

# managing risk with responsibility

Aston A. Henry, Director Risk Management Department		Telephone: Fax:	754 321-1900 754 321-1917
July 10, 2013	Signature on File	For Custodial S	upervisor Use Only
TO:	Erik Anderson, Principal Tropical Elementary School		ues Addressed ues Not Addressed
FROM:	Richard Rosa, Project Manager Risk Management Department	-	
SUBJECT:	Indoor Air Quality (IAQ) Assessment		

On June 11, 2013, I conducted an assessment at **Tropical 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

RR/tc Enc.

June 11, 2013

Time of Day

1:00

Evaluation Date

Tropical Elementary

Outdoor Conditions Tem	perature	95 Rel	ative Humidity	56.8	Ambient CO2	426
Fish Temperature 850 73.5	Range R	68.5	Range 30% - 60%	<b>CO</b> 424		Occupants
Noticeable Odor No	Visil	ole water damage staining?	,	microbial wth?	Amount of material affected	
Ceiling 2' x 4'		No		lo		
Walls Drywall  Floor 12" x 12" Vinyl		No		10 10		
Ceiling Clean Yes		HVAC Supply Grills Clean	No		HVAC Return Grills Clean	No
Walls Clean Yes		Inside of Supp	oly Van		Inside of Return	
Flooring Clean No		Duct Clean	Yes		Duct Clean	No
Room Surfaces No Clean		Ceiling at Sup Grills Clean	ply No			
Trash Removed Yes	Ex	haust Fans Work	ing Yes		Unapproved Chemicals Cleaners in Room	/ No
Signs of Pests No		Drain Traps \	Wet N/A		Air Fresheners	No
Room Cluttered No		if Stored in Rooi aled Containers	m is N/A		in Room	No
Mechanical Equipment Locat	ion Bard like	HVAC system ir	n classroom		Mechanical Room Clean	N/A
Filters Installed Properly	N/A	Filters Cle	an N/A		Inside of HVAC Unit Clean	N/A
Condensate Pan Clean	N/A	Cooling Coil Cle	ean N/A			
Fresh Air Intake Location	Behind Ba	ard unit/Exterio	r wall	▼	Fresh Air Intake Free	Yes
Pollutant Sources Near Air Intake	Grass and	I landscape		▼	of Obstruction	00
Observations						
There is a computer patch p coom. The entire room is ful						
Corrective Actions to be Co	mpleted by Site	e Based Staff	Corre	ective Actio	ons to be Completed by F	PPO
The floor is due for					to so completed by I	▼
Classroom is due for						▼
Clean HVAC supply of						
Vacuum/wipe Clean restroom e		▼				<b>▼</b>
Cican restroom e	Aliausi lali Yilli	▼				<u>\</u>
		▼				▼

June 11, 2013

Time of Day

1:45

Evaluation Date

Tropical Elementary

Outdoor Conditions	Temperature	95	Relative	Humidity	56.8	Ambient CO2 4	26
Fish         Tempe           851         70	Prature Range 0.8 <b>72 - 78</b>		<del>- 1</del>	Range % - 60%	<b>CC</b> 47:		ccupants
Noticeable Odor	No	Visible water da staining		Visible mid growth		Amount of material affected	
Ceiling 2'>	x 4'	No		No			
	wall	No		No	_		
Floor 12" x 12	2" Vinyl	No		No			
Ceiling Clean	Yes	HVAC S Grills Cl		No		HVAC Return Grills Clean	No
Walls Clean	Yes	Inside o	f Supply	Yes		Inside of Return	
Flooring Clean	No	Duct Cle		162		Duct Clean	No
Room Surfaces Clean	No	Ceiling a Grills Cl	at Supply ean	No			
Trash Removed	Yes	Exhaust Fans	Working	Yes		Unapproved Chemicals / Cleaners in Room	No
Signs of Pests	No	Drain 1	Γraps Wet	N/A		Air Fresheners	No
Room Cluttered	No	Food if Stored in Sealed Conta		N/A		in Room	NO
Mechanical Equipme	nt Location Ba	rd like HVAC sys	tem in clas	sroom		Mechanical Room Clean	N/A
Filters Installed Prope	rly N/A	Filte	ers Clean	N/A		Inside of HVAC Unit Clean	N/A
Condensate Pan Cl	lean N/A	Cooling C	oil Clean	N/A			
Fresh Air Intake Locat	ion Be	hind Bard unit/Ex	kterior wall		▼	Fresh Air Intake Free	Yes
Pollutant Sources Nea Intake	ar Air Gr	ass and landscap	ре		▼	of Obstruction	100
Observations							
I adjusted the Humid	listat to 50%, p	ior to the adjustr	nent it was	set at 65%.			
Corrective Actions to	o be Completed	l by Site Based S	taff	Correct	tive Action	ons to be Completed by P	PO
The floor is o	due for summe	· cleaning	▼ [			. ,	▼
	due for a summ		<del> ▼</del>				<b>▼</b>
	supply grills wit m/wipe return g		+ + +				<u>▼</u>
	room exhaust f		╅				▼
		<del>_</del>					▼
	_						▼
			<b>⊥</b> ₩				₩

