# THE SCHOOL BOARD OF BROWARD COUNTY, FLORIDA ENVIRONMENTAL HEALTH & SAFETY DEPARTMENT

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November 2,	Signature on File	For Custodial Supervisor Use Only
TO:	Melinda Frame Wessinger, Principal	Custodial Issues Addressed
	New River Middle	Custodial Issues Not Addressed
FROM:	Robert Krickovich, Coordinator, LEA Environmental Health & Safety Department	
SUBJECT:	Indoor Air Quality (IAQ) Assessment	

On November 1, 2016, I conducted an assessment at **New River Middle 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 754-321-4200.

# RK:smn

Enc.

cc: Shelley Meloni, Director, Pre-Construction
Mark Dorsett, Manager, Zone 1, Physical Plant Operations Division
Broward Teachers Union
Federation of Public Employees
Gerald Devio, Supervisor II Custodial
Benjamin Osborne, Supervisor II Custodial
Rich Volpi, Supervisor II Custodial
Mark Murray, Supervisor II Custodial
Sam Bays, Director, Maintenance Operations
Kurt Wirz, Area Manager Trades

New R	tiver Middle Evaluation Dat	e November 1, 2016	Time of Day 1:00
Outdoor Conditions Tempera	ture 84.5 Relative	Humidity 57.7	Ambient CO2 483
		Range <u>CO</u> <sup>2</sup> % - 60% 1313	
Noticeable Odor No	Visible water damage / staining?	Visible microbial growth?	Amount of material affected
Ceiling 2' X 4' Lay in	Yes	No_	1 tile - 6 Square Inches
Walls Drywall	No	No	
Floor 12" x 12" Vinyl	No	No	
Ceiling Clean Yes Walls Clean Yes	HVAC Supply Grills Clean	Yes	HVAC Return Grills Clean
Flooring Clean Yes	Inside of Supply Duct Clean	Yes	Inside of Return  Pust Clean  Yes
			Duct Clean Tes
Room Surfaces No Clean	Ceiling at Supply Grills Clean	Yes	
Trash Removed Yes	Exhaust Fans Working	Yes	Unapproved Chemicals / Cleaners in Room
Signs of Pests No	Drain Traps Wet	No	Ala Fusahanana Na
Room Cluttered Yes	Food if Stored in Room is in Sealed Containers	N/A	Air Fresheners No in Room
Mechanical Equipment Location	FISH 190 - Unit 2		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
Pollutant Sources Near Air Intake	None	▼	of obstruction
Observations			
Science Room - 10 sinks, 5 traps Slightly elevated - 1 stained ceili		d in some sinks - 3 aqı	uariums - Surfaces dusty - CO2

# Corrective Actions to be Completed by Site Based Staff

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Corrective Actions to be completed by 110	
Compressor kicking on and off - repair compressor	▼
Repair HVAC to reduce CO2	▼
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New River Middle

Outdoor Conditions Temperat	ture 84.5 Relative	Humidity 57.7	Ambient CO2 4	83
Fish         Temperature         Rar           151         72.6         72 -		Range <u>CO</u> % - <b>60</b> %		23
Noticeable Odor No	Visible water damage / staining?	Visible microbial growth?	Amount of material affected	
Ceiling 2' X 4' Lay in	Yes	No	1 tile - 4 Square Inch	ies
Walls Drywall	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 No	Inside of Supply Duct Clean	Yes	Inside of Return Duct Clean	Yes
Room Surfaces No Clean	Ceiling at Supply Grills Clean	No		
Trash Removed Yes	Exhaust Fans Working	Yes	Unapproved Chemicals / Cleaners in Room	Yes
Signs of Pests No	Drain Traps Wet	Yes	Air Fresheners	No
Room Cluttered Yes	Food if Stored in Room is in Sealed Containers	N/A	in Room	140
Mechanical Equipment Location	FISH 190 - Unit 2		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	None	▼	of Obstruction	
Observations				
Science Room - 10 sinks - 6 aqua Slightly elevated -	riums - Surfaces dusty - Floor	dirty - Ceilings at HV	AC Supply grills dirty - CO	12

Gallon of Clorox under sink - Remove from room

# Corrective Actions to be Completed by Site Based Staff

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Thoroughly clean horizontal surfaces	▼
Thoroughly clean and sanitize flooring	▼
Remove and replace stained ceiling tile	▼
If stains return, contact COMPASS for work order	▼
Clean ceilings around HVAC supply grills	▼
Remove non-approved chemicals	▼
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Corrective Actions to be completed by 11 C	
Compressor kicking on and off - repair compressor	▼
Repair HVAC to reduce CO2	▼
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Evaluation Date

