

# managing risk with responsibility

Aston A. Henry, Supervisor	Telephone:	754 321-190
Risk Management Department	Fax:	754 321-191

Setpember 11, 2012

Signature on File

TO: Amada Walker, Principal

**Silver Palms Elementary School** 

FROM: Richard Rosa, Project Manager

Facilities Design and Construction

SUBJECT: Indoor Air Quality (IAQ) Assessment

For	Custodial Supervisor Use Only
	Custodial Issues Addressed
	Custodial Issues Not Addressed
-	

On September 5, 2012, I conducted an assessment at **Silver Palms 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

RR/tc Enc.

Silver Palms Elementary

Evaluation Date September 5, 2012

Time of Day

12:10

Outdoor Conditions	Temperatu	re 83.6	Relative I	Humidity	75.9	Ambient CO	2 447
	erature Rang 1.4 72 - 7		<del></del> i	ange - 60%	<b>CO</b> <sup>2</sup> 875		
Noticeable Odor	No	Visible water da staining?	mage /	Visible mic growth		Amount material af	
Ceiling 2'	x 4'	No		No	<u></u>		
	ywall	No		No	_		
Floor 12" x 1	2" Vinyl	No		No	]		
Ceiling Clean Walls Clean	Yes	HVAC Su Grills Cle		No		HVAC Ret Grills Clea	1 Vac 1
Flooring Clean	Yes Yes	Inside of Duct Clea		Yes		Inside of R Duct Clear	
Room Surfaces Clean	No	Ceiling a Grills Cle		Yes			
Trash Removed	Yes	Exhaust Fans		Yes		Unapproved Cher Cleaners in Room	
Signs of Pests	Yes		aps Wet	Yes		Air Fresheners	No
Room Cluttered	No	Food if Stored in in Sealed Contain		No		in Room	
Mechanical Equipme	ent Location F	ISH 185				Mechanical Room	Clean Yes
Filters Installed Prope	erly Yes	Filter	s Clean	Yes		Inside of HVAC Uni	t Clean Yes
Condensate Pan C	Clean Yes	Cooling Co	il Clean	Yes			
Fresh Air Intake Loca	tion T	hru exterior wall			▼	Fresh Air Intak	VAC
Pollutant Sources Nea	ar Air G	rass and landscape	9		▼	oi obstruction	
Observations							
Insect droppings we	re visible on w	indow sills					
Corrective Actions t	to be Complete	ed by Site Based St	aff	Correct	ive Actio	ns to be Complete	ed by PPO
	clean elevated		<b>T</b>				▼
Clean HVAC s  Monitor insects by	supply grills w windows and		<b>▼</b>				▼
			▼ _				▼
			<b>▼</b>				<b>▼</b>
			<b>▼</b>				▼
			▼				▼

Silver Palms Elementary	Evaluation Date Se	eptember 5, 2012	Time of Day 11	1:15
Outdoor Conditions Temperature 83.6	Relative Humi	dity 75.9	Ambient CO2 44	7
	Humidity Range 6.7 30% - 609	074	Range # Oc MAX 700 > Ambient	cupants
	ter damage / Vis ning?	sible microbial growth?	Amount of material affected	
Ceiling 2' x 4'	es	No	7 ceiling tiles < 5 sq	ft
Walls Drywall Ye	es	No	16 sq ft	
Floor 12" x 12" Vinyl	0	No		
Grii	AC Supply Is Clean	o .	HVAC Return Grills Clean	Yes
	de of Supply	s	Inside of Return	Yes
Flooring Clean Yes Dud	ct Clean	<u> </u>	Duct Clean	[ les
	ling at Supply Is Clean	s		
	Fans Working Ye		approved Chemicals / aners in Room	No
Signs of Pests No Dr	ain Traps Wet Ye		ir Fresheners	□ No □
Room Cluttered No Food if Sto in Sealed C	red in Room is ontainers		Room	No
Mechanical Equipment Location FISH 185		Med	chanical Room Clean	Yes
Filters Installed Properly Yes	Filters Clean Ye	s Inside	e of HVAC Unit Clean	Yes
Condensate Pan Clean Yes Cooli	ng Coil Clean Ye	s		
Fresh Air Intake Location Thru exterior w	all		Fresh Air Intake Free	Yes
Pollutant Sources Near Air Intake Grass and land	scape		of Obstruction	
Observations				

The drywall system under the stained ceiling tiles is wet. The stained ceiling tiles are located on an exterior wall.

