

Aston A. Henry, Director

managing risk with responsibility

754 321-1900

Telephone:

Risk Manage	ement Department	Fax:	754 321-1917
October 8, 20	Signature on File	For Custodia	1 Supervisor Use Only
TO:	Mark Kaplan, Principal Falcon Cove Middle School		Issues Addressed Issues Not Addressed
FROM:	Richard Rosa, Project Manager Risk Management Department		
SUBJECT:	Indoor Air Quality (IAQ) Assessment	-	

On September 24, 2013, I conducted an assessment at **Falcon Cove Middle 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.

	Falcon Cove I	<u>Middle</u> Evalu	uation Da	septem	ber 24, 2013	Time of Day	0:15
Outdoor Conditions	Ге mperature	84.9	Relativ	e Humidity	83.4	Ambient CO2 4	83
Fish Temperatu 120 72.3	re Range 72 - 78	Relative Hum 56.5	─ i	Range 0% - 60%	CO ² 756	Range # O MAX 700 > Ambient	ccupants
Noticeable Odor	No	Visible water dan staining?			microbial wth?	Amount of material affected	
Ceiling 2' x 4'		No			No		
Walls Drywall		No		N	No		
Floor 12" x 12" Vi	nyl	No		N	No		
Ceiling Clean No	=	HVAC Su Grills Cle		No		HVAC Return Grills Clean	No
Walls Clean Ye Flooring Clean Ye	=	Inside of Duct Clea		Yes		Inside of Return Duct Clean	No
Room Surfaces Ye	s	Ceiling at Grills Cle		No			
Trash Removed Ye	_	Exhaust Fans \	Working	N/A		Unapproved Chemicals / Cleaners in Room	No
Signs of Pests No	=	Drain Tr Food if Stored in in Sealed Contair	Room is	N/A		Air Fresheners in Room	No
Mechanical Equipment L	ocation FISI	l 130 Air handl	er unit 1	-8		Mechanical Room Clean	Yes
Filters Installed Properly	No	Filters	s Clean	Yes		Inside of HVAC Unit Clean	Yes
Condensate Pan Clean	Yes	Cooling Co	il Clean	No			
Fresh Air Intake Location Pollutant Sources Near Ai	<u> </u>	u exterior wall			▼	Fresh Air Intake Free of Obstruction	Yes
Intake	Stud	dent Drop Off Driv	ve		▼		
Observations There are two return gril	ls - dust build	d up on the cross	thru gri	ill adjacent	to the door		
Corrective Actions to be	Completed	by Site Based Sta	aff	Corre	ective Actio	ns to be Completed by Pl	20
Replace ceiling tiles a	around HVAC	supply grills	▼		Clean	the HVAC coil	▼
Clean HVAC supp			▼	Ev	aluate clear	ning HVAC return drop	
	/ipe return gr		▼				
Tape and d	ate HVAC filt	ers	▼				▼

Falcon Cove Middle Evalu	uation Dat	September 2	24, 2013	Time of Day	10:45
Outdoor Conditions Temperature 84.9	Relative	Humidity 8	83.4	Ambient CO2	483
Fish Temperature Range Relative Hum 122 71.9 72 - 78 55.4		Range % - 60%	CO ² 788	Range # C MAX 700 > Ambient	occupants
Noticeable Odor No Visible water day staining?	_	Visible micro growth?		Amount of material affected	
Ceiling 2' x 4' No		No			
Walls Folding/drywall No		No	L		
Floor 12" x 12" Vinyl No		No			
Ceiling Clean No HVAC Su Grills Cle		No		HVAC Return Grills Clean	Yes
Flooring Clean Yes Inside of Duct Clea		Yes		Inside of Return Duct Clean	No
Room Surfaces Yes Ceiling at Clean Grills Cle		No			
Trash Removed Yes Exhaust Fans \	Working	N/A		Unapproved Chemicals / Cleaners in Room	No
Signs of Pests No Drain Tr	raps Wet	N/A			
Room Cluttered No Food if Stored in in Sealed Contain		N/A		Air Fresheners in Room	No
Mechanical Equipment Location FISH 130 Air handl	ler unit 1-	-8		Mechanical Room Clean	Yes
Filters Installed Properly No Filter	s Clean	Yes	In	side of HVAC Unit Clean	Yes
Condensate Pan Clean Yes Cooling Co	il Clean	No			
Fresh Air Intake Location Pollutant Sources Near Air Student Drop Off Dri			▼	Fresh Air Intake Free of Obstruction	Yes
Intake Student Drop Off Dri	ve		▼		
Observations					
Corrective Actions to be Completed by Site Based Sta		Correctiv		to be Completed by P	
Replace ceiling tiles around HVAC supply grills Clean HVAC supply grills with Wexcide	▼	Evaluat		e HVAC coil ng HVAC return drop	▼
0.000 Supp.) 5	▼		10 010	9 117.0 10.0 0	▼
Tape and date HVAC filters	▼				▼

