

managing risk with responsibility

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September 11, 2012 Signature on File

TO: Wendy Doll, Principal

Cooper City High 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		
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On August 29, 2012, I conducted an assessment at **Cooper City High 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.

Coo	pper City High Eva	aluation Date	August 29, 2012	Time of Day	2:15
Outdoor Conditions Tempe	rature 88.8	Relative Hu	midity 66.7	Ambient CO2	414
	Range Relative Hu 72 - 78 68.7	amidity Ran	100		Occupants 2
Noticeable Odor No	Visible water o	iailiage /	Visible microbial growth?	Amount of material affected	i
Ceiling 2' x 4'	No		No		
Walls Metal	No		No		
Floor 12" x 12" Vinyl	No		No		
Ceiling Clean Yes	HVAC S Grills C		Yes	HVAC Return Grills Clean	Yes
Walls Clean Yes Flooring Clean Yes	Inside o	of Supply ean	Yes	Inside of Return Duct Clean	Yes
Room Surfaces Yes Clean	Ceiling Grills C	at Supply lean	Yes		
Trash Removed Yes	Exhaust Fans	s Working	N/A	Unapproved Chemicals	s / No
Signs of Pests No	Drain [*]	Traps Wet	N/A		Na
Room Cluttered No	Food if Stored in Sealed Conta		N/A	Air Fresheners in Room	No
Mechanical Equipment Location	Roof Top			Mechanical Room Clea	n N/A
Filters Installed Properly	es Filt	ers Clean	Yes	Inside of HVAC Unit Clea	n Yes
Condensate Pan Clean Ye	Cooling (Coil Clean	Yes		
Fresh Air Intake Location	Roof top		▼	Fresh Air Intake Fre	e Yes
Pollutant Sources Near Air Intake	No		▼	of Obstruction	
Observations					
Unoccupied classroom for a w	eek-Check fresh air da	amper. Extrem	ely wet conditions	s in classroom, all hard	surfaces
are wet. Custodian Jamie states that or	nly one chiller is opera	ntional and tha	t chiller is not run	ning at full strength. I re	equested a
meeting with all the departmen work order.	t heads to discuss so	lutions. HFSP	states there is a r	odent problem and calle	ed in a
Work Order J564203 generated	I to address concerns				
Corrective Actions to be Comp			Corrective Action	ons to be Completed by	PPO
Continue to monitor and wipe	e surfaces w/ wexcide	▼ _	Repair HVAC	to reduce humidity level	
		 ▼	Repair HVAC	to reduce CO2 levels	▼
		▼			▼
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Cooper C	Eity High Evaluation Da	August 29, 2012	Time of Day 2	2:15
Outdoor Conditions Temperature	e 88.8 Relativ	e Humidity 66.7	Ambient CO2 4	14
Fish Temperature Range 138 74.4 72 - 78		Range CO ² 1108		ccupants 2
Noticeable Odor No	Visible water damage / staining?	Visible microbial growth?	Amount of material affected	
Ceiling 2' x 4'	Yes	No	1 ceiling tile < 1 sq	ft
Walls Metal/drywall	No	No		
Floor 12" x 12" Vinyl	No	No		
Ceiling Clean No 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	N/A	Unapproved Chemicals / Cleaners in Room	No
Signs of Pests No	Drain Traps Wet	N/A	Air Fresheners	No
Room Cluttered No	Food if Stored in Room is in Sealed Containers	N/A	in Room	NO
Mechanical Equipment Location Ro	oof Top		Mechanical Room Clean	N/A
Filters Installed Properly Yes	Filters Clean	Yes	Inside of HVAC Unit Clean	Yes
Condensate Pan Clean Yes	Cooling Coil Clean	Yes		
Fresh Air Intake Location Ro	oof top	▼	Fresh Air Intake Free of Obstruction	Yes
Pollutant Sources Near Air Intake)	▼	or obstruction	
Observations				
Check fresh air damper. Extremely of Custodian Jamie states that only on meeting with all the department hea HFSP states there is a rodent problem.	e chiller is operational and ds to discuss solutions. T	d that chiller is not runn here is a roof drain pipe	ing at full strength. I requ	
Work Order J564203 generated to ac	ddress concerns.			
Corrective Actions to be Completed			ns to be Completed by PF	0
Continue to manitar and wine our	:!!	Dama! IIV/AO 4a	اميرما برازان المنام مميرات	1 - 1

Continue to monitor and wipe surfaces w/ wexcide	▼
Replace stained ceiling tile after repair	▼
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Onlective Actions to be completed by 11 O	
Repair HVAC to reduce humidity level	▼
Repair HVAC to reduce CO2 levels	▼
Evaluate and repair cause of stained ceiling tiles	▼
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Cooper C	City High Evaluation Date	te August 29, 2012	Time of Day2	2:15
Outdoor Conditions Temperatur	e 88.8 Relative	e Humidity 66.7	Ambient CO2 4	14
Fish Temperature Range 172 72.8 72 - 78	i	Range CO % - 60%		ccupants 2
Noticeable Odor No	Visible water damage / staining?	Visible microbial growth?	Amount of material affected	
Ceiling 2' x 4'	Yes	No	Various >16 sq ft	
Walls Metal/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	N/A	Unapproved Chemicals / Cleaners in Room	No
Signs of Pests No	Drain Traps Wet	N/A	Air Fresheners	No
Room Cluttered No	Food if Stored in Room is in Sealed Containers	N/A	in Room	
Mechanical Equipment Location Ro	oof Top		Mechanical Room Clean	N/A
Filters Installed Properly Yes	Filters Clean	Yes	Inside of HVAC Unit Clean	Yes
Condensate Pan Clean Yes	Cooling Coil Clean	Yes		
Fresh Air Intake Location Ro	oof top	▼	Fresh Air Intake Free of Obstruction	Yes
Pollutant Sources Near Air Intake)	▼		
Observations				
Chack frash air damnar				

