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

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August 29,	2016 Signature on File	For Custodial Supervisor Use Only
TO:	Harold Osborn, Principal Walter C. Young Middle	Custodial Issues Addressed  Custodial Issues Not Addressed
FROM:	Robert Krickovich, Coordinator, LEA Environmental Health & Safety Department	
SUBJECT:	Indoor Air Quality (IAQ) Assessment	

On August 25, 2016, I conducted an assessment at **Walter C. Young 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

**Temperature** 87.4 **Relative Humidity** 94.1 **Ambient CO2** 427 **Outdoor Conditions** Fish  $CO^2$ **Temperature Relative Humidity** Range Range # Occupants Range 461 MAX 700 > 401 68.1 72 - 78 64.2 30% - 60% **Ambient** Visible microbial Amount of Visible water damage / **Noticeable Odor** No material affected growth? staining? 2' X 4' Lay in / Plaster 20 Sq ft Ceiling Yes No **Spotty Microbial on walls** Walls Struck Block / Tile No Yes Floor Ceramic Tile No No **Ceiling Clean HVAC Supply HVAC Return** Yes Yes Yes **Grills Clean Grills Clean** Walls Clean No Inside of Supply Inside of Return No No Flooring Clean Yes **Duct Clean Duct Clean Room Surfaces** Yes **Ceiling at Supply** Yes Clean **Grills Clean** Yes **Trash Removed Exhaust Fans Working** Yes **Unapproved Chemicals /** No **Cleaners in Room** Signs of Pests No **Drain Traps Wet** Yes Air Fresheners No **Room Cluttered** No Food if Stored in Room is in Room N/A in Sealed Containers **Mechanical Equipment Location FISH 450** Mechanical Room Clean Yes Filters Installed Properly Yes **Filters Clean** Yes Inside of HVAC Unit Clean No **Condensate Pan Clean** No **Cooling Coil Clean** No Roof top ▼ Fresh Air Intake Location Fresh Air Intake Free Yes of Obstruction

### **Observations**

Intake

**Pollutant Sources Near Air** 

Boys Locker room - Spotty microbial growth on walls - Spotty microbial growth on plaster ceiling over showers -Inside of duct work dirty - inside of HVAC unit dirty - Damper on HVAC unit disconnected - Humidity elevated causing microbial growth on surfaces

## Corrective Actions to be Completed by Site Based Staff

None

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#### Corrective Actions to be Completed by PPO

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Corrective Actions to be Completed by 11 C		
Evaluate and repair HVAC system as needed		
Repair HVAC to Reduce Humidity Levels		
Set Temperature to 72 - 78 degrees		
Clean entire HVAC system - unit and drops		
Repair all HVAC Controls		
Test / repair all HVAC Controls and interlocks		
Paint Ceilings and walls with anti microbial paint		
	▼	

Outdoor Conditions Temper	rature 87.4 Relative	Humidity 94.1	Ambient CO2 42	<u>!7</u>	
		Range CO <sup>2</sup> 512	Range # Oc MAX 700 > Ambient	cupants 2	
Noticeable Odor No	Visible water damage / staining?	Visible microbial growth?	Amount of material affected		
Ceiling Plaster	No	Yes	Spotty entire ceiling		
Walls Ceramic Tile	Yes	No	50 sq ft		
Floor Ceramic Tile	No	No			
Ceiling Clean Yes  Walls Clean No	HVAC Supply Grills Clean	Yes	HVAC Return Grills Clean	Yes	
Flooring Clean Yes	Inside of Supply Duct Clean	No	Inside of Return Duct Clean	No	
Room Surfaces Yes 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	Yes	Air Fresheners	Air Freeheners	
Room Cluttered No	Food if Stored in Room is in Sealed Containers	N/A	in Room	No	
Mechanical Equipment Location	FISH 450		Mechanical Room Clean	Yes	
Filters Installed Properly Ye	Filters Clean	Yes	Inside of HVAC Unit Clean	No	
Condensate Pan Clean No	Cooling Coil Clean	No			
Fresh Air Intake Location	Roof top	▼	Fresh Air Intake Free of Obstruction	Yes	
Pollutant Sources Near Air Intake	None	▼	or Obstruction		

## **Observations**

Boys Locker room - Water damaged walls in shower - Water damaged ceiling in shower - Spotty microbial growth on plaster ceiling over showers - Inside of duct work dirty - inside of HVAC unit dirty - Damper on HVAC unit disconnected - Humidity elevated causing microbial growth on surfaces

## Corrective Actions to be Completed by Site Based Staff

Clean ceilings	▼
	▼
	▼
	▼
	▼
	▼

#### Corrective Actions to be Completed by PPO

	corrective Actions to be completed by 1.1.5		
▼	Remove & Replace damaged walls		
▼	Repair Water damaged ceiling		
▼	Evaluate and repair HVAC system as needed		
▼	Clean entire HVAC system - unit and drops		
•	Test / repair all HVAC Controls and interlocks		
•	Paint Ceilings and with anti microbial paint		
$\blacksquare$	Set Temperature to 72 - 78 degrees		
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