Falcon Cove Middle

Evaluation Date September 24, 2013

Time of Day

12:15

Outdoor Conditions Temperature 84.9	Relative Humidity 83.4 Ambient CO2 483
	# Humidity Range CO ² Range # Occupants 6.4 30% - 60% 913 MAX 700 > Ambient
	ter damage / Visible microbial Amount of ning? growth? material affected
Ceiling Plaster No.	
Walls Plaster No.	o No
Floor Quarry Tile No	o No
	AC Supply Is Clean No HVAC Return N/a N/a
	de of Supply Inside of Return Duct Clean N/A
· · · ·	ling at Supply Is Clean
	Fans Working Yes Unapproved Chemicals / Cleaners in Room No
Signs of Pests No Dra	ain Traps Wet Yes Air Fresheners No
Room Cluttered N/A Food if Store in Sealed Co	red in Room is in Room
Mechanical Equipment Location FISH 130 Air h	handler unit 1-10 Mechanical Room Clean Yes
Filters Installed Properly No	Filters Clean Yes Inside of HVAC Unit Clean Yes
Condensate Pan Clean Yes Coolin	ng Coil Clean No
Fresh Air Intake Location Thru exterior wa	all ▼ Fresh Air Intake Free of Obstruction Yes
Pollutant Sources Near Air Intake Student Drop Of	Of Obstruction ——
Observations	
The return HVAC grill is located outside the entrai	ince to the boys restroom. There is no door to the restroom.
Corrective Actions to be Completed by Site Base	
Clean LIVAC supply grills with Waysida	▼ Clean the HVAC coil ▼
Clean HVAC supply grills with Wexcide	
Tape and date HVAC filters	▼ ▼
	▼
	▼

Falcon Cove	Middle Evaluation Da	September 24, 2013	Time of Day 12	2:15
Outdoor Conditions Temperature	e 84.9 Relativ	e Humidity 83.4	Ambient CO2 48	33
Fish Temperature Range 126 71.0 72 - 78		Range CO ² 0% - 60%	Range # Oc MAX 700 > Ambient	cupants
Noticeable Odor No	Visible water damage / staining?	Visible microbial growth?	Amount of material affected	
Ceiling 2' x 4' Walls Drywall	No	No		
Walls Drywall Floor 12" x 12" Vinyl	No No	No No		
Ceiling Clean Yes	HVAC Supply Grills Clean	No	HVAC Return Grills Clean	Yes
Walls 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 FIS	6H 130 Air handler unit 1	I-10	Mechanical Room Clean	Yes
Filters Installed Properly No	Filters Clean		Inside of HVAC Unit Clean	Yes
Condensate Pan Clean Yes	Cooling Coil Clean	No		
	ru exterior wall	▼	Fresh Air Intake Free of Obstruction	Yes
intake	udent Drop Off Drive	▼		
Observations				
Corrective Actions to be Completed	I by Site Based Staff	Corrective Action	ns to be Completed by PP	0
Clean window sills			the HVAC coil	▼
Clean HVAC supply grills wit	h Wexcide ▼	Set temperatu	re to 72 - 78 degrees	▼

