

**THE SCHOOL BOARD OF BROWARD COUNTY, FLORIDA**

**ENVIRONMENTAL HEALTH & SAFETY DEPARTMENT**

**TELEPHONE (754) 321-4200**

**FACSIMILE: (754) 321-4285**

April 12, 2016

Signature on File

TO: James McDermott, Principal  
**Bair Middle**

FROM: Daniel Meyer, Project Manger  
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
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On April 7, 2016, I conducted an assessment at **Bair 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.

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

DM:smn  
Enc.

# IAQ Assessment

Bair Middle

Evaluation Date April 7, 2016

Time of Day Noon

Outdoor Conditions    Temperature 85.0    Relative Humidity 47.1    Ambient CO2 410

Fish	Temperature	Range	Relative Humidity	Range	CO <sup>2</sup>	Range	# Occupants
<span style="border: 1px solid black; padding: 2px;">190</span>	<span style="border: 1px solid black; padding: 2px;">74.3</span>	<span style="border: 1px solid black; padding: 2px;">72 - 78</span>	<span style="border: 1px solid black; padding: 2px;">66.9</span>	<span style="border: 1px solid black; padding: 2px;">30% - 60%</span>	<span style="border: 1px solid black; padding: 2px;">931</span>	<span style="border: 1px solid black; padding: 2px;">MAX 700 &gt; Ambient</span>	<span style="border: 1px solid black; padding: 2px;">24</span>
Noticeable Odor		<span style="border: 1px solid black; padding: 2px;">Yes</span>	Visible water damage / staining?		Visible microbial growth?		Amount of material affected
Ceiling	<span style="border: 1px solid black; padding: 2px;">2' X 4' Lay in</span>		<span style="border: 1px solid black; padding: 2px;">No</span>		<span style="border: 1px solid black; padding: 2px;">No</span>		<span style="border: 1px solid black; padding: 2px;"></span>
Walls	<span style="border: 1px solid black; padding: 2px;">Plaster</span>		<span style="border: 1px solid black; padding: 2px;">No</span>		<span style="border: 1px solid black; padding: 2px;">No</span>		<span style="border: 1px solid black; padding: 2px;"></span>
Floor	<span style="border: 1px solid black; padding: 2px;">12" x 12" Vinyl</span>		<span style="border: 1px solid black; padding: 2px;">No</span>		<span style="border: 1px solid black; padding: 2px;">No</span>		<span style="border: 1px solid black; padding: 2px;"></span>
Ceiling Clean	<span style="border: 1px solid black; padding: 2px;">Yes</span>	HVAC Supply Grills Clean		<span style="border: 1px solid black; padding: 2px;">No</span>	HVAC Return Grills Clean		<span style="border: 1px solid black; padding: 2px;">N/a</span>
Walls Clean	<span style="border: 1px solid black; padding: 2px;">Yes</span>	Inside of Supply Duct Clean		<span style="border: 1px solid black; padding: 2px;">Yes</span>	Inside of Return Duct Clean		<span style="border: 1px solid black; padding: 2px;">N/A</span>
Flooring Clean	<span style="border: 1px solid black; padding: 2px;">Yes</span>	Ceiling at Supply Grills Clean		<span style="border: 1px solid black; padding: 2px;">No</span>			
Room Surfaces Clean	<span style="border: 1px solid black; padding: 2px;">Yes</span>						
Trash Removed	<span style="border: 1px solid black; padding: 2px;">Yes</span>	Exhaust Fans Working		<span style="border: 1px solid black; padding: 2px;">N/A</span>	Unapproved Chemicals / Cleaners in Room		<span style="border: 1px solid black; padding: 2px;">No</span>
Signs of Pests	<span style="border: 1px solid black; padding: 2px;">No</span>	Drain Traps Wet		<span style="border: 1px solid black; padding: 2px;">No</span>	Air Fresheners in Room		<span style="border: 1px solid black; padding: 2px;">No</span>
Room Cluttered	<span style="border: 1px solid black; padding: 2px;">No</span>	Food if Stored in Room is in Sealed Containers		<span style="border: 1px solid black; padding: 2px;">N/A</span>			
Mechanical Equipment Location	<span style="border: 1px solid black; padding: 2px;">FISH #192</span>				Mechanical Room Clean		<span style="border: 1px solid black; padding: 2px;">No</span>
Filters Installed Properly	<span style="border: 1px solid black; padding: 2px;">Yes</span>	Filters Clean		<span style="border: 1px solid black; padding: 2px;">Yes</span>	Inside of HVAC Unit Clean		<span style="border: 1px solid black; padding: 2px;">Yes</span>
Condensate Pan Clean	<span style="border: 1px solid black; padding: 2px;">Yes</span>	Cooling Coil Clean		<span style="border: 1px solid black; padding: 2px;">Yes</span>			
Fresh Air Intake Location	<span style="border: 1px solid black; padding: 2px;">Ducted to roof-top</span> ▼				Fresh Air Intake Free of Obstruction		<span style="border: 1px solid black; padding: 2px;">Yes</span>
Pollutant Sources Near Air Intake	<span style="border: 1px solid black; padding: 2px;">No</span> ▼						

