

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

**ENVIRONMENTAL HEALTH & SAFETY DEPARTMENT**

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November 2, 2017

Signature on File

TO: April Schentrup, Principal  
**Pembroke Pines Elementary**

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
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On October 27, 2017, I conducted an assessment at **Pembroke Pines Elementary**. 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

Pembroke Pines Elem. School

Evaluation Date October 27, 2017

Time of Day 1115

Outdoor Conditions    Temperature 84.4

Relative Humidity 51.6

Ambient CO2 486

## Fish # of rooms assessed

112, 112A, 113, 114

Temperature Range in the Rooms Assessed was Between 68.2 And 71.0    Acceptable Range 72 - 78

Relative Humidity Range in the Rooms Assessed was Between 62.6 And 77.7    Acceptable Range 30% - 60%

Co<sup>2</sup> Range in the Rooms Assessed was between 464 And 607    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;">No</span>	<span style="border: 1px solid black; padding: 2px;">Yes</span>	<div style="border: 1px solid black; height: 15px;"></div>
Walls <span style="border: 1px solid black; padding: 2px;">Plaster/Tack Board</span>	<span style="border: 1px solid black; padding: 2px;">No</span>	<span style="border: 1px solid black; padding: 2px;">No</span>	<div style="border: 1px solid black; height: 15px;"></div>
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>	<div style="border: 1px solid black; height: 15px;"></div>

FISH 112: Likely roof leak, 6 whole ceiling tiles and 1 cut ceiling tile.  
 FISH 113: Report of leak around A/C on roof above main plenum return. main plenum return is very dusty. leak maybe from roof or condensation plan (needs further investigation). Ceiling tiles need replacement, 1 cut & 2 full. light lenses have signs of water.  
 FISH 114: 1 ceiling tile stained. Signs of old water damage on closet door (114C).

Ceiling Clean	<span style="border: 1px solid black; padding: 2px;">No</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;">No</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;">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;">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;">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 Roof Top

Mechanical Room Clean N/A

Filters Installed Properly Yes

Filters Clean No

Inside of HVAC Unit Clean No

Condensate Pan Clean Yes

Cooling Coil Clean Yes

N/A in this section = Not Accessible

Fresh Air Intake Location Roof top ▼

Fresh Air Intake Free of Obstruction N/A

Pollutant Sources Near Air Intake Not Readily Accessible ▼

## Observations

The AP is still requesting the A/C be changed to 24/7 operation. However, at this point, it does not seem appropriate until the humidity and temperature issues can be addressed throughout. HFSP did ask for AC restart to be changed to 530am; which was changed.

Leaks appear to be associated with the roof and/or AC. Further investigation needed.

No wet wall materials were observed in the spaces assessed.

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

Thoroughly clean elevated surfaces	▼
Room too cluttered to clean properly	▼
Encourage occupant to reduce clutter	▼
Clean dust from ceiling tiles or replace	▼
Remove and replace stained ceiling tile	▼
If stains return, contact COMPASS for work order	▼
	▼
	▼
	▼
	▼
	▼
	▼
	▼
	▼
	▼

### Corrective Actions to be Completed by PPO

Evaluate and repair cause of stained ceiling tile	▼
Install new ceiling tile upon repair, cuts needed	▼
Evaluate and repair HVAC system as needed	▼
Set Temperature to 72 - 78 degrees	▼
Repair HVAC to Reduce Humidity Levels	▼
Evaluate/Repair HVAC dampers & exhaust interlocks	▼
Clean HVAC return grills and drops	▼
Replace Wood Door (fish 144c)	▼
	▼
	▼
	▼
	▼
	▼
	▼