

managing risk with responsibility

	enry, Director ement Department		Telephone: Fax:	754 321-1900 754 321-1917	
September 1	0, 2013	Signature on File	For Custodial S	upervisor Use Only	
TO:	Maria Bach, Pri Challenger Ele	ncipal mentary School		ues Addressed ues Not Addressed	
FROM:	Robert Krickov Risk Manageme	ich, Coordinator I, LEA ent Department			
SUBJECT:	Indoor Air Qua	lity (IAQ) Assessment			

On August 27, 2013, I conducted an assessment at **Challenger 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, Director, Risk Management Sonja Coley, Senior Project Manager, Facilities & Construction Broward Teachers Union Federation of Public Employees

RK/tc Enc.

Challenger Elementary	Evaluation Date	August 27, 2013	Time of Day1	0:45
Outdoor Conditions Temperature 84.	3 Relative	Humidity 74.7	Ambient CO2 5	06
Fish Temperature Range Rel 421 75.7 72 - 78		ange <u>CO²</u> 5 - 60% 501	Range # Oc MAX 700 > Ambient	ccupants 2
Noticeable Odor No Visible	water damage / staining?	Visible microbial growth?	Amount of material affected	
Ceiling 2' X 4' Lay in	Yes	No	2 tiles	
Walls Drywall	No	No		
Floor 12" x 12" Vinyl	Yes	No	6 sq ft	
Ceiling Clean Yes	HVAC Supply Grills Clean	Yes	HVAC Return Grills Clean	Yes
Walls Clean Yes	Inside of Supply		Inside of Return	
Flooring Clean Yes	Duct Clean	Yes	Duct Clean	Yes
Room Surfaces Yes Clean	Ceiling at Supply Grills Clean	Yes		
	ust Fans Working	Yes	Unapproved Chemicals / Cleaners in Room	No
Signs of Pests No	Drain Traps Wet	Yes	Air Fresheners	No
	Stored in Room is ed Containers	N/A	in Room	NO
Mechanical Equipment Location Bard Q-Tec	in room		Mechanical Room Clean	N/A
Filters Installed Properly Yes	Filters Clean	Yes	nside of HVAC Unit Clean	N/A
Condensate Pan Clean N/A C	ooling Coil Clean	N/A		
Fresh Air Intake Location Outside of U	Jnit	▼	Fresh Air Intake Free	Yes
Pollutant Sources Near Air Intake		▼	of Obstruction	Tes
Observations				
Room used for storage - Ceiling tile missing ceiling, No water damage above ceiling - Rus				ove
Corrective Actions to be Completed by Site	Based Staff	Corrective Action	s to be Completed by PF	0
Replace missing and stained ceiling til			d repair roof leaks	
	 		ace stained ceiling tiles amaged floor tile	▼
	▼			▼
	▼			▼
	─			▼
	 			→

Challenger Elementary Eval	luation Da	te August 2	7, 2013	Time of Day1	10:45		
Outdoor Conditions Temperature 84.3	Relative	Humidity	74.7	Ambient CO2 5	506		
Fish Temperature Range Relative Hum 422 75.5 72 - 78 46.9	-i	Range % - 60%	CO ² 469	Range # O MAX 700 > Ambient	ccupants 2		
Noticeable Odor No Visible water da staining?		Visible mic growth		Amount of material affected			
Ceiling 2' X 4' Lay in Yes Walls Drywall No		No]] [i tile	-		
Walls Drywall No Floor 12" x 12" Vinyl No		No No] [
Ceiling Clean Yes HVAC Su Grills Cle	ean	Yes		HVAC Return Grills Clean	Yes		
Flooring Clean Yes Inside of Duct Clean		Yes		Inside of Return Duct Clean	Yes		
Room Surfaces Yes Ceiling at Clean Grills Cle		Yes					
Trash Removed Yes Exhaust Fans	_	Yes		Unapproved Chemicals / Cleaners in Room	No		
Signs of Pests No Drain Tr Room Cluttered No Food if Stored in Sealed Contain		Yes N/A		Air Fresheners in Room	No		
Mechanical Equipment Location Bard Q-Tec in room				Mechanical Room Clean	N/A		
Filters Installed Properly Yes Filter	rs Clean	Yes	lr	nside of HVAC Unit Clean	N/A		
Condensate Pan Clean N/A Cooling Co	oil Clean	N/A					
Fresh Air Intake Location Pollutant Sources Near Air Intake Outside of Unit None			▼	Fresh Air Intake Free of Obstruction	Yes		
Observations							
2 ping pong tables in room - room used for after care - Ceiling tile missing behind HVAC unit - 1 stained ceiling tile @ fire sprinkler head - Concrete roof deck above ceiling, No water damage above ceiling.							
Corrective Actions to be Completed by Site Based Staff Corrective Actions to be Completed by PPO							
Replace missing ceiling tile ▼ Evaluate and repair roof leaks ▼ Remove and replace stained ceiling tiles ▼							
	▼	Kemove	anu repia	ice stained ceiling tiles	▼		
<u> </u>	1 I F						