**Observations**

Slight smell in classroom. No return duct in classroom. Sink trap was dry. Wall open where stove was removed. Ceiling tiles around the supply grills need to be replaced. Supply grills should be replaced. Microbial growth on wooden cabinet (North wall under the printer) needs to be wiped clean with wexcide. Book cabinet on West wall needs to have the contents removed and wiped clean with wexcide. Wipe books and discard paper items with growth. Reduce stored items in cabinets (old books and papers = odors) Store in plastic containers with lids. Replace broken ceiling tile. Door to Fish #193 should be left open until return issue resolved.

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

Reduce stored items in cabinets	▼
Store items in plastic containers with lids	▼
Pour water down drains when not in use	▼
Replace ceiling tiles around supply grills	▼
Replace broken ceiling tile	▼
Wipe wooden cabinet with wexcide	▼
Remove contents from West cabinet and wexcide	▼
	▼

**Corrective Actions to be Completed by PPO**

Repair HVAC to Reduce Humidity Levels	▼
Replace supply grills	▼
Install return duct or remove wooden wall	▼
Close wall opening (South wall)	▼
	▼
	▼
	▼
	▼

# IAQ Assessment

Bair Middle

Evaluation Date

April 7, 2016

Time of Day

Noon

Outdoor Conditions

Temperature

85.0

Relative Humidity

47.1

Ambient CO2

410

Fish	Temperature	Range	Relative Humidity	Range	CO <sup>2</sup>	Range	# Occupants
193	72.9	72 - 78	60.5	30% - 60%	877	MAX 700 > Ambient	1
Noticeable Odor		Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
Ceiling		Walls		Floor			
2' X 4' Lay in		Plaster		12" x 12" Vinyl			
No		Yes		Yes		1 tile water / 12 have growth	
No		No		No			
No		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	No		
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	No	Air Fresheners in Room	No		
Room Cluttered	No	Food if Stored in Room is in Sealed Containers	N/A				
Mechanical Equipment Location	FISH #192					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	Ducted to roof-top					Fresh Air Intake Free of Obstruction	Yes
Pollutant Sources Near Air Intake	No						

**Observations**

Replace ceiling tiles - Water stained and tiles with growth. Supply grills need to be wiped with wexcide. Return grill needs to be wiped with wexcide. Room unoccupied - should be thoroughly cleaned. 7 sinks have dry traps. Mechanical room is extremely dusty. Drain line in mechanical room needs to be cleaned out. Return duct work needs to be cleaned. Holes in mechanical room need to be patched - open return.

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

Replace ceiling tiles	▼
Clean surfaces in mechanical room	▼
Clean supply/return grills w/ wexcide	▼
Pour water down drains when not in use	▼
Thoroughly Clean All Surfaces in Room	▼
	▼
	▼
	▼

**Corrective Actions to be Completed by PPO**

Clean return ductwork	▼
Clean drain in Mechanical Room	▼
Repair openings in Mechanical Room	▼
	▼
	▼
	▼
	▼