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Risk Management Department

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January 31, 2013

Signature on File

TO: Haleh Darbar, Principal
Everglades High School

FROM: Richard Rosa, Project Manager
Facilities Design and Construction

SUBJECT: Indoor Air Quality (IAQ) Assessment

<u>For Custodial Supervisor Use Only</u>	
<input type="checkbox"/>	Custodial Issues Addressed
<input type="checkbox"/>	Custodial Issues Not Addressed

On January 28, 2013, I conducted an assessment at **Everglades 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.

IAQ Assessment

Everglades High

Evaluation Date January 28, 2013

Time of Day 10:00

Outdoor Conditions Temperature 77.5

Relative Humidity 57.7

Ambient CO2 416

Fish	Temperature	Range	Relative Humidity	Range	CO ²	Range	# Occupants
358	69.6	72 - 78	56.1	30% - 60%	607	MAX 700 > Ambient	
Noticeable Odor		No	Visible water damage / staining?		Visible microbial growth?		Amount of material affected
Ceiling	2' x 4'		No		No		
Walls	Plaster / Drywall		Yes		No		< 2 sq ft
Floor	12" x 12" Vinyl		No		No		

Ceiling Clean	No	HVAC Supply Grills Clean	No	HVAC Return Grills Clean	No
Walls Clean	No	Inside of Supply Duct Clean	Yes	Inside of Return Duct Clean	Yes
Flooring Clean	Yes	Ceiling at Supply Grills Clean	No		
Room Surfaces Clean	No				

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 in Room	No
Room Cluttered	No	Food if Stored in Room is in Sealed Containers	N/A		

Mechanical Equipment Location	FISH 355		Mechanical Room Clean	Yes	
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	Roof top ▼	Fresh Air Intake Free of Obstruction	Yes
Pollutant Sources Near Air Intake	No ▼		

Observations

Water damage is located adjacent to right window.

The filters are installed properly but the dates are missing.

The control starter for the HVAC unit was in by-pass, HFSP switched it back to Auto.

Corrective Actions to be Completed by Site Based Staff

Thoroughly clean elevated surfaces	▼
Clean ceilings around HVAC supply grills	▼
Clean HVAC supply grills with Wexcide	▼
Vacuum/wipe HVAC return grill	▼
Ensure A/C filters are properly dated	▼
	▼
	▼
	▼

Corrective Actions to be Completed by PPO

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

IAQ Assessment

Everglades High

Evaluation Date January 28, 2013

Time of Day 10:45

Outdoor Conditions Temperature 77.5

Relative Humidity 57.7

Ambient CO2 416

Fish	Temperature	Range	Relative Humidity	Range	CO ²	Range	# Occupants
376	71.1	72 - 78	64.2	30% - 60%	911	MAX 700 > Ambient	
Noticeable Odor		Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
Ceiling		Walls		Floor			
No		2' x 4'		Plaster / Drywall		12" x 12" Vinyl	
No		No		No			
Yes		Yes		No		< 2 sq ft	
No		No		No			

Ceiling Clean	<input type="checkbox"/> No	HVAC Supply Grills Clean	<input type="checkbox"/> No	HVAC Return Grills Clean	<input type="checkbox"/> No
Walls Clean	<input type="checkbox"/> No	Inside of Supply Duct Clean	<input type="checkbox"/> Yes	Inside of Return Duct Clean	<input type="checkbox"/> Yes
Flooring Clean	<input type="checkbox"/> Yes	Ceiling at Supply Grills Clean	<input type="checkbox"/> No		
Room Surfaces Clean	<input type="checkbox"/> No				

Trash Removed	<input type="checkbox"/> Yes	Exhaust Fans Working	<input type="checkbox"/> N/A	Unapproved Chemicals / Cleaners in Room	<input type="checkbox"/> No
Signs of Pests	<input type="checkbox"/> No	Drain Traps Wet	<input type="checkbox"/> N/A	Air Fresheners in Room	<input type="checkbox"/> No
Room Cluttered	<input type="checkbox"/> Yes	Food if Stored in Room is in Sealed Containers	<input type="checkbox"/> N/A		

Mechanical Equipment Location	FISH 373	Mechanical Room Clean	<input type="checkbox"/> Yes
Filters Installed Properly	<input type="checkbox"/> Yes	Filters Clean	<input type="checkbox"/> Yes
Condensate Pan Clean	<input type="checkbox"/> Yes	Cooling Coil Clean	<input type="checkbox"/> Yes
		Inside of HVAC Unit Clean	<input type="checkbox"/> Yes

Fresh Air Intake Location	Roof top	Fresh Air Intake Free of Obstruction	<input type="checkbox"/> Yes
Pollutant Sources Near Air Intake	No		

Observations

Water damage is located adjacent to left window.

There are cardboard boxes stored on top of cabinetry. The contents of the cardboard boxes that are stored on top of the cabinets should be in plastic containers with lids.

The filters are installed properly but the dates are missing.

- Corrective Actions to be Completed by Site Based Staff**
- | | |
|--|---|
| Thoroughly clean elevated surfaces | ▼ |
| Clean ceilings around HVAC supply grills | ▼ |
| Clean HVAC supply grills with Wexcide | ▼ |
| Vacuum/wipe HVAC return grill | ▼ |
| Ensure A/C filters are properly dated | ▼ |
| | ▼ |
| | ▼ |
| | ▼ |

- Corrective Actions to be Completed by PPO**
- | | |
|---|---|
| Repair HVAC to reduce humidity level | ▼ |
| | ▼ |
| Evaluate and repair cause of water damage | ▼ |
| Remove and replace wall material as necessary | ▼ |
| | ▼ |
| See observations for additional information | ▼ |
| | ▼ |
| | ▼ |

IAQ Assessment

Everglades High

Evaluation Date January 28, 2013

Time of Day 11:15

Outdoor Conditions Temperature 77.5

Relative Humidity 57.7

Ambient CO2 416

Fish	Temperature	Range	Relative Humidity	Range	CO ²	Range	# Occupants
378	71.2	72 - 78	65.5	30% - 60%	968	MAX 700 > Ambient	
Noticeable Odor		No	Visible water damage / staining?		Visible microbial growth?		Amount of material affected
Ceiling	2' x 4'		No		No		
Walls	Plaster / Drywall		Yes		No		< 2 sq ft
Floor	12" x 12" Vinyl		No		No		

Ceiling Clean	Yes	HVAC Supply Grills Clean	No	HVAC Return Grills Clean	No
Walls Clean	No	Inside of Supply Duct Clean	Yes	Inside of Return Duct Clean	Yes
Flooring Clean	Yes	Ceiling at Supply Grills Clean	Yes		
Room Surfaces Clean	No				

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 in Room	No
Room Cluttered	No	Food if Stored in Room is in Sealed Containers	N/A		

Mechanical Equipment Location	FISH 373		Mechanical Room Clean	Yes	
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	Roof top ▼	Fresh Air Intake Free of Obstruction	Yes
Pollutant Sources Near Air Intake	No ▼		

Observations

Minor water damage is located above windows. The filters are installed properly but the dates are missing.

Corrective Actions to be Completed by Site Based Staff

Thoroughly clean elevated surfaces	▼
Ensure A/C filters are properly dated	▼
Clean HVAC supply grills with Wexcide	▼
Vacuum/wipe HVAC return grill	▼
	▼
	▼
	▼
	▼

Corrective Actions to be Completed by PPO

Repair HVAC to reduce humidity level	▼
	▼
Evaluate and repair cause of water damage	▼
Remove and replace wall material as necessary	▼
	▼
See observations for additional information	▼
	▼
	▼