Challenger Elementary Eval	uation Da	te August 27	', 2013	Time of Day1	0:45		
Outdoor Conditions Temperature 84.3	Relative	e Humidity	74.7	Ambient CO2 5	D6		
Fish Temperature Range Relative Hum 423 75.2 72 - 78 51.9	─ i	Range % - 60%	CO ² 861	Range # Oc MAX 700 > Ambient	19		
Noticeable Odor No Visible water da staining?		Visible micro growth?		Amount of material affected			
Ceiling 2' X 4' Lay in Yes		No		2 tiles			
Walls Drywall No		No					
Flan: 428 v 428 V food							
Ploor 12 x 12 vinyi No		No					
Ceiling Clean Yes HVAC Su		Yes		HVAC Return Grills Clean	Yes		
Walls Clean Yes Inside of	Supply	Yes		Inside of Return			
Flooring Clean Yes Duct Clea	an	res		Duct Clean	Yes		
Room Surfaces Yes Ceiling a Grills Clean		Yes					
Trash Removed Yes Exhaust Fans	Working	Yes		Unapproved Chemicals / Cleaners in Room	No		
Signs of Pests No Drain Ti	raps Wet	Yes		Air Fresheners	□ Na □		
Room Cluttered No Food if Stored in in Sealed Contain		N/A		in Room	No		
Mechanical Equipment Location Bard Q-Tec in room				Mechanical Room Clean	N/A		
Filters Installed Properly Yes Filter	s Clean	Yes		Inside of HVAC Unit Clean	N/A		
Condensate Pan Clean N/A Cooling Co	oil Clean	N/A					
Fresh Air Intake Location Outside of Unit			▼	Fresh Air Intake Free	Yes		
Pollutant Sources Near Air Intake			▼	of Obstruction	103		
Observations							
Ceiling tile missing behind HVAC unit - 2 stained ceiling tiles right of A/C unit - Concrete roof deck above ceiling, Nowater damage above ceiling.							
Corrective Actions to be Completed by Site Based Staff Corrective Actions to be Completed by PPO							
					▼		
Replace stained ceiling tiles	▼	Kemove	and rep	lace stained ceiling tiles	▼		
	→						
	▼				▼		
	▼				▼		
	▼				▼		

Challenger Ele	ementary Evaluation Da	te August 27, 2013	Time of Day1	10:45
Outdoor Conditions Temperatur	re 84.3 Relative	e Humidity 74.7	Ambient CO2 5	506
Fish Temperature Rang 424 73.5 72 - 7		Range CO ² 904	Range # O MAX 700 > Ambient	ccupants 20
Noticeable Odor No	Visible water damage / staining?	Visible microbial growth?	Amount of material affected	
Ceiling 2' X 4' Lay in	Yes	No	3 tiles	
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	Yes
Flooring Clean Yes	Inside of Supply Duct Clean	Yes	Inside of Return Duct Clean	Yes
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	Drain Traps Wet	Yes	Air Fresheners	No
Room Cluttered No	Food if Stored in Room is in Sealed Containers	N/A	in Room	NO
Mechanical Equipment Location B	ard Q-Tec in room		Mechanical Room Clean	N/A
Filters Installed Properly Yes	Filters Clean	Yes	Inside of HVAC Unit Clean	N/A
Condensate Pan Clean N/A	Cooling Coil Clean	N/A		
Fresh Air Intake Location	utside of Unit	▼	Fresh Air Intake Free of Obstruction	Yes
Pollutant Sources Near Air Intake	one	▼	or obstruction	
Observations				
Ceiling tile missing behind HVAC u unit - 1 stained ceiling tile in front o water damage above ceiling.				
Corrective Actions to be Complete	d by Site Based Staff	Corrective Action	ns to be Completed by P	РО
Clean fixture lens	· ▼ [Evaluate ar	nd renair roof leaks	\blacksquare

