

THE SCHOOL BOARD OF BROWARD COUNTY, FLORIDA

ENVIRONMENTAL HEALTH & SAFETY DEPARTMENT

TELEPHONE (754) 321-4200

FACSIMILE: (754) 321-4285

August 24, 2017

Signature on File

TO: Melinda Frame-Wessinger, Principal
New River Middle

FROM: Alison Witoshynsky, Project Manager
Environmental Health & Safety Department

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
<hr/>	
<hr/>	

On August 21, 2017, 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.

AW:smn

Enc.

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

IAQ Assessment

New River Middle

Evaluation Date August 21, 2017

Time of Day 12:45 PM

Outdoor Conditions Temperature 90.3 Relative Humidity 67.1 Ambient CO2 462

Fish	Temperature	Range	Relative Humidity	Range	CO ²	Range	# Occupants	
163	68.2	72 - 78	61.8	30% - 60%	1708	MAX 700 > Ambient	18	
Noticeable Odor		No	Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
Ceiling	2' X 4' Lay in		Yes		No		@ each supply grill	
Walls	Drywall		No		No			
Floor	12" x 12" Vinyl		No		No			
Ceiling Clean		No	HVAC Supply Grills Clean		Yes	HVAC Return Grills Clean		Yes
Walls Clean		Yes	Inside of Supply Duct Clean		Yes	Inside of Return Duct Clean		No
Flooring Clean		Yes	Ceiling at Supply Grills Clean		No			
Room Surfaces Clean		Yes						
Trash Removed		Yes	Exhaust Fans Working		Yes	Unapproved Chemicals / Cleaners in Room		No
Signs of Pests		No	Drain Traps Wet		Yes	Air Fresheners in Room		No
Room Cluttered		No	Food if Stored in Room is in Sealed Containers		N/A			
Mechanical Equipment Location			FISH 190			Mechanical Room Clean		No
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		N/A
Pollutant Sources Near Air Intake			Not readily accessible ▼					

Observations

Classroom. Black/Grey staining on ceiling tiles around supply grills. Condensation and dust on supply grills. Ceiling tile grid is rusting around supply grills. Door open to central Large Materials Storage Area (FISH 186) which contains lots of items and cardboard boxes on wooden shelves. Temperature is low and Relative Humidity is similarly high in the adjacent FISH 186. Drain traps of lab sinks have foreign objects with some dry and some wet.

Corrective Actions to be Completed by Site Based Staff

Clean ceilings around HVAC supply grills	▼
Clean dust from perimeter ceiling grid	▼
Remove foreign objects from sink drains & run water in sinks and floor drains monthly	▼
	▼
	▼
	▼
	▼

Corrective Actions to be Completed by PPO

Set Temperature to 72 - 78 degrees	▼
Repair HVAC to Reduce Humidity Levels	▼
Repair HVAC to Reduce CO2 Levels	▼
Evaluate and repair cause of stained ceiling tile	▼
Install new ceiling tile upon repair, cuts needed	▼
Evaluate/Repair HVAC dampers & exhaust interlocks	▼
interlocks	▼
Clean and repaint ceiling tile grid where rusted	▼

IAQ Assessment

New River Middle

Evaluation Date August 21, 2017

Time of Day 12:45 PM

Outdoor Conditions Temperature 90.3 Relative Humidity 67.1 Ambient CO2 462

Fish	Temperature	Range	Relative Humidity	Range	CO ²	Range	# Occupants
165/167	65.8	72 - 78	54.1	30% - 60%	1439	MAX 700 > Ambient	0
Noticeable Odor		No	Visible water damage / staining?		Visible microbial growth?		Amount of material affected
Ceiling	2' X 4' Lay in		Yes		No		@ each supply grill
Walls	Drywall		No		No		
Floor	12" x 12" Vinyl		No		No		
Ceiling Clean	No	HVAC Supply Grills Clean		Yes	HVAC Return Grills Clean		No
Walls Clean	Yes	Inside of Supply Duct Clean		N/A	Inside of Return Duct Clean		No
Flooring Clean	Yes	Ceiling at Supply Grills Clean		No			
Room Surfaces Clean	Yes						
Trash Removed	Yes	Exhaust Fans Working		Yes	Unapproved Chemicals / Cleaners in Room		No
Signs of Pests	No	Drain Traps Wet		Yes	Air Fresheners in Room		No
Room Cluttered	No	Food if Stored in Room is in Sealed Containers		N/A			
Mechanical Equipment Location	FISH 190					Mechanical Room Clean	No
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	N/A
Pollutant Sources Near Air Intake	Not readily accessible ▼						

