

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

**ENVIRONMENTAL HEALTH & SAFETY DEPARTMENT**

**TELEPHONE (754) 321-4200**

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

November 29, 2017

Signature on File

TO: Janice Crosby, Principal  
**Flamingo Elementary**

FROM: Alison Witoszynsky, 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 January 31, 2017, I conducted an assessment at **Flamingo 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

Flamingo Elementary School

Evaluation Date November 27, 2017

Time of Day 1145

Outdoor Conditions    Temperature 79.1

Relative Humidity 56.0

Ambient CO2 396

## Fish # of rooms assessed

FISH 123, 132

Similar complaints in FISH 121, 124, 125, 126, 127, 128, 131

Temperature Range in the Rooms Assessed was Between	<span style="border: 1px solid black; padding: 2px;">69.9</span>	And	<span style="border: 1px solid black; padding: 2px;">71.8</span>	Acceptable Range	72 - 78
Relative Humidity Range in the Rooms Assessed was Between	<span style="border: 1px solid black; padding: 2px;">45.8</span>	And	<span style="border: 1px solid black; padding: 2px;">51.8</span>	Acceptable Range	30% - 60%
Co <sup>2</sup> Range in the Rooms Assessed was between	<span style="border: 1px solid black; padding: 2px;">1006</span>	And	<span style="border: 1px solid black; padding: 2px;">1041</span>	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;">No</span>	
Walls <span style="border: 1px solid black; padding: 2px;">Tack Board</span>	<span style="border: 1px solid black; padding: 2px;">No</span>	<span style="border: 1px solid black; padding: 2px;">No</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>	

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;">Yes</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;">No</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;">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;">Yes</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>		

# Multiple Room IAQ Assessment

Flamingo Elementary School

Evaluation Date November 27, 2017

Time of Day 1145

Outdoor Conditions    Temperature 79.1

Relative Humidity 56.0

Ambient CO2 396

## HVAC System

Mechanical Equipment Location FISH 109 (clsrn 123) / 153 (clsrn 132)

Mechanical Room Clean Yes

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 Yes

Pollutant Sources Near Air Intake Not readily accessible-roof replacement ▼

## Observations

Building 1 of the school is currently in the midst of roof replacement. The contractor is reportedly working on the north side and staging materials on the south side. Occupants of FISH 123 and 132 complained upon initiation of work on the roof; likely a result of the staging of materials on the south side of the roof.

Generally the main areas of the rooms are clean (floor, walls, ceiling). There is a light layer of dust on stored items and bookshelves throughout the classroom. Due to the amount of items on the bookshelves it is not feasible for the entire area to be thoroughly cleaned each day. A moderate level of dust was observed within the computer storage carts for each room.

A light layer of dust was observed behind the northwest return grill in FISH 123. Rooms supplied by HVAC unit in FISH 109 were complaining that area is too cold. The HFSP reportedly adjusted the dampers to increase the temperature.

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

Room too cluttered to clean properly	▼
Encourage occupant to reduce clutter	▼
Thoroughly clean elevated/horizontal surfaces	▼
Store items in plastic containers with lids	▼
Coordinate dusting of items stored on shelves	▼
Assign dusting interior of computer carts	▼
	▼
	▼
	▼
	▼
	▼
	▼
	▼
	▼
	▼

### Corrective Actions to be Completed by PPO

Evaluate and repair HVAC system as needed	▼
JW39035 / EQ09390	▼
Set Temperature to 72 - 78 degrees	▼
Evaluate/Replace fresh air damper at HVAC	▼
mechanical room / roof (EQ09390)	▼
	▼
	▼
	▼
	▼
	▼
	▼
	▼
	▼
	▼

