

# managing risk with responsibility

Aston A. Henry, Director Risk Management Department		Telephone: Fax:	754 321-1900 754 321-1917
August 20, 2	2013 Signature on File	For Custodial S	upervisor Use Only
TO:	Brian Faso, Principal  Miramar High School		ues Addressed ues Not Addressed
FROM:	Richard Rosa, Project Manager Risk Management Department		
SUBJECT:	Indoor Air Quality (IAQ) Assessment	-	

On August 7, 2013, I conducted an assessment at **Miramar 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: 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.

## **IAQ Assessment**

ation Date August 7, 2013 Time of Day 9:15
Relative Humidity 87.1 Ambient CO2 454
dity Range CO <sup>2</sup> Range # Occupants  30% - 60% 456 MAX 700 > Ambient
nage / Visible microbial Amount of growth? material affected
No No
No
tupply Yes Inside of Return Duct Clean Yes
Supply Yes
Vorking N/A Unapproved Chemicals / Cleaners in Room No
PS Wet N/A Air Fresheners No In Room
Mechanical Room Clean Yes
Clean No Inside of HVAC Unit Clean Yes
Clean Yes
▼ Fresh Air Intake Free of Obstruction Yes
ed off and on for two weeks, partially due to fire alarm system Follow up with the fire alarm department regarding current ng was the staining between floor tiles. Cause was explained to
f Corrective Actions to be Completed by PPO
Repair HVAC to reduce humidity level
▼ Set temperature to 72 - 78 degrees ▼ ▼
▼
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## **IAQ Assessment**

	Miramar High	<u>Evaluation</u>	n Date Augus	t 7, 2013	Time of Day	10:00
Outdoor Conditions Tem	perature	81.9 Rel	ative Humidity [	87.1	Ambient CO2	454
Fish Temperature 1424 81.3	Range 72 - 78	Relative Humidity	Range 30% - 60%	<b>CO</b> <sup>2</sup> 454	Range # C MAX 700 > Ambient	Occupants
Noticeable Odor No	Vis	ible water damage staining?	y Visible m grow		Amount of material affected	
Ceiling 2' x 4'		No	No	<u></u>		
Walls Drywall	_	No	No	<u> </u>		
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 Supp Duct Clean	Yes		Inside of Return Duct Clean	Yes
Room Surfaces Yes Clean		Ceiling at Sup Grills Clean	ply Yes			
Trash Removed Yes	E	xhaust Fans Work			Unapproved Chemicals /	No
Signs of Pests No  Room Cluttered No		Drain Traps V d if Stored in Roor ealed Containers			Air Fresheners in Room	No
Mechanical Equipment Locati	ion FISH 142	7			Mechanical Room Clean	Yes
Filters Installed Properly	Yes	Filters Cle	an No	I	nside of HVAC Unit Clean	Yes
Condensate Pan Clean	Yes	Cooling Coil Cle	ean Yes			
Fresh Air Intake Location Pollutant Sources Near Air	Roof top			▼	Fresh Air Intake Free of Obstruction	Yes
Intake	No			▼		
Observations						
The HFSP states that the HV repairs. Gary Hahn is current work orders in place. The other to staff.	tly working on	the system. Fol	low up with the f	fire alarm d	epartment regarding cu	rrent
Corrective Actions to be Co	mpleted by Si	te Based Staff	Correc	ctive Action	s to be Completed by P	PO
Follow up with the fire	alarm depart	ment <b>v</b>			reduce humidity level	▼
		▼	Set	t temperatu	re to 72 - 78 degrees	▼
						<b>—   ▼</b>

### **IAQ Assessment**

	Miramar High Evaluation Da	August 7, 2013	Time of Day 10:30		
Outdoor Conditions Tem	perature 81.9 Relativ	e Humidity 87.1	Ambient CO2 454		
Fish Temperature P-396 65.8	Range Relative Humidity 72 - 78 40.7 30	Range CO <sup>2</sup> 0% - 60% 510	Range # Occupants MAX 700 > Ambient		
Noticeable Odor No	Visible water damage / staining?	Visible microbial growth?	Amount of material affected		
Ceiling Homasote	Yes	No	Entire ceiling is wet		
Walls Homasote	Yes	Yes	50 sq ft		
Floor 12" x 12" Vinyl	No	No			
Ceiling Clean No Walls Clean No Flooring Clean Yes	HVAC Supply Grills Clean Inside of Supply Duct Clean	Yes	HVAC Return Grills Clean  Inside of Return Duct Clean  Yes		
Room Surfaces Yes Clean	Ceiling at Supply Grills Clean	Yes			
Trash Removed Yes  Signs of Pests No  Room Cluttered No	Exhaust Fans Working  Drain Traps Wet  Food if Stored in Room is in Sealed Containers	N/A N/A	Unapproved Chemicals / No Cleaners in Room  Air Fresheners in Room		
Mechanical Equipment Location FISH 1427 Mechanical Room Clean Yes					
Filters Installed Properly	Yes Filters Clean	No	nside of HVAC Unit Clean Yes		
Condensate Pan Clean	Yes Cooling Coil Clean	Yes			
Fresh Air Intake Location	Roof top	▼	Fresh Air Intake Free Yes		
Pollutant Sources Near Air Intake	No	▼	or obstruction		
Observations					

The ceiling is wet due to condensation in the room because of the super cooled occupied space. There is an entire wall panel wet under Southwest window. The East wall panel adjacent to the North HVAC unit needs repair/replacement. Adjacent to the South HVAC unit there are three wall panels wet and damaged also needing repair/replacement. This area has a hole in the wall due to water damage. Evaluate the exterior for water intrusion in the areas of interior water damage. Remove bulletin board and assess surrounding water damaged areas.

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

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#### Corrective Actions to be Completed by PPO

Evaluate and repair cause of water damage	▼
Remove and replace wall material as necessary	▼
Set temperature to 72 - 78 degrees	▼
	▼
	▼
	▼
	▼
	▼