

managing risk with responsibility

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August 2, 2012 Signature on File

TO: Priscilla Ribeiro, Principal

Fort Lauderdale 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						

On October 26, 2011, I conducted an assessment at **Fort Lauderdale 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/jg Enc.

	Fort I	_auderdale Higl	h School		Evaluation Request	ed October 26, 2011	
Time of Day	1500				Evaluation D	ate October 26, 2011	
Outdoor Condi	tions Tem	perature 8	1.8 F	Relative Humidity	48.5 Am	abient CO2 455	
			tive Humidity	Range		Range # Occupants	
507	72.1 7	2 - 78	64.2	80% - 60%	753 Max 7	700 > Ambient	
Noticeable Od	lor No	-	'isible water age / staining?	Visible micro growth?	7		
Ceiling Type	2 x 2 Lay	in	Yes	No	2 st	ained ceiling tiles	
Wall Type	Drywall		No	No			
Flooring	Carpet		No	No			
	Clean	Minor Dust / Debris	Needs Cleaning		Corrective Action	n Required	
Ceiling			Yes		See Below		
Walls	х						
Flooring	х						
HVAC Supply	Grills x						
HVAC Return Grills Yes Clean Appropriately			riately				
Ceiling at Sup Grills	Ceiling at Supply x Grills						
Surfaces in Ro	oom		Yes		Clean Approp	riately	
bservations							
Findings - FISH 507- Elevated humidity level							
Site Based Maintenance - FISH 507- Dust build up on HVAC return grills. Clean as appropriate FISH 507- 2 stained ceiling tiles. Remove and replace ceiling tiles and monitor. If staining returns contact COMPASS to generate a work order FISH 507-Dust build up on elevated surfaces and low corner. Clean as appropriate. Physical Plant Operation -FISH 507- Evaluate HVAC system for proper operation and repair as appropriate to lower humidity level							

-Note Work orders EQ02197 and EQ02198 issued 11/7/11

IAQ Assessment

Location Number

	Fort I	_auderdale High	n School		Evaluation	Requested [October 26, 2011
Time of Day [1400				Eval	uation Date	October 26, 2011
Outdoor Condi	itions Tem	perature 8	1.8 F	Relative Humidit	ty 48.5	Ambier	at CO2 455
Fish 519 Noticeable Oc Ceiling Type Wall Type Flooring	69.3	2 - 78 V dam	ive Humidity 63 isible water age / staining? No Yes No	Range 30% - 60% Visible mic growth No No		Amount of naterial affect	- Ambient
	Clean	Minor Dust / Debris	Needs Cleaning		Correctiv	e Action Rec	quired
Ceiling	Х						
Walls			Yes		See Below		
Flooring	x						
HVAC Supply	Grills	х			Clean	Appropriate	ly
HVAC Return	Grills		Yes		Clean	Appropriate	ly
Ceiling at Sup Grills	oply x						
Surfaces in Ro	oom	х			Clean	Appropriate	ly
bservations							

Location Number

0

<u>|Findings</u>

- FISH 519- Elevated humidity level
- FISH 519- Water damaged wallboard in the northeast corner n the window wall. Staining on exterior of the building adjacent to inside damage.

Site Based Maintenance

- FISH 519- Dust build up on HVAC return grills. Clean as appropriate.
- FISH 519- Dust build up on HVAC supply grills. Clean as appropriate
- FISH 519-Dust build up on elevated surfaces and low corners. Clean as appropriate

Physical Plant Operation

- -FISH 519- Evaluate HVAC system for proper operation and repair as appropriate to lower humidity level
- -FISH 519- Evaluate for cause of water intrusion and repair as appropriate. Repair/replace wall and ceiling material as necessary.

