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Risk Management Department

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October 1, 2012

Signature on File

TO: Jonathan Williams, Principal
Northeast High School

FROM: Robert Krickovich, Coordinator I, LEA
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 September 27, 2012, I conducted an assessment at **Northeast 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

RK/tc
Enc.

IAQ Assessment

Northeast High

Evaluation Date September 27, 2012

Time of Day 2:30

Outdoor Conditions Temperature 90.3

Relative Humidity 64.1

Ambient CO2 466

Fish	Temperature	Range	Relative Humidity	Range	CO ²	Range	# Occupants
241	65.8	72 - 78	59.1	30% - 60%	512	MAX 700 > Ambient	1
Noticeable Odor		Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
No		Yes		No		1 Sq Ft over doorway by 241B	
Ceiling	2' X 2' Lay in / Plaster		Yes	No	Entire room		
Walls	Plaster		Yes	No	 		
Floor	12" x 12" Vinyl		No	No	 		

Ceiling Clean	Yes	HVAC Supply Grills Clean	No	HVAC Return Grills Clean	Yes
Walls Clean	No	Inside of Supply Duct Clean	Yes	Inside of Return Duct Clean	Yes
Flooring Clean	No	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	Roof Top	Mechanical Room Clean	N/A
Filters Installed Properly	N/A	Filters Clean	N/A
Condensate Pan Clean	N/A	Cooling Coil Clean	N/A
		Inside of HVAC Unit Clean	N/A

Fresh Air Intake Location	Roof top ▼	Fresh Air Intake Free of Obstruction	Yes
Pollutant Sources Near Air Intake	None ▼		

Observations

Wall plaster cracked / blistered/ flaking entire room - Dirt / debris on flooring - Debris in light fixture lenses - Dust on surfaces - One 2' x 2' ceiling tile missing.

- Corrective Actions to be Completed by Site Based Staff**
- | | |
|--|---|
| Thoroughly clean all surfaces | ▼ |
| Remove debris from lights | ▼ |
| Clean ceilings around HVAC supply grills | ▼ |
| Clean HVAC supply grills with Wexcide | ▼ |
| Replace missing ceiling tile | ▼ |
| Thoroughly clean and sanitize flooring | ▼ |
| | ▼ |
| | ▼ |
| | ▼ |

- Corrective Actions to be Completed by PPO**
- | | |
|--|---|
| Set temperature to 72 - 78 degrees | ▼ |
| Evaluate and repair cause of stained ceiling tiles over doorway to FISH 241B | ▼ |
| Remove and replace ceiling tiles | ▼ |
| Evaluate walls and repair as appropriate | ▼ |
| | ▼ |
| | ▼ |
| | ▼ |

IAQ Assessment

Northeast High

Evaluation Date September 27, 2012

Time of Day 2:30

Outdoor Conditions Temperature 90.3

Relative Humidity 64.1

Ambient CO2 466

Fish	Temperature	Range	Relative Humidity	Range	CO ²	Range	# Occupants
268	71.0	72 - 78	62.5	30% - 60%	640	MAX 700 > Ambient	2
Noticeable Odor		Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
Ceiling		Walls		Floor			
Yes		2' X 4' Lay in		Plaster		12" x 12" Vinyl	
No		No		No		Entire East wall	
No		Yes		No		No	

Ceiling Clean	<input type="checkbox"/> Yes	HVAC Supply Grills Clean	<input type="checkbox"/> No	HVAC Return Grills Clean	<input type="checkbox"/> Yes
Walls Clean	<input type="checkbox"/> Yes	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"/> Yes		
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"/> Yes	Air Fresheners in Room	<input type="checkbox"/> No
Room Cluttered	<input type="checkbox"/> No	Food if Stored in Room is in Sealed Containers	<input type="checkbox"/> N/A		

Mechanical Equipment Location	Roof Top	Mechanical Room Clean	<input type="checkbox"/> N/A
Filters Installed Properly	<input type="checkbox"/> N/A	Filters Clean	<input type="checkbox"/> N/A
Condensate Pan Clean	<input type="checkbox"/> N/A	Cooling Coil Clean	<input type="checkbox"/> N/A
		Inside of HVAC Unit Clean	<input type="checkbox"/> N/A

Fresh Air Intake Location	Roof top	Fresh Air Intake Free of Obstruction	<input type="checkbox"/> Yes
Pollutant Sources Near Air Intake	None		

Observations

New ceiling tile - musty odor - minor dust on surfaces - Water damage along entire exterior wall - Severely water damaged wall in 268A - Severely water damaged ceiling in room 268B

Corrective Actions to be Completed by Site Based Staff

Thoroughly clean all surfaces	▼
Clean HVAC supply grills with Wexcide	▼
	▼
	▼
	▼
	▼
	▼
	▼

Corrective Actions to be Completed by PPO

Evaluate and repair cause of water damage in 268	▼
Evaluate and repair cause of water damage in 268A	▼
Evaluate and repair cause of water damage in 268B	▼
Replace all water damaged materials in all rooms	▼
Repair HVAC to reduce humidity level	▼
	▼
See observations for additional info	▼
	▼

IAQ Assessment

Northeast High

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Time of Day 2:30

Outdoor Conditions Temperature 90.3

Relative Humidity 64.1

Ambient CO2 466

Fish	Temperature	Range	Relative Humidity	Range	CO ²	Range	# Occupants
303	75.3	72 - 78	56.3	30% - 60%	515	MAX 700 > Ambient	1
Noticeable Odor		Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
Ceiling		Yes		No		1 sq ft over door to 303B	
Walls		Yes		No		NW corner under windows	
Floor		No		No			

Ceiling Clean	<input type="checkbox"/> Yes	HVAC Supply Grills Clean	<input type="checkbox"/> Yes	HVAC Return Grills Clean	<input type="checkbox"/> Yes
Walls Clean	<input type="checkbox"/> Yes	Inside of Supply Duct Clean	<input type="checkbox"/> Yes	Inside of Return Duct Clean	<input type="checkbox"/> Yes
Flooring Clean	<input type="checkbox"/> No	Ceiling at Supply Grills Clean	<input type="checkbox"/> N/a		
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"/> Yes	Air Fresheners in Room	<input type="checkbox"/> No
Room Cluttered	<input type="checkbox"/> No	Food if Stored in Room is in Sealed Containers	<input type="checkbox"/> N/A		

Mechanical Equipment Location	Roof Top	Mechanical Room Clean	<input type="checkbox"/> N/A
Filters Installed Properly	<input type="checkbox"/> N/A	Filters Clean	<input type="checkbox"/> N/A
Condensate Pan Clean	<input type="checkbox"/> N/A	Cooling Coil Clean	<input type="checkbox"/> N/A
		Inside of HVAC Unit Clean	<input type="checkbox"/> N/A

Fresh Air Intake Location	Roof top	Fresh Air Intake Free of Obstruction	<input type="checkbox"/> Yes
Pollutant Sources Near Air Intake	None		

Observations

Ceiling stain over door to 303B - Water damaged wall under window 16 Sq ft - Dust / Debris on floors and counter tops and inside of cabinets - Minor dust on surfaces

Corrective Actions to be Completed by Site Based Staff

Thoroughly clean all surfaces	▼
Thoroughly clean and sanitize flooring	▼
Clean inside of cabinets	▼
Remove and replace stained ceiling tiles	▼
	▼
	▼
	▼
	▼

Corrective Actions to be Completed by PPO

Evaluate roofing and expedite repair	▼
Evaluate and repair cause of water damage to wall material	▼
Remove and replace wall material as necessary	▼
	▼
	▼
	▼
	▼