▼ ▼ ▼

Tape and date HVAC filters

Falcon Co	ve Middle Evalu	uation Da	ate Septemb	oer 24, 2013	Time of Day 1	1:15
Outdoor Conditions Temperate	ure 84.9	Relativ	e Humidity	83.4	Ambient CO2 4	83
Fish Temperature Range 127 70.7 72 -		─ i	Range 0% - 60%	CO ² 812	Range # Oo MAX 700 > Ambient	ccupants
Noticeable Odor No Ceiling 2' x 4'	Visible water dan staining?		Visible m grow	vth?	Amount of material affected	
Walls Folding/drywall	No		N	_		
Floor 12" x 12" Vinyl	No		No	_		
Ceiling Clean Yes Walls Clean Yes	HVAC Su Grills Cle Inside of	an Supply	No Yes		HVAC Return Grills Clean Inside of Return	No No
Room Surfaces Yes Clean	Duct Clea Ceiling at Grills Cle	Supply	No		Duct Clean	
Trash Removed Yes Signs of Pests No	Exhaust Fans \ Drain Tr		N/A		Unapproved Chemicals / Cleaners in Room	No
Room Cluttered No	Food if Stored in in Sealed Contair	Room is			Air Fresheners in Room	No
Mechanical Equipment Location	FISH 130 Air handl	ler unit	1-8		Mechanical Room Clean	Yes
Filters Installed Properly No	Filter	s Clean	Yes		Inside of HVAC Unit Clean	Yes
Condensate Pan Clean Yes	Cooling Co	il Clean	No			
Pollutant Sources Near Air	Thru exterior wall Student Drop Off Dri	ve		▼	Fresh Air Intake Free of Obstruction	Yes
Observations						
There are two return grills; the cro classroom.	ss thru grill adjacen	t to the	door is dirty.	. Two germ	Guard air cleaners are in	the
Corrective Actions to be Complet	ed by Site Based Sta	aff	Corre		ns to be Completed by PF	90
01		▼			the HVAC coil	
Clean HVAC supply grills v		▼			ing HVAC return drap	- ▼
Vacuum/wipe returi Tape and date HVAC		▼	EVa	aiuate ciean	ing HVAC return drop	▼

Falcon Cove Middle Eva	aluation Da	ate September 24, 20	13 Time of Day 12:	15
Outdoor Conditions Temperature 84.9	Relativ	ve Humidity 83.4	Ambient CO2 483	
Fish Temperature Range Relative Hu 128 70.1 72 - 78 58.3	i	Range <u>C</u> 60% - 60%		upants
Noticeable Odor No Visible water d staining Ceiling 2' x 4' No		Visible microbial growth?	Amount of material affected	-
Walls Drywall No		No		
Floor 12" x 12" Vinyl No		No		
Ceiling Clean Yes HVAC S Grills Cl Walls Clean Yes		No	HVAC Return Grills Clean Inside of Return	Yes
Flooring Clean Yes Duct Cle		Yes	Duct Clean	No
Room Surfaces No Ceiling a Clean Grills Cl	at Supply lean	Yes		
Trash Removed Yes Exhaust Fans Signs of Pests No Drain 1	s Working Traps Wet		Unapproved Chemicals / Cleaners in Room	No
Room Cluttered No Food if Stored in Sealed Conta	n Room is		Air Fresheners in Room	No
Mechanical Equipment Location FISH 130 Air hand	dler unit	1-10	Mechanical Room Clean	Yes
Filters Installed Properly No Filter	ers Clean	Yes	Inside of HVAC Unit Clean	Yes
Condensate Pan Clean Yes Cooling C	oil Clean	No		
Fresh Air Intake Location Pollutant Sources Near Air Intake Student Drop Off December 2015	rive	v	Fresh Air Intake Free of Obstruction	Yes
Observations				
Corrective Actions to be Completed by Site Based S	taff	Corrective Act	ions to be Completed by PPO	
Clean window sills	▼		n the HVAC coil	▼
Clean HVAC supply grills with Wexcide	 ▼	·	ature to 72 - 78 degrees	
Tape and date HVAC filters	▼	Evaluate cle	aning HVAC return drop	▼ ▼