Outdoor Conditions Tempe	erature 84.5 Relative	Humidity 57.7	Ambient CO2 48	3
		Range CO <sup>2</sup> 1276		cupants 2
Noticeable Odor No  Ceiling 2' X 4' Lay in	Visible water damage / staining?  Yes	Visible microbial growth?	Amount of material affected  3 Tiles - 1 Square Foot to	otal
Walls Drywall  Floor 12" x 12" Vinyl	No 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 Yes Clean	Ceiling at Supply Grills Clean	Yes		
Trash Removed Yes	Exhaust Fans Working	N/A	Unapproved Chemicals / Cleaners in Room	No
Room Cluttered No	Drain Traps Wet Food if Stored in Room is in Sealed Containers	N/A	Air Fresheners in Room	No
Mechanical Equipment Location	n FISH 171 Unit 21		Mechanical Room Clean	Yes
Filters Installed Properly	es Filters Clean	Yes	Inside of HVAC Unit Clean	Yes
Condensate Pan Clean Ye	Cooling Coil Clean	Yes		
Fresh Air Intake Location  Pollutant Sources Near Air Intake	Roof top  None	▼	Fresh Air Intake Free of Obstruction	Yes
Observations				
3 stained ceiling tiles - Humidi	ty elevated - CO2 slightly elevate	2d		
Opening Antique to Lo 2	mleted by Oite Deep 100-11			
Corrective Actions to be Com	pieted by Site Based Staff	Corrective Actio	ns to be Completed by PPC	<u> </u>

Remove and replace stained ceiling tile	▼
If stains return, contact COMPASS for work order	▼
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Evaluate and repair HVAC system as needed	▼
Set Temperature to 72 - 78 degrees	▼
Repair HVAC to reduce CO2	▼
Repair HVAC to Reduce Humidity Levels	▼
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New R	River Middle Evaluation Dat	e November 1, 2016	Time of Day 1	:00
Outdoor Conditions Tempera	ture 84.5 Relative	Humidity 57.7	Ambient CO2 4	33
		Range <u>CO</u> <sup>2</sup> % - <b>60</b> % 1395		ccupants 2
Noticeable Odor No	Visible water damage / staining?	Visible microbial growth?	Amount of material affected	
Ceiling 2' X 4' Lay in	No	No		
Walls Drywall	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 Yes Clean	Ceiling at Supply Grills Clean	Yes		
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 Sealed Containers	N/A	in Room	NO
Mechanical Equipment Location	FISH 190 Unit 19		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 Pollutant Sources Near Air	Roof top	▼	Fresh Air Intake Free of Obstruction	Yes
Intake	None	▼		
Observations				
One HVAC supply grill covered	with paper to block air flow - To	emperature to cold - C	O2 slightly elevated	

One HVAC supply grill covered with paper to block air flow - Temperature to cold - CO2 slightly elevated

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

Remove paper from supply grill	▼
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Onlective Actions to be completed by 11 O	
Set Temperature to 72 - 78 degrees	▼
Repair HVAC to reduce CO2	▼
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Outdoor Conditions Temperatur	e 84.5 Relative	Humidity 57.7	Ambient CO2 4	83
Fish         Temperature         Range           164         71.5         72 - 78		Range CO % - <b>60</b> % 129		ccupants 2
Noticeable Odor No	Visible water damage / staining?	Visible microbial growth?	Amount of material affected	
Ceiling 2' X 4' Lay in	No	No		
Walls Drywall	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 Yes Clean	Ceiling at Supply Grills Clean	Yes		
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 Yes	Food if Stored in Room is in Sealed Containers	N/A	in Room	140
Mechanical Equipment Location FI	SH 171 Unit 21		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 Ro	oof top	▼	Fresh Air Intake Free of Obstruction	Yes
Pollutant Sources Near Air Intake	one	▼	oi Obstituction	
Observations				

One aquarium - 4 Bean bag chairs - Papers and books on floor, tables, shelves, and cabinets - Humidity slightly	
elevated - CO2 slightly elevated	

# Corrective Actions to be Completed by Site Based Staff

Corrective Actions to be Completed by Site Based Stan	
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Corrective Actions to be completed by 1.1.6	
Evaluate and repair HVAC system as needed	▼
Set Temperature to 72 - 78 degrees	▼
Repair HVAC to Reduce Humidity Levels	▼
Repair HVAC to reduce CO2	▼
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Outdoor Conditions Te	mperature 84.5	Relative Humidity 57	7.7 Ambient CO2 4	83
Fish Temperature 168 68.4	Range         Relative Humio           72 - 78         52.9	30% - 60%	CO²         Range         # O           1210         MAX 700 >         [           Ambient         [	ccupants 1
Noticeable Odor No	Visible water dam staining?	age / Visible microb	oial Amount of material affected	
Ceiling 2' X 4' Lay ir	Yes	Yes	29 tiles	
Walls Drywall	No	No		
Floor 12" x 12" Viny	No	No		
Ceiling Clean Yes Walls Clean Yes	HVAC Sup Grills Clea		HVAC Return Grills Clean	Yes
Walls Clean Yes Flooring Clean Yes	Inside of S Duct Clean		Inside of Return Duct Clean	Yes
Room Surfaces Yes Clean	Ceiling at S Grills Clean	· · · · I Voc I		
Trash Removed Yes	Exhaust Fans W	orking Yes	Unapproved Chemicals / Cleaners in Room	No
Signs of Pests No	Drain Tra	ps Wet Yes		
Room Cluttered No	Food if Stored in R in Sealed Containe	I NI/A	Air Fresheners in Room	No
Mechanical Equipment Loc	ation FISH 190 Unit 19		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	Yes
Pollutant Sources Near Air Intake	None		of Obstruction  ▼	

### **Observations**

Science Room 10 sinks - Temperature too cold - 29 ceiling tiles with spotty microbial growth due to exhaust fan damper -

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

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Thoroughly clean ALL surfaces	▼
After ceiling tile replacement	▼
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