

managing risk with responsibility

Aston A. Henry, Supervisor Telephone: 754 321-1900 Risk Management Department Fax: 754 321-1917

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

For Custodial Supervisor Use Only	
Custodial Issues Addressed	
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.

	Northeast Hig	<u>h</u> Evaluation	Date September 27,	2012 Time of Day 2:3	0
Outdoor Conditions Tem	nperature	90.3 Relat	tive Humidity 64.	1 Ambient CO2 466	
Fish Temperature 128 70.5	Range 72 - 78	Relative Humidity 51.4	Range 30% - 60%	CO² Range # Occu 532 MAX 700 > Ambient	upants 2
Noticeable Odor No Ceiling 2' X 4' Lay in	Vis	sible water damage / staining?	Visible microbia growth?	Amount of material affected	
Walls Plaster Floor 12" x 12" Vinyl		No No	No No		
Ceiling Clean Walls Clean Flooring Clean Room Surfaces Clean		HVAC Supply Grills Clean Inside of Supply Duct Clean Ceiling at Suppl Grills Clean	Yes	HVAC Return Grills Clean Inside of Return Duct Clean	Yes Yes
Trash Removed Yes Signs of Pests No Room Cluttered No	Foo	Exhaust Fans Workin Drain Traps Workin od if Stored in Room Sealed Containers	et N/A	Unapproved Chemicals / Cleaners in Room Air Fresheners in Room	No No
Mechanical Equipment Loca Filters Installed Properly Condensate Pan Clean	N/A	Filters Clear		Mechanical Room Clean Inside of HVAC Unit Clean	N/A N/A
Fresh Air Intake Location Pollutant Sources Near Air Intake	Roof top	1		Fresh Air Intake Free of Obstruction	Yes
Observations Heavy dust on surfaces - 6 f	tiles dirty / stai	ned at HVAC supp	ly grills (2 need cuts)		
Corrective Actions to be Co				ctions to be Completed by PPO	$\overline{}$
Thoroughly clea			Replace dirty ce	eiling tiles @ HVAC supply grills requiring cuts	▼ ▼ ▼
			—		- _

Northeast High	Evaluation Dat	e September 2	27, 2012	Time of Day	2:30
Outdoor Conditions Temperature 90.3	Relative	Humidity	64.1	Ambient CO2 4	66
Fish Temperature Range Relative 138 68.7 72 - 78 46		Range % - 60%	CO ² 597	Range # O MAX 700 > Ambient	ccupants 2
Noticeable Odor No Visible water stain	ing?	Visible micro growth?		Amount of material affected	
Ceiling 2' X 4' Lay in No Walls Plaster No Floor 12" x 12" Vinyl No		No No	۱] آ		
Floor 12" X 12" Vinyl No	<u> </u>	No			
Grills Walls Clean Yes	C Supply s Clean	Yes		HVAC Return Grills Clean	No
Flooring Clean Yes Duct	le of Supply Clean	Yes		Inside of Return Duct Clean	No
	ng at Supply s Clean	Yes			
	ans Working	N/A		Unapproved Chemicals / Cleaners in Room	No
	in Traps Wet ed in Room is ontainers	N/A		Air Fresheners in Room	No
Mechanical Equipment Location Roof Top				Mechanical Room Clean	N/A
. , <u>—</u>	Filters Clean	N/A		nside of HVAC Unit Clean	N/A
Fresh Air Intake Location Roof top Pollutant Sources Near Air			▼	Fresh Air Intake Free of Obstruction	Yes
Intake None					
Observations Minor dust on surfaces					
Corrective Actions to be Completed by Site Base	d Staff	Corrective	a Actions	s to be Completed by Pl	
Thoroughly clean all surfaces	u Otan			return duct in room	▼
Clean HVAC return grills with Wexcide	▼			e to 72 - 78 degrees	▼
	▼				▼
	▼				▼
	─				▼
	──┼				

Northeast High Eva	aluation 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 Hur 141 71.6 72 - 78 49.0	umidity Range CO ² Range # Occupants 30% - 60% 648 MAX 700 > 1 Ambient
Noticeable Odor No Visible water da staining? Ceiling 2' X 4' Lay in No	
	No No
51 40" v 40" V invi	
Floor 12 x 12 vinyi No	No
Ceiling Clean Yes HVAC So Grills Clean Yes	
Flooring Clean Yes Duct Cle	of Supply Inside of Return Duct Clean Yes
Room Surfaces No Ceiling a Grills Cl	at Supply Yes
Trash Removed Yes Exhaust Fans	s Working N/A Unapproved Chemicals / Cleaners in Room No
Signs of Pests No Drain T	Traps Wet N/A
Room Cluttered No Food if Stored in Sealed Contains	in Room is in Room
Mechanical Equipment Location Roof Top	Mechanical Room Clean N/A
Filters Installed Properly N/A Filte	ers Clean N/A Inside of HVAC Unit Clean N/A
Condensate Pan Clean N/A Cooling Co	Coil Clean N/A
Fresh Air Intake Location Roof top	▼ Fresh Air Intake Free of Obstruction Yes
Pollutant Sources Near Air Intake	▼
Observations	
Minor dust on surfaces - Minor water damage under v	windows
Corrective Actions to be Completed by Site Based St	
Thoroughly clean all surfaces	▼ Evaluate and repair cause of water damage ▼ under windows ▼
	▼ Remove and replace wall material as necessary ▼
	▼ ▼
	▼ ▼