Falcon Cove Middle Eval	uation D	ate September 24, 20	13 Time of Day 11:48)
Outdoor Conditions Temperature 84.9	Relativ	ve Humidity 83.4	Ambient CO2 483	
Fish Temperature Range Relative Hum 129 69.0 72 - 78 58.9	Ti i	Range Co 0% - 60%		pants
Noticeable Odor No Visible water da staining?	-	Visible microbial growth?	Amount of material affected	
Ceiling 2' x 4' No		No		
Walls Drywall No		No		
Floor 12" x 12" Vinyl No		No		
Ceiling Clean No HVAC Su Grills Clean Yes		No	HVAC Return Grills Clean	⁄es
Flooring Clean Yes Inside of Duct Clean		Yes	Inside of Return Duct Clean	No
Room Surfaces No Ceiling a Grills Clean		No		
Trash Removed Yes Exhaust Fans	_	N/A	Unapproved Chemicals / Cleaners in Room	No
Signs of Pests No Drain To	raps Wet	N/A	Air Fresheners	No
Room Cluttered No Food if Stored in Sealed Contai		N/A	in Room	NO
Mechanical Equipment Location FISH 130 Air hand	ler unit	1-8	Mechanical Room Clean	⁄es
Filters Installed Properly No Filter	rs Clean	Yes	Inside of HVAC Unit Clean	⁄es
Condensate Pan Clean Yes Cooling Co	oil Clean	No		
Fresh Air Intake Location Thru exterior wall		▼	Fresh Air Intake Free of Obstruction	res .
Pollutant Sources Near Air Intake Student Drop Off Dri	ive	▼		
Observations				
. There was an American flag installed on the wall, her	avy dus	build up on upper su	rface of flag.	
Corrective Actions to be Completed by Site Based St	aff	Corrective Act	ions to be Completed by PPO	
Replace ceiling tiles around HVAC supply grills	▼		n the HVAC coil	▼
Clean HVAC supply grills with Wexcide	 ▼		ature to 72 - 78 degrees	
Vacuum/wipe return grill Tape and date HVAC filters	▼	Evaluate Cle	aning HVAC return drop	▼

Clean cobwebs from elevated corners
Thoroughly clean elevated surfaces

Falcon Cove	Middle Evalu	uation Da	September 2	4, 2013	Time of Day 1	2:00
Outdoor Conditions Temperature	84.9	Relativ	re Humidity 8	33.4	Ambient CO2 4	83
Fish Temperature Range 131 68.9 72 - 78		 i	Range 0% - 60%	CO ² 822	Range # Oo MAX 700 > Ambient	ccupants
Noticeable Odor No	Visible water dan staining?	_	Visible micro growth?	bial	Amount of material affected	
Ceiling 2' x 4'	No		No			
Walls Drywall	No		No			
Floor 12" x 12" Vinyl	No		No			
Ceiling Clean No Walls Clean Yes	HVAC Su Grills Cle	an	No		HVAC Return Grills Clean	Yes
Flooring Clean No	Duct Clea		Yes		Inside of Return Duct Clean	No
Room Surfaces Yes Clean	Ceiling at Grills Cle		No			
Trash Removed Yes	Exhaust Fans V		N/A		Unapproved Chemicals / Cleaners in Room	No
Signs of Pests No Room Cluttered No	Food if Stored in in Sealed Contain		N/A		Air Fresheners in Room	No
Mechanical Equipment Location FIS	6H 130 Air handl	er unit 1	1-8		Mechanical Room Clean	Yes
Filters Installed Properly No	Filters	s Clean	Yes	li	nside of HVAC Unit Clean	Yes
Condensate Pan Clean Yes	Cooling Co	il Clean	No			
Pollutant Sources Near Air	ru exterior wall	ve		V	Fresh Air Intake Free of Obstruction	Yes
Observations						
There are glue build up stains in var	ious locations on	the floo	*			
Corrective Actions to be Completed	by Site Based Sta	aff	Corrective	e Action	s to be Completed by PF	.o
Replace ceiling tiles around HVA	C supply grills	▼			he HVAC coil	▼
Clean HVAC supply grills wit		▼	Set ter	nperatu	re to 72 - 78 degrees	▼
Vacuum/wipe return g	grill	▼	Evaluat	e cleani	ng HVAC return drop	▼
Tape and date HVAC fi	lters	▼				▼

Clean stained flooring