Roofers to evaluate cause of stained ceiling tiles and water damaged drywall, also above the drop ceiling are chilled water lines that may contribute to the cause of ceiling stains. Carpenters to repair/replace water damaged drywall and remove the back splash and possibly the cabinetry under the stained ceiling tiles and evaluate for additional water damage.

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

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### Corrective Actions to be Completed by PPO

Contourve / totalene to be completed by 1.1.6	
Evaluate and repair cause of stained ceiling tiles	▼
Evaluate and repair cause of water damage	▼
see observations above for additional info	▼
	▼
	▼
	▼
	▼
	▼

Silver Palms Elementary

Evaluation Date September 5, 2012

Time of Day

12:30

Outdoor Conditions	Temperature 83.6	Relative Humidity	75.9	Ambient CO2 4	47
Fish         Temperatu           174         71.6	re Range Relative Hu 72 - 78 48.6	30% - 60%	<b>CO</b> <sup>2</sup> 1064	Range # Oo MAX 700 > Ambient	ccupants
Noticeable Odor	No Visible water d staining	aniage /	microbial wth?	Amount of material affected	
Ceiling 2' x 4'	Yes	N	lo [	3 ceiling stains < 3 s	q ft
Walls Drywall		N	lo [		
Floor 12" x 12" Vi	inyl No		lo		
Ceiling Clean Ye Walls Clean Ye	Grills C	The state of the s		HVAC Return Grills Clean	Yes
Flooring Clean Ye	Inside o	f Supply Yes		Inside of Return Duct Clean	Yes
Room Surfaces Ye	S Ceiling Grills C	at Supply ean Yes			
Trash Removed Ye	_			Unapproved Chemicals / Cleaners in Room	No
Signs of Pests  Room Cluttered  No	<u></u>			Air Fresheners in Room	No
Mechanical Equipment L Filters Installed Properly Condensate Pan Clean	Yes Filte	ers Clean Yes		Mechanical Room Clean	Yes
Fresh Air Intake Location Pollutant Sources Near Ai	Thru exterior wall		<b>▼</b>	Fresh Air Intake Free of Obstruction	Yes
Observations Insect droppings and de	ad insects were visible unde	r sink.			
	e Completed by Site Based S	taff Corre	ective Actions	s to be Completed by PF	20
Clean HVAC supp	oly grills with Wexcide	▼			▼
Monitor insects by win	dows and treat if necessary	▼ ▼			▼ ▼
		<b>▼</b>			▼
		▼			▼
		▼			▼

Silver Palms Elementary

Evaluation Date September 5, 2012

Time of Day

1:00

Outdoor Conditions Temp	erature 83.6 Rel	ative Humidity 75.9	Ambient CO2 44	17
	Range Relative Humidity 72 - 78 46.6	Range CC 30% - 60%		cupants
Noticeable Odor No	Visible water damage staining?	y Visible microbial growth?	Amount of material affected	
Ceiling 2' x 4'	Yes	No	1 stain < 1 sq ft	
Walls Drywall	No	No		
Floor 12" x 12" Vinyl	No	No		
Ceiling Clean No	HVAC Supply Grills Clean	No	HVAC Return Grills Clean	Yes
Walls Clean Yes	Inside of Supp		Inside of Return	
Flooring Clean Yes	Duct Clean	Yes	Duct Clean	Yes
Room Surfaces Yes Clean	Ceiling at Sup Grills Clean	Ply Yes		
Trash Removed Yes	Exhaust Fans Work		Unapproved Chemicals / Cleaners in Room	No
Signs of Pests Yes	Drain Traps V	Wet Yes	Air Fresheners	No
Room Cluttered No	Food if Stored in Roor in Sealed Containers	m is No	in Room	140
Mechanical Equipment Location	on FISH 186		Mechanical Room Clean	Yes
Filters Installed Properly	'es Filters Cle	an Yes	Inside of HVAC Unit Clean	Yes
Condensate Pan Clean Y	Cooling Coil Cle	ean Yes		
Fresh Air Intake Location	Thru exterior wall	▼	Fresh Air Intake Free of Obstruction	Yes
Pollutant Sources Near Air Intake	Grass and landscape	▼	of Obstruction	
Observations				
Ceiling stain is behind the ins	tructors desk			
Corrective Actions to be Con	<u> </u>		ons to be Completed by PP	
Replace stained ceilin Clean HVAC supply gr		Evaluate and repair	cause of stained ceiling til	les ▼
Cidali III A Supply gi	IIIS WITH WEXCIDE ▼			▼
	▼			▼
	▼			▼
	<u>∀</u>			<del> </del>