Custodian Jamie states that only one chiller is operational and that chiller is not running at full strength. I requested a meeting with all the department heads to discuss solutions. Many of the stained ceiling tiles have been recently changed out due to roof leaks. HFSP stated roofers were at site prior to Tropical storm Issac, 16 sq ft of stained ceiling. tiles were changed out after Issac passed. HFSP states there is a rodent problem and called in a work order. Work Order J564203 generated to address concerns.

Corrective Actions to be Completed by Site Based Staff

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Corrective Actions to be Completed by PPO

Repair HVAC to reduce humidity level	▼
Repair HVAC to reduce CO2 levels	▼
Evaluate and repair cause of stained ceiling tiles	▼
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Соор	per City High Evaluation Da	August 29, 2012	Time of Day 2:15
Outdoor Conditions Temper	ature 88.8 Relativ	re Humidity 66.7	Ambient CO2 414
	ange Relative Humidity 2 - 78 61.5 30	Range CO ² 1818	Range # Occupants MAX 700 > 2 Ambient
Noticeable Odor No	Visible water damage / staining?	Visible microbial growth?	Amount of material affected
Ceiling 2' x 4'	Yes	Yes	7 ceiling tiles
Walls Metal	Yes	No	50 sq ft
Floor Carpet	Yes	No	entire storage area
Ceiling Clean No Walls Clean No	HVAC Supply Grills Clean	Yes	HVAC Return Grills Clean
Flooring Clean No	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
Signs of Pests No	Drain Traps Wet	N/A	
Room Cluttered No	Food if Stored in Room is in Sealed Containers	N/A	Air Fresheners No in Room
Mechanical Equipment Location	Roof Top		Mechanical Room Clean N/A
Filters Installed Properly Yes	s Filters Clean	Yes	nside of HVAC Unit Clean Yes
Condensate Pan Clean Yes	Cooling Coil Clean	Yes	
Fresh Air Intake Location	Roof top	▼	Fresh Air Intake Free
Pollutant Sources Near Air Intake	No	▼	of Obstruction
Observations			
	heads to discuss solutions. R	emove carpet and no ne	ng at full strength. I requested a w flooring needs to be replaced. d in a work order.
Work Order J564203 generated	to address concerns.		
Corrective Actions to be Comp	leted by Site Based Staff	Corrective Action	s to be Completed by PPO

Continue to monitor and wipe surfaces w/ wexcide	▼
Replace stained ceiling tiles after repairs	▼
Thoroughly clean all surfaces	▼
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Repair HVAC to reduce humidity level	▼
Repair HVAC to reduce CO2 levels	▼
Evaluate and repair cause of stained ceiling tiles	▼
Evaluate carpet for replacement	▼
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Cooper City	y High Evaluation Da	te August 29, 2012	Time of Day 2:15
Outdoor Conditions Temperature	88.8 Relative	e Humidity 66.7	Ambient CO2 414
Fish Temperature Range 172B 69.6 72 - 78		Range CO ² 1850	Range # Occupants MAX 700 > 2 Ambient
Noticeable Odor No	Visible water damage / staining?	Visible microbial growth?	Amount of material affected
Ceiling 2' x 4'	Yes	No	1 ceiling tile
Walls Metal/drywall	No	No	
Floor Carpet	Yes	No	entire storage area
Ceiling Clean No	HVAC Supply Grills Clean	Yes	HVAC Return Grills Clean
Walls Clean Yes Flooring Clean No	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
Signs of Pests No Room Cluttered No	Drain Traps Wet Food if Stored in Room is	N/A	Air Fresheners No in Room
	in Sealed Containers		
Mechanical Equipment Location Roo	f Тор		Mechanical Room Clean N/A
Filters Installed Properly Yes	Filters Clean	Yes	Inside of HVAC Unit Clean Yes
Condensate Pan Clean Yes	Cooling Coil Clean	Yes	
Fresh Air Intake Location Roo	f top	▼	Fresh Air Intake Free of Obstruction Yes
Pollutant Sources Near Air Intake		▼	of Obstruction
Observations			
Check fresh air damper. Custodian Jamie states that only one meeting with all the department head Repair roofing to eliminate roof leaks	s to discuss solutions. Re	emove carpet and no ne	ew flooring needs to be replaced.
Work Order J564203 generated to add	dress concerns.		

Corrective Actions to be Completed by Site Based Staff

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Continue to monitor and wipe surfaces w/ wexcide	▼
Replace stained ceiling tile after repair	▼
Thoroughly clean all surfaces	▼
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Corrective Actions to be Completed by PPO

Repair HVAC to reduce humidity level	▼
Repair HVAC to reduce CO2 levels	▼
Evaluate and repair cause of stained ceiling tiles	▼
Evaluate the need for carpet replacement	▼
Set temperature to 72 - 78 degrees	▼
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	▼
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