on walls and surfaces in rooms, when humidity gets above 65% microbial growth can begin in the dust) - Fresh air duct removed from unit - HFSP says they were having HVAC problems in the rooms and called in a work order and the duct work was removed.

Corrective Actions to be Completed by Site Based Staff

Clean dust from wall surfaces	▼
Clean HVAC supply and return grills with Wexcide	▼
Change filters per District schedule	▼
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	IAQ Assessi	ment		
Wilton Manors E	Elementary Evaluation Dat	te April 24, 2013	Time of Day	1:00
Outdoor Conditions Temperat	ture 82.4 Relative	e Humidity 54.1	Ambient CO2 4	52
Fish Temperature Rar 401A 74.1 72 -		Range CC % - 60% 684		ccupants 1
Noticeable Odor No	Visible water damage / staining?	Visible microbial growth?	Amount of material affected	
Ceiling 2' X 4' Lay in	Νο	No		
Walls Drywall	No	No		
Floor 12" x 12" Vinyl	No	No		
Ceiling Clean Yes Walls Clean Yes	HVAC Supply Grills Clean	Νο	HVAC Return Grills Clean	Yes
Flooring Clean Yes	Inside of Supply Duct Clean	Yes	Inside of Return Duct Clean	Yes
Room Surfaces No Clean	Ceiling at Supply Grills Clean	Yes		
Trash Removed Yes	Exhaust Fans Working	N/A	Unapproved Chemicals / Cleaners in Room	No
Signs of Pests No	Drain Traps Wet	N/A	Air Fresheners	No
Room Cluttered Yes	Food if Stored in Room is in Sealed Containers	N/A	in Room	
Mechanical Equipment Location	FISH 406		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	▼	or obstruction	
Observations				
Media center office - dust on surf			boxes, books, papers on f	loor,
tables, desks, shelves) HVAC sup	ply grills dirty (media center a	also <u>)</u>		
HVAC filters just changed - dirty f	/ilters still in room - room full	of boxes of new filter	S	

Corrective Actions to be Completed by Site Based Staff

Clean HVAC supply grills with Wexcide	▼
Thoroughly clean all surfaces	▼
Encourage occupant to reduce clutter	▼
Change filters per District schedule	▼
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