	Tropical Eleme	ntary Evalua	ation Date June	e 11, 2013	Time of Day	2:45
Outdoor Conditions	Temperature	95	Relative Humidity	56.8	Ambient CO2	426
Fish         Tempe           852         72		Relative Humio	30% - 60%	436		# Occupants
Noticeable Odor	No	Visible water dam staining?	lage /	microbial owth?	Amount of material affect	
Ceiling 2' x	: 4'	No		No		
Walls Dryv	vall	No		No		
Floor 12" x 12	" Vinyl	No		No		
	Yes	HVAC Sup Grills Clea			HVAC Return Grills Clean	No
Walls Clean Flooring Clean	Yes No	Inside of S Duct Clean			Inside of Retu Duct Clean	ırn No
Room Surfaces Clean	No	Ceiling at S Grills Clear				
	Yes	Exhaust Fans W			Unapproved Chemica Cleaners in Room	als / No
Signs of Pests	No	Drain Tra	ps Wet N/A		Air Fresheners	No
Room Cluttered	No	Food if Stored in R in Sealed Containe	TO THE STATE OF TH		in Room	
Mechanical Equipmer	nt Location Bard	like HVAC syster	n in classroom		Mechanical Room Clo	ean N/A
Filters Installed Proper	rly N/A	Filters	Clean N/A		Inside of HVAC Unit Cl	ean N/A
Condensate Pan Cl	ean N/A	Cooling Coil	Clean N/A			
Fresh Air Intake Locati	on Behi	nd Bard unit/Exte	rior wall	▼	Fresh Air Intake F	ree Yes
Pollutant Sources Nea Intake	r Air Gras	s and landscape		▼		
Observations						
I adjusted the Humid exterior wall.	istat to 50%, prio	r to the adjustme	nt it was set at 65	%. Paint is	bubbling and peeling	on the South
Corrective Actions to	be Completed b	y Site Based Staf	f Corr	rective Action	ons to be Completed b	oy PPO
The floor is d	lue for summer c	leaning			r cause of paint bubbli	
	lue for a summer		▼ and	d peeling o	n the South exterior w	all ▼
Cloan HVAC e	upply arills with \	Maycida I T	<b>V</b> I I			<b>         </b>

▼ ▼ ▼ ▼

Vacuum/wipe return grill
Clean restroom exhaust fan grill

Tro	ppical Elementary	Evaluation Date	June 11, 2013	Time of Day	3:15
Outdoor Conditions Ten	mperature 95	Relative H	Humidity 56.8	Ambient CO2	426
Fish Temperature 853 68.7	Range         Relative           72 - 78         60	<del></del> i		O <sup>2</sup> Range 51 MAX 700 > Ambient	# Occupants
Noticeable Odor No	Visible wate stain		Visible microbial growth?	Amount of material affec	
Ceiling 2' x 4'	Yes	<b>_</b>	No	5 ceiling ti	les
Walls Drywall	No	<u> </u>	No		
Floor 12" x 12" Vinyl	No		No		
Ceiling Clean No Walls Clean Yes		C Supply s Clean	No	HVAC Return Grills Clean	No
Flooring Clean No		le of Supply : Clean	Yes	Inside of Retu Duct Clean	ırn No
Room Surfaces No Clean		ng at Supply s Clean	No		
Trash Removed Yes	Exhaust F	ans Working	Yes	Unapproved Chemic Cleaners in Room	als / No
Signs of Pests Yes	Dra	in Traps Wet	N/A	Air Fresheners	No
Room Cluttered No	Food if Store in Sealed Co	ed in Room is ontainers	N/A	in Room	
Mechanical Equipment Loca	Bard like HVAC	system in class	room	Mechanical Room Cl	ean N/A
Filters Installed Properly	N/A	Filters Clean	N/A	Inside of HVAC Unit C	lean N/A
Condensate Pan Clean	N/A Coolin	g Coil Clean	N/A		
Fresh Air Intake Location	Behind Bard uni	t/Exterior wall	▼	Fresh Air Intake F	ree Yes
Pollutant Sources Near Air Intake	Grass and lands	cape	▼	or Obstruction	
Observations					_
I adjusted the Humidistat to cleaning and painting. In th gap in roof. Repair the roof occupancy sensor as desig	e center of the room ar to prevent any further	re ceiling stains	s, above the drop o	ceiling one can see day	light, large

#### **Corrective Actions to be Completed by Site Based Staff**

	<u> </u>		
The floor is due for summer cleaning	▼		
Classroom is due for a summer cleaning	▼		
Clean HVAC supply grills with Wexcide	▼		
Vacuum/wipe return grill	▼		
Clean restroom exhaust fan grill	▼		
Generate a work order for pest control			
	▼		
	▼		

#### Corrective Actions to be Completed by PPO

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▼
▼
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