

Aston A. Henry, Director
Risk Management Department

Telephone: 754 321-1900
Fax: 754 321-1917

April 23, 2015

Signature on File

TO: Michelle Alvarez, Principal
Bethune Elementary

FROM: Richard Rosa, Project Manager
Risk Management 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

On April 21, 2015, I conducted an assessment at **Bethune 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 754-321-1900.

cc: Shelley Meloni, Executive Director, Facilities & Construction
Mark Dorsett, Manager, Zone 1, Physical Plant Operations Division
Roy Norton, Manager, Custodial/Grounds, Physical Plant Operations Division
Aston Henry, Director, Risk Management
Sonja Coley, Senior Project Manager, Facilities & Construction
Broward Teachers Union
Federation of Public Employees

RR/jj
Enc.

IAQ Assessment

Bethune Elementary

Evaluation Date April 21, 2015

Time of Day 11:45 AM

Outdoor Conditions Temperature 77.6 Relative Humidity 93.6 Ambient CO2 442

Fish	Temperature	Range	Relative Humidity	Range	CO ²	Range	# Occupants
609	69.7	72 - 78	61.0	30% - 60%	505	MAX 700 > Ambient	
Noticeable Odor		No	Visible water damage / staining?		Visible microbial growth?		Amount of material affected
Ceiling	12"x12"		No		No		
Walls	Plaster		No		No		
Floor	12" x 12" Vinyl		No		No		
Ceiling Clean		Yes	HVAC Supply Grills Clean		Yes	HVAC Return Grills Clean	
Walls Clean		Yes	Inside of Supply Duct Clean		Yes	Inside of Return Duct Clean	
Flooring Clean		Yes	Ceiling at Supply Grills Clean		Yes		
Room Surfaces Clean		Yes					
Trash Removed		Yes	Exhaust Fans Working		N/A	Unapproved Chemicals / Cleaners in Room	
Signs of Pests		No	Drain Traps Wet		N/A	Air Fresheners in Room	
Room Cluttered		No	Food if Stored in Room is in Sealed Containers		N/A		
Mechanical Equipment Location			Roof Top			Mechanical Room Clean	
Filters Installed Properly		N/A	Filters Clean		N/A	Inside of HVAC Unit Clean	
Condensate Pan Clean		N/A	Cooling Coil Clean		N/A		
Fresh Air Intake Location			Roof top ▼			Fresh Air Intake Free of Obstruction	
Pollutant Sources Near Air Intake			Standing water ▼			Yes	

Observations

The roof top units were not accessible due to the rain.

N/A Not Accessible

N/A not applicable

- Corrective Actions to be Completed by Site Based Staff**
- | | |
|--|---|
| Install proper filters, tape and date. | ▼ |
| Mold growth on Jalousie windows, clean both sides of windows | ▼ |
| Leave one Jalousie window open for better cross ventilation due to return is in the corridor | ▼ |
| | ▼ |
| | ▼ |
| | ▼ |

- Corrective Actions to be Completed by PPO**
- | | |
|---|---|
| Replace broken and missing 12" x 12" tile in Corridor | ▼ |
| Repair HVAC to Reduce Humidity Levels | ▼ |
| | ▼ |
| | ▼ |
| | ▼ |
| | ▼ |

IAQ Assessment

Bethune Elementary

 Evaluation Date April 21, 2015

 Time of Day 12:45 PM
Outdoor Conditions

 Temperature 77.6

 Relative Humidity 93.6

 Ambient CO2 442

Fish	Temperature	Range	Relative Humidity	Range	CO ²	Range	# Occupants
610	73.9	72 - 78	60.2	30% - 60%	507	MAX 700 > Ambient	
Noticeable Odor		No	Visible water damage / staining?		Visible microbial growth?		Amount of material affected
Ceiling	12"x12"		No		No		
Walls	Plaster		No		No		
Floor	12" x 12" Vinyl		No		No		
Ceiling Clean		Yes	HVAC Supply Grills Clean		Yes	HVAC Return Grills Clean N/a	
Walls Clean		Yes	Inside of Supply Duct Clean		Yes	Inside of Return Duct Clean N/A	
Flooring Clean		Yes	Ceiling at Supply Grills Clean		Yes		
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		N/A	Air Fresheners in Room No	
Room Cluttered		Yes	Food if Stored in Room is in Sealed Containers		N/A		
Mechanical Equipment Location			Roof Top			Mechanical Room Clean n/a	
Filters Installed Properly		N/A	Filters Clean		N/A	Inside of HVAC Unit Clean N/A	
Condensate Pan Clean		N/A	Cooling Coil Clean		N/A		
Fresh Air Intake Location			Roof top ▼			Fresh Air Intake Free of Obstruction Yes	
Pollutant Sources Near Air Intake			Standing water ▼				

Observations

The roof top units were not accessible due to the rain.

