

managing risk with responsibility

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

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September 14, 2	2012 Signature on File	For Custodial Supervisor Use Only
TO:	Daphene Watson, Principal Park Ridge Elementary School	Custodial Issues Addressed Custodial Issues Not Addressed
FROM:	Robert Krickovich, Coordinator I, LEA Facilities Design and Construction	
SUBJECT:	Indoor Air Quality (IAQ) Assessment	

On September 13, 2012, I conducted an assessment at **Park Ridge 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 Assessr	nent		
Park Ridge	Elementary Evaluation Date	e September 13, 2012	Time of Day	1:45
Outdoor Conditions Tempera	ature 87.3 Relative	Humidity 79.3	Ambient CO2 4	83
		Range CO ² % - 60% 870	Range # Oc MAX 700 > Ambient	2
Noticeable OdorNoCeiling2' X 2' Lay inWallsDrywall	Visible water damage / staining? No No	Visible microbial growth? No No	Amount of material affected	
Floor 12" x 12" Vinyl	No	Νο		
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	No N/A
Room Surfaces Yes Clean	Ceiling at Supply Grills Clean	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	FISH 750		Mechanical Room Clean	No
Filters Installed Properly Yes	s Filters Clean	Νο	nside of HVAC Unit Clean	N/A
Condensate Pan Clean N/A	Cooling Coil Clean	N/A		
Fresh Air Intake Location Pollutant Sources Near Air Intake	Side of door to 750 Oak Trees	▼ ▼	Fresh Air Intake Free of Obstruction	Yes
Observations				
Humidity elevated Exterior of both buildings crack Walls of Mechanical room wet a Condensate drain pans leaking	nd water damaged with visible		r both fresh air grills	

Corrective Actions to be Completed by Site Based Staff

Remove and replace A/C filters	
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▼	
▼	
▼	
▼	
▼	
▼	

Corrective Actions to be Completed by PPO

Repair HVAC to reduce humidity level	▼
Evaluate and repair cause of water damage	▼
Replace damaged wall material in Mech Rooms	▼
in both buildings	▼
	▼
Repair building exterior paint and cracks	▼
	▼
	▼

IAQ Assessment					
Park Ridge Elementary Eval	uation D	ate September 13, 201	2 Time of Day 1:45		
Outdoor Conditions Temperature 87.3	Relativ	ve Humidity 79.3	Ambient CO2 483]	
FishTemperatureRangeRelative Hum75477.372 - 7865.1	— i	Range CO 0% - 60% 868		ants	
Noticeable OdorNoVisible water da staining?Ceiling2' X 2' Lay inNoWallsDrywallNoFloor12" x 12" VinylNo	•	Visible microbial growth? No No No	Amount of material affected		
Ceiling Clean Yes HVAC Su Grills Clean Walls Clean Inside of Flooring Clean Inside of Duct Clean Room Surfaces Yes Ceiling a Grills Clean	Supply an t Supply	Yes Yes Yes	HVAC Return Grills Clean Inside of Return Duct Clean		
Trash RemovedYesExhaust FansSigns of PestsNoDrain Train	raps Wet Room is	Yes	Unapproved Chemicals / Cleaners in Room Air Fresheners in Room		
Mechanical Equipment Location FISH 750 Filters Installed Properly Yes Filter Condensate Pan Clean N/A Cooling Co	rs Clean bil Clean	No N/A	Mechanical Room Clean		
Fresh Air Intake LocationSide of door to 750Pollutant Sources Near Air IntakeOak Trees		▼▼	Fresh Air Intake Free Ye	es	
Observations Humidity elevated Exterior of both buildings cracked / blistered paint with water in blisters. Walls of Mechanical room wet and water damaged with visible microbial growth under both fresh air grills Condensate drain pans leaking Mechanical rooms in other building (765 & 768) have same water issues and will cause damage to those classrooms if not repaired. Repair HVAC units and walls of all 4 mechanical rooms.					
Corrective Actions to be Completed by Site Based St Remove and replace A/C filters	aff V V	Corrective Action Repair HVAC to Evaluate and rep Replace damaged	ons to be Completed by PPO to reduce humidity level air cause of water damage wall material in Mech Rooms	v v v	
	▼ in both buildings ▼ ▼ ▼ ▼ ■ ▼ Repair building exterior paint and cracks ▼				

Repair HVAC to reduce humidity level	▼
Evaluate and repair cause of water damage	•
Replace damaged wall material in Mech Rooms	▼
in both buildings	•
	•
Repair building exterior paint and cracks	•
	•
	▼
	Evaluate and repair cause of water damage Replace damaged wall material in Mech Rooms in both buildings