Observations

Classroom. Black/Grey staining on ceiling tiles around supply grills. Condensation and dust on supply grills. Ceiling tile grid is rusting around supply grills. Door open to central Large Materials Storage Area (FISH 186) which contains lots of items and cardboard boxes on wooden shelves. Temperature is low and Relative Humidity is similarly high in the adjacent FISH 186. Drain traps of lab sinks have foreign objects with some dry and some wet.

Corrective Actions to be Completed by Site Based Staff

Clean ceilings around HVAC supply grills	▼
Clean dust from perimeter ceiling grid	▼
Remove foreign objects from sink drains & run water in sinks and floor drains monthly	▼
Clean HVAC Return Grill with Wexcide	▼
	▼
	▼
	▼

Corrective Actions to be Completed by PPO

Evaluate and repair HVAC system as needed	▼
Set Temperature to 72 - 78 degrees	▼
Repair HVAC to Reduce CO2 Levels	▼
Evaluate and repair cause of stained ceiling tile	▼
Install new ceiling tile upon repair, cuts needed	▼
Evaluate/Repair HVAC dampers & exhaust interlocks	▼
interlocks	▼
Clean and repaint ceiling tile grid where rusted	▼

IAQ Assessment

New River Middle

Evaluation Date August 21, 2017

Time of Day 12:45 PM

Outdoor Conditions Temperature 90.3

Relative Humidity 67.1

Ambient CO2 462

Fish	Temperature	Range	Relative Humidity	Range	CO ²	Range	# Occupants
168	66.5	72 - 78	73.5	30% - 60%	1276	MAX 700 > Ambient	16
Noticeable Odor		No	Visible water damage / staining?		Visible microbial growth?		Amount of material affected
Ceiling	2' X 4' Lay in		Yes		No		@ 5 CT; light lense
Walls	Drywall		No		No		
Floor	12" x 12" Vinyl		No		No		
Ceiling Clean	No	HVAC Supply Grills Clean	Yes		HVAC Return Grills Clean	No	
Walls Clean	Yes	Inside of Supply Duct Clean	Yes		Inside of Return Duct Clean	No	
Flooring Clean	Yes	Ceiling at Supply Grills Clean	Yes				
Room Surfaces Clean	Yes						
Trash Removed	Yes	Exhaust Fans Working	Yes		Unapproved Chemicals / Cleaners in Room	No	
Signs of Pests	No	Drain Traps Wet	Yes		Air Fresheners in Room	No	
Room Cluttered	No	Food if Stored in Room is in Sealed Containers	N/A				
Mechanical Equipment Location	FISH 190				Mechanical Room Clean	No	
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	N/A	
Pollutant Sources Near Air Intake	Not readily accessible ▼						

Observations

Classroom. Black/Grey staining on ceiling tiles around supply grills. Condensation and dust on supply grills. Ceiling tile grid is rusting around supply grills. Door open to central Large Materials Storage Area (FISH 186) which contains lots of items and cardboard boxes on wooden shelves. Temperature is low and Relative Humidity is similarly high in the adjacent FISH 186. Drain traps of lab sinks have foreign objects with some dry and some wet.

Corrective Actions to be Completed by Site Based Staff

Clean ceilings around HVAC supply grills	▼
Clean dust from perimeter ceiling grid	▼
Remove foreign objects from sink drains & run water in sinks and floor drains monthly	▼
Clean inside of light lenses with Wexcide	▼
Clean HVAC Return Grill with Wexcide	▼
	▼
	▼

Corrective Actions to be Completed by PPO

Set Temperature to 72 - 78 degrees	▼
Repair HVAC to Reduce Humidity Levels	▼
Repair HVAC to Reduce CO2 Levels	▼
Evaluate and repair cause of stained ceiling tile	▼
Install new ceiling tile upon repair, cuts needed	▼
Evaluate/Repair HVAC dampers & exhaust interlocks	▼
interlocks	▼
Clean and repaint ceiling tile grid where rusted	▼