N/A Not Accessible

N/A Not applicable

Corrective Actions to be Completed by Site Based Staff

Install proper filters, tape and date.	▼
Dust on Jalousie windows, clean both sides of windows	▼
Leave one Jalousie window open for better cross ventilation due to return is in the corridor	▼
Coordinate a schedule between HFSP and classroom Instructor to clean properly due to clutter	▼

Corrective Actions to be Completed by PPO

Replace broken and missing 12" x 12" tile in Corridor	▼
Repair HVAC to Reduce Humidity Levels	▼

IAQ Assessment

Bethune Elementary

Evaluation Date

Time of Day

Outdoor Conditions Temperature Relative Humidity Ambient CO2

Fish	Temperature	Range	Relative Humidity	Range	CO ²	Range	# Occupants
<input type="text" value="611"/>	<input type="text" value="73.0"/>	<input type="text" value="72 - 78"/>	<input type="text" value="62.7"/>	<input type="text" value="30% - 60%"/>	<input type="text" value="507"/>	<input type="text" value="MAX 700 > Ambient"/>	<input type="text"/>
Noticeable Odor		<input type="text" value="No"/>	Visible water damage / staining?		Visible microbial growth?		Amount of material affected
Ceiling	<input type="text" value="12" x12"=""/>		<input type="text" value="No"/>		<input type="text" value="No"/>		<input type="text"/>
Walls	<input type="text" value="Plaster"/>		<input type="text" value="No"/>		<input type="text" value="No"/>		<input type="text"/>
Floor	<input 12"="" type="text" value="12" vinyl"="" x=""/>		<input type="text" value="No"/>		<input type="text" value="No"/>		<input type="text"/>
Ceiling Clean		<input type="text" value="Yes"/>	HVAC Supply Grills Clean		<input type="text" value="Yes"/>	HVAC Return Grills Clean	
Walls Clean		<input type="text" value="Yes"/>	Inside of Supply Duct Clean		<input type="text" value="Yes"/>	Inside of Return Duct Clean	
Flooring Clean		<input type="text" value="Yes"/>	Ceiling at Supply Grills Clean		<input type="text" value="Yes"/>		
Room Surfaces Clean		<input type="text" value="No"/>					
Trash Removed		<input type="text" value="Yes"/>	Exhaust Fans Working		<input type="text" value="N/A"/>	Unapproved Chemicals / Cleaners in Room	
Signs of Pests		<input type="text" value="No"/>	Drain Traps Wet		<input type="text" value="N/A"/>	Air Fresheners in Room	
Room Cluttered		<input type="text" value="Yes"/>	Food if Stored in Room is in Sealed Containers		<input type="text" value="N/A"/>		
Mechanical Equipment Location			<input type="text" value="Roof Top"/>			Mechanical Room Clean	
Filters Installed Properly		<input type="text" value="N/A"/>	Filters Clean		<input type="text" value="N/A"/>	Inside of HVAC Unit Clean	
Condensate Pan Clean		<input type="text" value="N/A"/>	Cooling Coil Clean		<input type="text" value="N/A"/>		
Fresh Air Intake Location			<input type="text" value="Roof top"/>			Fresh Air Intake Free of Obstruction	
Pollutant Sources Near Air Intake			<input type="text" value="Standing water"/>			<input type="text" value="Yes"/>	

Observations

The roof top units were not accessible due to the rain.

N/A Not Accessible

N/A Not Applicable

- Corrective Actions to be Completed by Site Based Staff**
- | | |
|--|---|
| Install proper filters, tape and date. | ▼ |
| Dust on Jalousie windows, clean both sides of windows | ▼ |
| Leave one Jalousie window open for better cross ventilation due to return is in the corridor | ▼ |
| Coordinate a schedule between HFSP and classroom Instructor to clean properly due to clutter | ▼ |

- Corrective Actions to be Completed by PPO**
- | | |
|---|---|
| Replace broken and missing 12" x 12" tile in Corridor | ▼ |
| Repair HVAC to Reduce Humidity Levels | ▼ |