	IAQ As	ssessment			
Park R	Ridge Elementary Evalua	tion Date Septembe	er 13, 2012	Time of Day	1:45
Outdoor Conditions Ten	nperature 87.3 F	Relative Humidity	79.3	Ambient CO2 4	83
FishTemperature75570.3	RangeRelative Humid72 - 7860.9	ity Range 30% - 60%	CO ² 867	Range # O MAX 700 > [Ambient	ccupants 2
Noticeable Odor Yes	Visible water dama staining?	age / Visible mic growt		Amount of material affected	
Ceiling 2' X 2' Lay in	Yes	Yes		7 tiles between wind	ows
Walls Drywall	Yes	Yes		Walls at mechanical r	oom
Floor 12" x 12" Vinyl	No	No			
Ceiling Clean Yes Walls Clean Yes	HVAC Supp Grills Clear			HVAC Return Grills Clean	No
Flooring Clean Yes	Inside of Su Duct Clean	ipply Yes		Inside of Return Duct Clean	N/A
Room Surfaces Yes Clean	Ceiling at S Grills Clear				
Trash Removed Yes	Exhaust Fans Wo	orking N/A		Unapproved Chemicals / Cleaners in Room	No
Signs of Pests No	Drain Trap	s Wet Yes			
Room Cluttered No	Food if Stored in R in Sealed Containe			Air Fresheners in Room	No
Mechanical Equipment Loca	tion FISH 758M			Mechanical Room Clean	No
Filters Installed Properly	Yes Filters	Clean No	l	nside of HVAC Unit Clean	N/A
Condensate Pan Clean	N/A Cooling Coil	Clean N/A			
Fresh Air Intake Location	Side of door to 758M		▼	Fresh Air Intake Free	Yes
Pollutant Sources Near Air Intake	Oak Trees		▼	of Obstruction	
Observations					

Musty odor in room - wall at mechanical room wet up 12" with visible microbial growth at base board - Carpet in room wet at mechanical room walls - Water stained ceiling tiles and wall between window (roof drain leak) - Back splash needs caulk. - Exterior of both buildings cracked / blistered paint with water in blisters. Walls of Mechanical room wet and water damaged with visible microbial growth under both fresh air grills - 1" standing water on mechanical room floor running into classrooms 755 & 758 Condensate drain pans leaking

Corrective Actions to be Completed by Site Based Staff

Clean and dry carpet by mechanical room	▼
Move from area until repairs are made	▼
	▼
Remove and replace A/C filters	▼
	▼
	▼
	▼
	▼

Corrective Actions to be Completed by PPO

Remove cabinets from window wall	▼
Replace water damaged wall material	▼
Replace water damaged ceiling tiles	▼
Evaluate and repair cause of water damage	▼
Replace damaged wall material in Mech Room	▼
in both buildings	▼
Repair building exterior paint and cracks	▼
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	IAQ Assess	nent		
Park Ridge	Elementary Evaluation Date	September 13, 201	2 Time of Day	1:45
Outdoor Conditions Tempera	ature 87.3 Relative	Humidity 79.3	Ambient CO2 4	83
		Range CO % - 60% 960		ccupants 2
Noticeable Odor Yes Ceiling 2' X 2' Lay in	Visible water damage / staining? No	Visible microbial growth?	Amount of material affected	
Walls Drywall Floor 12" x 12" Vinyl	Yes	Yes	Walls at mechanical r	oom
Ceiling CleanYesWalls CleanNoFlooring CleanYesRoom SurfacesYesCleanYes	HVAC Supply Grills Clean Inside of Supply Duct Clean Ceiling at Supply Grills Clean	Yes Yes	HVAC Return Grills Clean Inside of Return Duct Clean	No N/A
Trash RemovedYesSigns of PestsNoRoom ClutteredNo	Exhaust Fans Working Drain Traps Wet Food if Stored in Room is in Sealed Containers	N/A Yes Yes	Unapproved Chemicals / Cleaners in Room Air Fresheners in Room	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	Side of door to 758M Oak Trees	▼	Fresh Air Intake Free of Obstruction	Yes
Observations				

Musty odor in room - wall at mechanical room wet up 12" with visible microbial growth at base board - Dust on walls in front of HVAC supply grills - Water standing on counter by sink and puddle on floor in front of sink and under refrigerator (kids washing hands) - Back splash needs caulk. Exterior of both buildings cracked / blistered paint with water in blisters.

Walls of Mechanical room wet and water damaged with visible microbial growth under both fresh air grills - 1" standing water on mechanical room floor running into classrooms 755 & 758

Corrective Actions to be Completed by Site Based Staff

Clean dust from all wall surfaces	▼
Promptly wipe up spills at sinks	▼
Do not allow water to pond on floor	▼
Remove and replace A/C filters	▼
	▼
	▼
	▼
	▼

Corrective Actions to be Completed by PPO

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Remove and replace bottom 2 feet of wall	▼
that backs up to mechanical room	▼
Caulk sink counter top	▼
Replace damaged wall material in Mech Rooms	▼
Repair cause of water damage	▼
Repair building exterior paint and cracks	▼