

Aston A. Henry, Director
Risk Management Department

Telephone: 754 321-1900
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February 12, 2014

Signature on File

TO: Lori McConaughy, Principal
Quiet Waters Elementary School

FROM: Robert Krickovich, Coordinator I, LEA
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 January 31, 2014, I conducted an assessment at **Quiet Waters 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 754-321-1907.

cc: Shelley Meloni, Task Assigned Chief Facilities & Construction Officer, 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

RK/tc
Enc.

IAQ Assessment

Quiet Waters Elementary

Evaluation Date January 31, 2014

Time of Day 2:00

Outdoor Conditions Temperature 82.7

Relative Humidity 69.9

Ambient CO2 495

Fish	Temperature	Range	Relative Humidity	Range	CO ²	Range	# Occupants
301	73.7	72 - 78	63.2	30% - 60%	1128	MAX 700 > Ambient	10
Noticeable Odor		Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
<input type="checkbox"/> Yes		<input type="checkbox"/> No		<input type="checkbox"/> No		<input style="width: 100%;" type="text"/>	
Ceiling	4' x 4' Lay in		No	No		<input style="width: 100%;" type="text"/>	
Walls	Drywall		Yes	No		<input style="width: 100%;" type="text"/>	
Floor	Carpet		No	No		<input style="width: 100%;" type="text"/>	
Ceiling Clean	<input type="checkbox"/> Yes	HVAC Supply Grills Clean		<input type="checkbox"/> No	HVAC Return Grills Clean		<input type="checkbox"/> No
Walls Clean	<input type="checkbox"/> Yes	Inside of Supply Duct Clean		<input type="checkbox"/> Yes	Inside of Return Duct Clean		<input type="checkbox"/> Yes
Flooring Clean	<input type="checkbox"/> Yes	Ceiling at Supply Grills Clean		<input type="checkbox"/> No			
Room Surfaces Clean	<input type="checkbox"/> No						
Trash Removed	<input type="checkbox"/> Yes	Exhaust Fans Working		<input type="checkbox"/> N/A	Unapproved Chemicals / Cleaners in Room		<input type="checkbox"/> No
Signs of Pests	<input type="checkbox"/> No	Drain Traps Wet		<input type="checkbox"/> N/A	Air Fresheners in Room		<input type="checkbox"/> No
Room Cluttered	<input type="checkbox"/> No	Food if Stored in Room is in Sealed Containers		<input type="checkbox"/> N/A			
Mechanical Equipment Location	FISH 306				Mechanical Room Clean		<input type="checkbox"/> Yes
Filters Installed Properly	<input type="checkbox"/> No	Filters Clean		<input type="checkbox"/> Yes	Inside of HVAC Unit Clean		<input type="checkbox"/> Yes
Condensate Pan Clean	<input type="checkbox"/> N/A	Cooling Coil Clean		<input type="checkbox"/> No			
Fresh Air Intake Location	Roof top ▼				Fresh Air Intake Free of Obstruction		<input type="checkbox"/> Yes
Pollutant Sources Near Air Intake	None ▼						

Observations

Media center - Slight musty odor - dust on books and shelves - Water damaged wall left side of windows on north wall - water damaged walls at both exit doors - HVAC supply grills dusty on South wall and wall is dusty around supply grills - Return grill dusty - Humidity slightly elevated

Corrective Actions to be Completed by Site Based Staff

Thoroughly clean horizontal surfaces	▼
Clean HVAC supply and return grills with Wexcide	▼
Clean walls around supply grills	▼
	▼
	▼
	▼
	▼
	▼
	▼

Corrective Actions to be Completed by PPO

Clean HVAC coil and pan	▼
Install spacer for filters	▼
Repair HVAC to reduce humidity level	▼
Evaluate and repair cause of water damage	▼
to wall material	▼
Remove and replace wall material as necessary	▼
	▼
	▼

