

THE SCHOOL BOARD OF BROWARD COUNTY, FLORIDA

ENVIRONMENTAL HEALTH & SAFETY DEPARTMENT

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September 6, 2016

Signature on File

TO: Delicia Decembert, Principal
Hollywood Central Elementary

FROM: Robert Krickovich, Coordinator, LEA
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/>	
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On September 1, 2016, I conducted an assessment at **Hollywood Central 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.

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

IAQ Assessment

Hollywood Central Elementary

 Evaluation Date September 1, 2016

 Time of Day 10:30 AM

 Outdoor Conditions Temperature 88.1

 Relative Humidity 93.1

 Ambient CO2 484

Fish	Temperature	Range	Relative Humidity	Range	CO ²	Range	# Occupants	
205	75.0	72 - 78	77.2	30% - 60%	533	MAX 700 > Ambient	20	
Noticeable Odor		No	Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
Ceiling	2' X 2' Lay in		No		No			
Walls	Plaster		Yes		No		Entire East wall	
Floor	Carpet		Yes		No		100 Square Feet	
Ceiling Clean		Yes	HVAC Supply Grills Clean		No	HVAC Return Grills Clean		No
Walls Clean		Yes	Inside of Supply Duct Clean		Yes	Inside of Return Duct Clean		Yes
Flooring Clean		Yes	Ceiling at Supply Grills Clean		No			
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		No	Food if Stored in Room is in Sealed Containers		N/A			
Mechanical Equipment Location			FISH 213			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			
Fresh Air Intake Location			Roof top ▼			Fresh Air Intake Free of Obstruction		Yes
Pollutant Sources Near Air Intake			None ▼					

Observations

Media center - roof leaks along east wall - 2 ceiling tiles removed due to roof leaks - water damaged carpet (two 2 square foot areas under missing ceiling tiles) - water damaged books (still not moved from under leaks) - Wall water stained from roof leaks - 100 Square foot of carpet water damaged under aquarium - dust on books and shelves - 17 stuffed animals.

Open Sewer Pipe "T" in mechanical room 213 next to water heater - PPO Cap open sewer pipe.

Corrective Actions to be Completed by Site Based Staff

Clean Dust from Books and Shelves	▼
Remove stuffed animals from room	▼
Remove aquarium from facility	▼
Remove books from location of water intrusion	▼
Clean Supply Grills with Wexcide	▼
Clean ceilings around HVAC supply grills	▼
Clean HVAC Return Grill with Wexcide	▼
	▼

Corrective Actions to be Completed by PPO

Evaluate and repair HVAC system as needed	▼
Repair HVAC to Reduce Humidity Levels	▼
Clean entire HVAC system - unit and drops	▼
Repair roof leaks	▼
Repair / Replace / Paint water stained wall	▼
Repair / replace water damaged carpet	▼
	▼
Cap open sewer pipe in 213	▼

IAQ Assessment

Hollywood Central 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="206"/>	<input type="text" value="74.4"/>	<input type="text" value="72 - 78"/>	<input type="text" value="75.9"/>	<input type="text" value="30% - 60%"/>	<input type="text" value="487"/>	<input type="text" value="MAX 700 > Ambient"/>	<input type="text" value="2"/>	
Noticeable Odor		<input type="text" value="No"/>	Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
Ceiling	<input type="text" value="2' X 2' Lay in"/>		<input type="text" value="Yes"/>		<input type="text" value="Yes"/>		<input type="text" value="1 tile removed 3 stained orange"/>	
Walls	<input type="text" value="Plaster"/>		<input type="text" value="No"/>		<input type="text" value="No"/>		<input type="text"/>	
Floor	<input type="text" value="Carpet"/>		<input type="text" value="Yes"/>		<input type="text" value="No"/>		<input type="text" value="4 Sq Ft Under removed tile"/>	
Ceiling Clean		<input type="text" value="Yes"/>	HVAC Supply Grills Clean		<input type="text" value="Yes"/>	HVAC Return Grills Clean		<input type="text" value="Yes"/>
Walls Clean		<input type="text" value="Yes"/>	Inside of Supply Duct Clean		<input type="text" value="Yes"/>	Inside of Return Duct Clean		<input type="text" value="Yes"/>
Flooring Clean		<input type="text" value="Yes"/>	Ceiling at Supply Grills Clean		<input type="text" value="No"/>			
Room Surfaces Clean		<input type="text" value="Yes"/>						
Trash Removed		<input type="text" value="Yes"/>	Exhaust Fans Working		<input type="text" value="N/A"/>	Unapproved Chemicals / Cleaners in Room		<input type="text" value="No"/>
Signs of Pests		<input type="text" value="No"/>	Drain Traps Wet		<input type="text" value="Yes"/>	Air Fresheners in Room		<input type="text" value="No"/>
Room Cluttered		<input type="text" value="No"/>	Food if Stored in Room is in Sealed Containers		<input type="text" value="Yes"/>			
Mechanical Equipment Location			<input type="text" value="FISH 213"/>			Mechanical Room Clean		<input type="text" value="Yes"/>
Filters Installed Properly		<input type="text" value="Yes"/>	Filters Clean		<input type="text" value="Yes"/>	Inside of HVAC Unit Clean		<input type="text" value="No"/>
Condensate Pan Clean		<input type="text" value="No"/>	Cooling Coil Clean		<input type="text" value="No"/>			
Fresh Air Intake Location			<input type="text" value="Roof top"/>			Fresh Air Intake Free of Obstruction		<input type="text" value="Yes"/>
Pollutant Sources Near Air Intake			<input type="text" value="None"/>					