Note Work orders EQ02197 and EQ02198 issued 11/7/11

Fort Lauderdale High School Evaluation Requested October 26, 2011						
Time of Day 1420 Evaluation Date October 26, 2011						
Outdoor Conditions Temperature 81.8 Relative Humidity 48.5 Ambient CO2 455						
Fish Temperature Range Relative Humidity Range CO2 Range # Occupants						
520 73.1 72 - 78 56.2 30% - 60% 764 Max 700 > Ambient						
Noticeable Odor No Visible water Visible microbial Amount of damage / staining? growth? material affected						
Ceiling Type 2 x 2 Lay in No No						
Wall Type Drywall No No						
Flooring Carpet No No						
Clean Minor Dust Needs Corrective Action Required / Debris Cleaning						
Ceiling x						
Walls x						
Flooring Yes Clean Appropriately						
HVAC Supply Grills X Clean Appropriately						
HVAC Return Grills Yes Clean Appropriately						
Ceiling at Supply x Grills						
Surfaces in Room						
bservations						
Findings - FISH 520- Chiller HVAC system currently under repair, HFP states one chiller is continually running while the other chiller is being repaired						
Site Based Maintenance - FISH 520- Dust build up on HVAC return grills. Clean as appropriate FISH 520- Dust build up on HVAC supply grills. Clean as appropriate - FISH 520-Dust build up on elevated surfaces and low corners. Clean as appropriate						
- FISH 520-Dust and debris on floor. Clean and sanitize.						
Physical Plant Operation						
-Note Work orders EQ02197 and EQ02198 issued 11/7/11						

Location Number

Fort Lauderdale High School Evaluation Requested October 26, 2011						
Time of Day 1440 Evaluation Date October 26, 2011						
Outdoor Conditions Temperature 81.8 Relative Humidity 48.5 Ambient CO2 455						
Fish Temperature Range Relative Humidity Range CO2 Range # Occupants 521 70.2 72 - 78 61.4 30% - 60% 734 Max 700 > Ambient Noticeable Odor No Visible water damage / staining? Visible microbial growth? Amount of material affected Ceiling Type 2 x 2 Lay in No No No Flooring Carpet No						
Clean Minor Dust Needs Corrective Action Required Ceiling x						
Walls x						
Flooring x						
HVAC Supply Grills						
HVAC Return Grills Yes Clean Appropriately						
Ceiling at Supply x Grills						
Surfaces in Room						
Dbservations						
Findings - FISH 521- Chiller HVAC system currently under repair , HFP states one chiller is continually running while the other chiller is being repaired						
Site Based Maintenance - FISH 521- Dust build up on HVAC return grills. Clean as appropriate FISH 521- Dust build up on HVAC supply grills. Clean as appropriate - FISH 521-Dust build up on elevated surfaces and low corners. Clean as appropriate						
Physical Plant Operation						
-Note Work orders EQ02197 and EQ02198 issued 11/7/11						

Location Number

	Fort I	_auderdale Higl	n School		Evaluation	n Requested	October 26, 2011
Time of Day	1320				Ev	aluation Date	October 26, 2011
Outdoor Conditi	ons Tem	perature 8	1.8	Relative Humic	dity 48.5	Ambier	nt CO2 455
922 Noticeable Odo Ceiling Type Wall Type	73.8 7 r No 2 x 2 Lay Drywall	2 - 78 V dam	isible water age / staining Yes	No	vth?	Amount of material affect	> Ambient
Flooring	Carpet		No	No			
	Clean	Minor Dust / Debris	Needs Cleaning		Correcti	ive Action Re	quired
Ceiling			Yes			See below	
Walls	х						
Flooring	X						
HVAC Supply G	irills		Yes		Clear	n Appropriate	ly
HVAC Return G	rills		Yes		Clear	n Appropriate	ly
Ceiling at Supp Grills	ly x						
Surfaces in Roc	om	х			Clear	n Appropriate	ly
bservations							
Eindingo							

Location Number

<u>Findings</u>

- FISH 922- Chiller HVAC system currently under repair , HFP states one chiller is continually running while the other chiller is being repaired
- FISH 922-Signs of water intrusion and stained ceiling tiles, possible HVAC roof penetration,

Site Based Maintenance

- FISH 922- Dust build up on HVAC return grills. Clean as appropriate.
- FISH 922- Dust build up on HVAC supply grills. Clean as appropriate
- FISH 922-Dust build up on elevated surfaces, bookshelves and horizontal surfaces .Cobwebs in elevated corners. Clean as appropriate.

Physical Plant Operation

- FISH 922- Evaluate for cause of water intrusion. Repair/replace wall and ceiling material as necessary.

-Note Work orders EQ02197 and EQ02198 issued 11/7/11