

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

**ENVIRONMENTAL HEALTH & SAFETY DEPARTMENT**

**TELEPHONE (754) 321-4200**

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November 20, 2017

Signature on File

TO: Erik Anderson, Principal  
**Tropical Elementary**

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

SUBJECT: Indoor Air Quality (IAQ) Assessment

**For Custodial Supervisor Use Only**

Custodial Issues Addressed

Custodial Issues Not Addressed

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On November 17, 2017, I conducted an assessment at **Tropical Elementary 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

# Multiple Room IAQ Assessment

Tropical Elem. School

Evaluation Date November 17, 2017

Time of Day 1230

Outdoor Conditions    Temperature 80.0

Relative Humidity 57.2

Ambient CO2 410

## Fish # of rooms assessed

850, 851, 852, 853

Temperature Range in the Rooms Assessed was Between 71.8 And 74.8 Acceptable Range 72 - 78

Relative Humidity Range in the Rooms Assessed was Between 59.6 And 76.3 Acceptable Range 30% - 60%

Co<sup>2</sup> Range in the Rooms Assessed was between 589 And 828 Acceptable Range MAX 700 > Ambient

Noticeable Odor	Visible water damage / staining?	Visible microbial growth?	Amount of material affected
<span style="border: 1px solid black; padding: 2px;">No</span>			
Ceiling <span style="border: 1px solid black; padding: 2px;">2' X 4' Lay in</span>	<span style="border: 1px solid black; padding: 2px;">Yes</span>	<span style="border: 1px solid black; padding: 2px;">No</span>	multiple ceiling tiles in each
Walls <span style="border: 1px solid black; padding: 2px;">Drywall</span>	<span style="border: 1px solid black; padding: 2px;">No</span>	<span style="border: 1px solid black; padding: 2px;">No</span>	paint peeling, buckling(852)
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>	

**FISH 851 & 853: Peeling paint throughout, but mainly near the return vent for the air handler.**  
**FISH 852: Wet drywall above the dry erase board and below the ceiling tile grid on the west wall (@ middle, (~2' x 3')). Double check above ceiling tile grid, likely roof seam.**  
 Likely that this area corresponds to large paint peeling area on adjoining wall in FISH 851.  
 Multiple wet ceiling tiles in each of the rooms inspected. Most near center of room.

Ceiling Clean <span style="border: 1px solid black; padding: 2px;">Yes</span>	HVAC Supply Grills Clean <span style="border: 1px solid black; padding: 2px;">Yes</span>	HVAC Return Grills Clean <span style="border: 1px solid black; padding: 2px;">No</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;">No</span>	Ceiling at Supply Grills Clean <span style="border: 1px solid black; padding: 2px;">Yes</span>	
Room Surfaces Clean <span style="border: 1px solid black; padding: 2px;">No</span>		

Trash Removed <span style="border: 1px solid black; padding: 2px;">Yes</span>	Exhaust Fans Working <span style="border: 1px solid black; padding: 2px;">Yes</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;">N/A</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;">Yes</span>	Food if Stored in Room is in Sealed Containers <span style="border: 1px solid black; padding: 2px;">N/A</span>	

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## HVAC System

Mechanical Equipment Location BARD in each Room

Mechanical Room Clean N/A

Filters Installed Properly Yes

Filters Clean No

Inside of HVAC Unit Clean N/A

Condensate Pan Clean N/A

Cooling Coil Clean N/A

N/A in this section = Not Accessible

Fresh Air Intake Location Exterior Wall ▼

Fresh Air Intake Free of Obstruction Yes

Pollutant Sources Near Air Intake No ▼

## Observations

Multiple work orders have already been called in for the roof leak issues identified above.  
H010797, J815009, J825435

Drywall and ceiling tiles need to be removed/replaced during inspection/repair of roof issue.

Server is present in FISH 850. Very high humidity in this room. Needs to be adjusted accordingly

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

Remove and replace stained ceiling tile	▼
If stains return, follow up with Maint. on existing work order	▼
Remove and replace A/C Filters	▼
Date the filters properly	▼
Clean wall surfaces before repainting	▼
	▼
	▼
	▼
	▼
	▼
	▼
	▼
	▼
	▼
	▼
	▼

### Corrective Actions to be Completed by PPO

No New Work Orders for roof leak repair/replace	▼
H010797, J815009, J825435	▼
Remove and replace wall material as needed	▼
Install new ceiling tile upon repair, cuts needed	▼
	▼
Repair HVAC to Reduce Humidity Levels	▼
FISH 850, 852, 853 (needs evaluation)	▼
FISH 851 (elevated)	▼
	▼
	▼
	▼
	▼
	▼
	▼
	▼
	▼