Observations

Media Work Room - One ceiling tile removed due to roof leak - 4 sq ft water damaged carpet under roof leak - 3 tile with orange microbial growth due to roof leaks - Light fixture shorted due to roof leaks - ceiling grid rusty due to roof leaks.

Open Sewer Pipe "T" in mechanical room 213 next to water heater - PPO Cap open sewer pipe.

Corrective Actions to be Completed by Site Based Staff

Clean ceilings around HVAC supply grills	▼
Remove and replace stained ceiling tile	▼
If stains return, contact COMPASS for work order	▼
	▼
	▼
	▼
	▼
	▼

Corrective Actions to be Completed by PPO

Evaluate and repair HVAC system as needed	▼
Repair HVAC to Reduce Humidity Levels	▼
Clean entire HVAC system - unit and drops	▼
Replace water damaged light fixture	▼
Repair roof leaks	▼
Repair / replace water damaged carpet	▼
	▼
Cap open sewer pipe in 213	▼

IAQ Assessment

Hollywood Central 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="207"/>	<input type="text" value="73.1"/>	<input type="text" value="72 - 78"/>	<input type="text" value="77.2"/>	<input type="text" value="30% - 60%"/>	<input type="text" value="507"/>	<input type="text" value="MAX 700 > Ambient"/>	<input type="text" value="1"/>	
Noticeable Odor		<input type="text" value="No"/>	Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
Ceiling	<input type="text" value="2' X 4' Lay in"/>		<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 type="text" value="Carpet"/>		<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="No"/>	HVAC Return Grills Clean		<input type="text" value="No"/>
Walls Clean		<input type="text" value="Yes"/>	Inside of Supply Duct Clean		<input type="text" value="Yes"/>	Inside of Return Duct Clean		<input type="text" value="Yes"/>
Flooring Clean		<input type="text" value="No"/>	Ceiling at Supply Grills Clean		<input type="text" value="No"/>			
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		<input type="text" value="No"/>
Signs of Pests		<input type="text" value="No"/>	Drain Traps Wet		<input type="text" value="N/A"/>	Air Fresheners in Room		<input type="text" value="No"/>
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="FISH 213"/>			Mechanical Room Clean		<input type="text" value="Yes"/>
Filters Installed Properly		<input type="text" value="Yes"/>	Filters Clean		<input type="text" value="Yes"/>	Inside of HVAC Unit Clean		<input type="text" value="No"/>
Condensate Pan Clean		<input type="text" value="No"/>	Cooling Coil Clean		<input type="text" value="No"/>			
Fresh Air Intake Location			<input type="text" value="Roof top"/>			Fresh Air Intake Free of Obstruction		<input type="text" value="Yes"/>
Pollutant Sources Near Air Intake			<input type="text" value="None"/>					

Observations

Boxes stored in room - two bags of stuffed animals - Dust on surfaces - Debris on carpet - Room to cluttered to clean properly.

Open Sewer Pipe "T" in mechanical room 213 next to water heater - PPO Cap open sewer pipe.

Corrective Actions to be Completed by Site Based Staff

Remove boxes use plastic tubs if necessary	▼
Remove stuffed animals from room	▼
Can be source of dust allergens	▼
Clean Supply Grills with Wexcide	▼
Clean ceilings around HVAC supply grills	▼
Clean HVAC Return Grill with Wexcide	▼
Encourage occupant to reduce clutter	▼
	▼

Corrective Actions to be Completed by PPO

Evaluate and repair HVAC system as needed	▼
Repair HVAC to Reduce Humidity Levels	▼
Clean entire HVAC system - unit and drops	▼
	▼
Cap open sewer pipe in 213	▼
	▼
	▼
	▼