*
*
*
*
*
*
*
*
*
*

Replace missing ceiling tile

Replace stained ceiling tiles

▼ ▼ ▼ ▼

Replace stained ceiling tiles

Challenger	Elementary Evaluation L	August 27, 2013	Time of Day1	0:45
Outdoor Conditions Tempera	ature 84.3 Relati	ve Humidity 74.7	Ambient CO2 5	06
	Relative Humidity 2 - 78 46.5	Range CO ² 30% - 60%		ccupants 22
Noticeable Odor No	Visible water damage / staining?	Visible microbial growth?	Amount of material affected	
Ceiling 2' X 4' Lay in	Yes	No	2 tiles	
Walls Drywall	Yes	No	3 sq ft	
Floor 12" x 12" Vinyl	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	Duct Clean Ceiling at Supply	,	Duct Clean	res
Clean	Grills Clean	Yes		
Trash Removed Yes Signs of Pests No	Exhaust Fans Working Drain Traps We		Unapproved Chemicals / Cleaners in Room	No
Room Cluttered No	Food if Stored in Room i in Sealed Containers	s N/A	Air Fresheners in Room	No
Mechanical Equipment Location	Bard Q-Tec in room		Mechanical Room Clean	N/A
Filters Installed Properly Yes	Filters Clean	Yes	Inside of HVAC Unit Clean	N/A
Condensate Pan Clean N/A	Cooling Coil Clean	N/A		
Fresh Air Intake Location Pollutant Sources Near Air	Outside of Unit	▼	Fresh Air Intake Free of Obstruction	Yes
Intake				
Observations Ceiling tile missing behind HVA stains near ceiling right of wind				ter
Corrective Actions to be Comp	leted by Site Based Staff	Corrective Actio	ns to be Completed by PF	·O
Replace missing c			nd repair roof leaks	<u> </u>
Replace stained ce			tained ceiling tiles	▼
	▼			▼
	▼	1		▼

Challenger Elementary Eval	luation Date	August	27, 2013	Time of Day	10:45		
Outdoor Conditions Temperature 84.3	Relative I	Humidity [74.7	Ambient CO2	506		
Fish Temperature Range Relative Hun 426 73.5 72 - 78 49.9	 i	ange - 60%	CO ² 958	Range # O MAX 700 > Ambient	ccupants 20		
Noticeable Odor No Visible water da staining?	•	Visible mi growt		Amount of material affected			
Ceiling 2' X 4' Lay in Yes		No		1 tile			
Walls Drywall No		No					
Floor 12" x 12" Vinyl No		No					
Ceiling Clean Yes HVAC Su Grills Cle Walls Clean Yes Inside of Flooring Clean Yes Duct Cle	Supply	Yes		HVAC Return Grills Clean Inside of Return Duct Clean	Yes		
	t Supply	Yes		Duct Clean			
Trash Removed Yes Exhaust Fans Signs of Pests No Drain T	Working	Yes		Unapproved Chemicals / Cleaners in Room	No		
Room Cluttered No Food if Stored in Sealed Contai	n Room is	N/A		Air Fresheners in Room	No		
Mechanical Equipment Location Bard Q-Tec in room				Mechanical Room Clean	N/A		
Filters Installed Properly Yes Filter	rs Clean	Yes	ı	nside of HVAC Unit Clean	N/A		
Condensate Pan Clean N/A Cooling Co	oil Clean	N/A					
Fresh Air Intake Location Pollutant Sources Near Air Intake Outside of Unit None			▼	Fresh Air Intake Free of Obstruction	Yes		
Observations Ceiling tile missing behind HVAC unit - 1 stained ceiling tile - Concrete roof deck above ceiling, No water damage above ceiling.							
Corrective Actions to be Completed by Site Based Staff Corrective Actions to be Completed by PPO							
Replace missing ceiling tile ▼ Evaluate and repair roof leaks ▼ Replace stained ceiling tiles ▼							
	Teplace stailed telling tiles ▼						
					▼		