IAQ Assessment

Quiet Waters Elementary

Evaluation Date January 31, 2014

Time of Day 2:00

Outdoor Conditions Temperature 82.7

Relative Humidity 69.9

Ambient CO2 495

Fish	Temperature	Range	Relative Humidity	Range	CO ²	Range	# Occupants
301A	73.9	72 - 78	67.3	30% - 60%	1342	MAX 700 > Ambient	16
Noticeable Odor		No	Visible water damage / staining?		Visible microbial growth?		Amount of material affected
Ceiling	2' X 4' Lay in		No		No		
Walls	Drywall		Yes		No		2 Sq ft
Floor	Carpet		No		No		
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		Yes			
Room Surfaces Clean	Yes						
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 306					Mechanical Room Clean	Yes
Filters Installed Properly	No	Filters Clean		Yes	Inside of HVAC Unit Clean		Yes
Condensate Pan Clean	N/A	Cooling Coil Clean		No			
Fresh Air Intake Location	Roof top ▼					Fresh Air Intake Free of Obstruction	Yes
Pollutant Sources Near Air Intake	None ▼						

Observations

Water damaged wall material right side of windows - HVAC supply grills dusty - Return grill dusty - Humidity slightly elevated

Corrective Actions to be Completed by Site Based Staff

Clean HVAC supply and return grills with Wexcide	▼
	▼
	▼
	▼
	▼
	▼
	▼
	▼

Corrective Actions to be Completed by PPO

Clean HVAC coil and pan	▼
Install spacer for filters	▼
Repair HVAC to reduce humidity level	▼
Repair HVAC to reduce CO2 level	▼
Evaluate and repair cause of water damaged to wall material	▼
Remove and replace wall material as necessary	▼
	▼

IAQ Assessment

Quiet Waters Elementary

Evaluation Date January 31, 2014

Time of Day 2:00

Outdoor Conditions Temperature 82.7

Relative Humidity 69.9

Ambient CO2 495

Fish	Temperature	Range	Relative Humidity	Range	CO ²	Range	# Occupants
301G	73.4	72 - 78	71.3	30% - 60%	1225	MAX 700 > Ambient	14
Noticeable Odor		No	Visible water damage / staining?		Visible microbial growth?		Amount of material affected
Ceiling	2' X 4' Lay in		Yes		No		
Walls	Drywall		Yes		No		2 Sq ft
Floor	Carpet		No		No		
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		Yes					
Trash Removed		Yes	Exhaust Fans Working		N/A		Unapproved Chemicals / Cleaners in Room No
Signs of Pests		No	Drain Traps Wet		Yes		Air Fresheners in Room No
Room Cluttered		No	Food if Stored in Room is in Sealed Containers		N/A		
Mechanical Equipment Location			FISH 306			Mechanical Room Clean Yes	
Filters Installed Properly		No	Filters Clean		Yes		Inside of HVAC Unit Clean Yes
Condensate Pan Clean		N/A	Cooling Coil Clean		No		
Fresh Air Intake Location			Roof top ▼			Fresh Air Intake Free of Obstruction Yes	
Pollutant Sources Near Air Intake			None ▼				

Observations

Stained ceiling tile along Northeast wall - water damaged wall left side of window - HVAC supply grills dusty - Ceilings at supply grills dusty - Return grill dusty - Humidity slightly elevated - CO2 slightly elevated

Corrective Actions to be Completed by Site Based Staff

Clean ceilings around HVAC supply grills	▼
Clean HVAC supply and return grills with Wexcide	▼
	▼
	▼
	▼
	▼
	▼
	▼

Corrective Actions to be Completed by PPO

Clean HVAC coil and pan	▼
Install spacer for filters	▼
Repair HVAC to reduce humidity level	▼
Repair HVAC to reduce CO2 level	▼
Evaluate and repair cause of water damage to wall material	▼
Remove and replace wall material as necessary	▼
	▼