North	east High Evaluation Dat	September 27, 2012	Time of Day 2:30
Outdoor Conditions Temperatu	re 90.3 Relative	Humidity 64.1	Ambient CO2 466
Fish Temperature Range 221 76.1 72 - 73	,i	Range CO ² 1334	
Noticeable Odor No	Visible water damage / staining?	Visible microbial growth?	Amount of material affected
Ceiling Tectum	Yes	No	Multiple stains throughout
Walls Plaster	Yes	Yes	See Below - < 10 sq ft
Floor Wood	No	No	
Ceiling Clean Yes Walls Clean No	HVAC Supply Grills Clean	No	HVAC Return Grills Clean
Flooring Clean No	Inside of Supply Duct Clean	N/A	Inside of Return Duct Clean Yes
Room Surfaces No Clean	Ceiling at Supply Grills Clean	N/a	
Trash Removed Yes	Exhaust Fans Working	N/A	Unapproved Chemicals / Cleaners in Room
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	Ceiling Hung		Mechanical Room Clean N/A
Filters Installed Properly Yes	Filters Clean	Yes	Inside of HVAC Unit Clean N/A
Condensate Pan Clean N/A	Cooling Coil Clean	N/A	
Fresh Air Intake Location	coof top	▼	Fresh Air Intake Free Yes
Pollutant Sources Near Air Intake	lone	▼	or Obstruction
Observations			
GYM - Dust / debris on walls, floor and in corners - Minor microbial gr water stains on east wall North co	owth on South wall East cor	ner - water blistered pa	aint on North wall west corner -

TEMPORARY roof from Hurricane Wilma.

Corrective Actions to be Completed by Site Based Staff

Stair
▼
▼
▼
▼
▼
\blacksquare
▼
▼

Corrective Actions to be Completed by PPO

.	
Evaluate roofing and expedite repair	▼
Evaluate and repair cause of water intrusion	▼
Repair/replace water damaged and stained material	▼
	▼
	▼
	▼
	▼
	▼

241 65.8 72 - 78 59.1 30% - 60% 512 MAX 700 > Ambient	ipants
Noticeable Odor No Visible water damage / Visible microbial Staining? Growth? Mount of material affected	
Ceiling 2' X 2' Lay in / Plaster Yes No 1 Sq Ft over doorway by 2	1B
Walls Plaster Yes No Entire room	
Floor 12" x 12" Vinyl No No	
Ceiling Clean Yes HVAC Supply Grills Clean No HVAC Return Grills Clean	Yes
Flooring Clean Inside of Supply Duct Clean Ves Inside of Return Duct Clean	Yes
Room Surfaces No Ceiling at Supply Clean No Grills Clean	
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 Room in Sealed Containers	140
Mechanical Equipment Location Roof Top Mechanical Room Clean	N/A
Filters Installed Properly N/A Filters Clean N/A Inside of HVAC Unit Clean	N/A
Condensate Pan Clean N/A Cooling Coil Clean N/A	
Fresh Air Intake Location	Yes
Pollutant Sources Near Air Intake	
Observations	
Wall plaster cracked / blistered/ flaking entire room - Dirt / debris on flooring - Debris in light fixture lenses - Dus surfaces - One 2' x 2' ceiling tile missing.	on

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

Corrective Actions to be completed by 1.1.	
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	▼
	▼
	▼
	▼

	Northeast High	Evaluation D	ate September	27, 2012	Time of Day	2:30
Outdoor Conditions Tem	perature 90	0.3 Relati	ve Humidity	64.1	Ambient CO2	466
Fish Temperature 268 71.0	Range R 72 - 78	62.5 3	Range 0% - 60%	CO ² 640	Range MAX 700 > Ambient	# Occupants
Noticeable Odor Yes	Visib	le water damage / staining?	Visible mic growth		Amount of material affect	
Ceiling 2' X 4' Lay in Walls Plaster Floor 12" x 12" Vinyl		No Yes No	No No]]]	Entire East	wall
Ceiling Clean Yes Walls Clean Yes Flooring Clean Yes		HVAC Supply Grills Clean Inside of Supply Duct Clean	No		HVAC Return Grills Clean Inside of Ret Duct Clean	Yes
Room Surfaces No Clean		Ceiling at Supply Grills Clean	Yes			
Trash Removed Yes Signs of Pests No Room Cluttered No	Food	Drain Traps Wet if Stored in Room is aled Containers	Yes		Unapproved Chemic Cleaners in Room Air Fresheners in Room	cals / No
	N/A	Filters Clean Cooling Coil Clean	N/A N/A	lr	Mechanical Room C	
Fresh Air Intake Location Pollutant Sources Near Air Intake	Roof top			▼	Fresh Air Intake I of Obstruction	Free Yes
Observations New ceiling tile - musty odo damaged wall in 268A - Seve	rely water dama	aged ceiling in roo	om 268B			
Corrective Actions to be Co	mpleted by Site	Based Staff	Correcti	ve Actions	s to be Completed	by PPO

Confective Actions to be completed by Site Dased St	u
Thoroughly clean all surfaces	▼
Clean HVAC supply grills with Wexcide	▼
	▼
	▼
	▼
	▼
	▼
	▼

▼
▼
V
▼
•
▼
▼
▼

	Northeast High	Evaluation D	Septembe	r 27, 2012	Time of Day	2:30
Outdoor Conditions Tem	nperature 90.	.3 Relati	ve Humidity	64.1	Ambient CO2 4	66
Fish Temperature 280 69.8	Range Re 72 - 78	57.1 3	Range 0% - 60%	CO ² 545	Range # O MAX 700 > Ambient	ccupants 1
Noticeable Odor No	Visible	e water damage / staining?	Visible mid growth		Amount of material affected	
Ceiling 2' X 4' Lay in		No	No			
Walls Plaster		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 No Clean		Ceiling at Supply Grills Clean	Yes			
Trash Removed Yes	Exha	aust 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		f Stored in Room is led Containers	N/A		in Room	
Mechanical Equipment Loca	tion Roof Top				Mechanical Room Clean	N/A
Filters Installed Properly	N/A	Filters Clean	N/A	I	nside of HVAC Unit Clean	N/A
Condensate Pan Clean	N/A	Cooling Coil Clean	N/A			
Fresh Air Intake Location	Roof top			▼	Fresh Air Intake Free	Yes
Pollutant Sources Near Air Intake	INONE I VI		of Obstruction	100		
Observations						
Minor dust on surfaces						
Corrective Actions to be Co	ompleted by Site	Based Staff	Correct	tive Action	s to be Completed by PI	 PO
Thoroughly clea		▼			re to 72 - 78 degrees	▼
		▼				▼
		▼				▼
		▼				V
		▼				▼ ▼
		▼				▼

	Northeast High	Evaluation D	Septemb	oer 27, 2012	Time of Day	2:30
Outdoor Conditions Tem	perature 90.3	Relati	ve Humidity	64.1	Ambient CO2	466
Fish Temperature 303 75.3	Range Rela	tive Humidity 56.3	Range 80% - 60%	CO ² 515	Range MAX 700 > Ambient	# Occupants
Noticeable Odor No		water damage /	Visible m grow		Amount o material affe	
Ceiling Tectum		Yes	No	0	1 sq ft over dod	or to 303B
Walls Plaster		Yes	No	0	NW corner unde	er windows
Floor 12" x 12" Vinyl		No	Ne	0		
Ceiling Clean Yes Walls Clean Yes		HVAC Supply Grills Clean	Yes		HVAC Retur Grills Clean	n Yes
Flooring Clean No		nside of Supply Duct Clean	Yes		Inside of Ref Duct Clean	turn Yes
Room Surfaces No Clean		Ceiling at Supply Grills Clean	N/a			
Trash Removed Yes	Exhau	st Fans Working	N/A		Unapproved Chemi Cleaners in Room	cals / No
Signs of Pests No		Drain Traps We	t Yes			
Room Cluttered No		Stored in Room i d Containers	s N/A		Air Fresheners in Room	No No
Mechanical Equipment Locat	ion Roof Top				Mechanical Room C	Clean N/A
Filters Installed Properly	N/A	Filters Clean	N/A		Inside of HVAC Unit (Clean N/A
Condensate Pan Clean	N/A Co	ooling Coil Clean	N/A			
Fresh Air Intake Location	Roof top			▼	Fresh Air Intake	Free Yes
Pollutant Sources Near Air Intake	None			▼	of Obstruction	
Observations						
Ceiling stain over door to 30 and inside of cabinets - Mine			vindow 16 Sq	ft - Dust / Γ	Debris on floors and	l counter tops
Corrective Actions to be Co	mpleted by Site B	ased Staff	Corre	ective Action	ns to be Completed	by PPO

Otan
•
•
•
•
•
•
▼
▼

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