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Risk Management Department

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January 25, 2013

Signature on File

TO: Kyna Duarte, Interim Assistant Principal
Norcrest Elementary School

FROM: Robert Krickovich, Coordinator I, LEA
Facilities Design and Construction

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 23, 2013, I conducted an assessment at **Norcrest 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: Directors, School Performance & Accountability
Shelley Meloni, Executive Director, Facilities Design and Construction
Mark Dorsett, Manager, Zone 1, Physical Plant Operations Division
Roy Norton, Manager, Custodial/Grounds, Physical Plant Operations Division
Aston Henry, Supervisor, Risk Management
Sonja Coley, Senior Project Manager, Facilities Design and Construction
Broward Teachers Union
Federation of Public Employees

RK/tc
Enc.

IAQ Assessment

Norcrest Elementary

Evaluation Date January 23, 2013

Time of Day 12:00

Outdoor Conditions Temperature 77.9

Relative Humidity 40.5

Ambient CO2 473

Fish	Temperature	Range	Relative Humidity	Range	CO ²	Range	# Occupants
911	65.1	72 - 78	53.7	30% - 60%	560	MAX 700 > Ambient	1
Noticeable Odor		Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
Ceiling		Walls		Floor			
No		2' X 4' Lay in		No		No	
Struck Block / Drywall		No		No		1 sq ft @ exit door	
12" x 12" Vinyl		No		No			
Ceiling Clean		Walls Clean		Flooring Clean		Room Surfaces Clean	
Yes		Yes		Yes		Yes	
HVAC Supply Grills Clean		Inside of Supply Duct Clean		Ceiling at Supply Grills Clean		HVAC Return Grills Clean	
Yes		Yes		Yes		No	
Exhaust Fans Working		Drain Traps Wet		Food if Stored in Room is in Sealed Containers		Unapproved Chemicals / Cleaners in Room	
Yes		No		N/A		N/A	
Air Fresheners in Room		Mechanical Equipment Location		Filters Installed Properly		Condensate Pan Clean	
N/A		FISH 921		Yes		Yes	
Mechanical Room Clean		Filters Clean		Cooling Coil Clean		Inside of HVAC Unit Clean	
Yes		Yes		Yes		Yes	
Fresh Air Intake Location		Pollutant Sources Near Air Intake		Fresh Air Intake Free of Obstruction			
Over Door to Room		None		Yes			

Observations

Science Lab (5 Sinks traps dry and drains full of debris) ---HVAC Return grill heavy dust --- Small 12" x 12" area of water damaged wall material at back exit door --- room to cold

Corrective Actions to be Completed by Site Based Staff

Ensure water is poured down drains regularly	▼
Clean HVAC return grills with Wexcide	▼
	▼
	▼
	▼
	▼
	▼
	▼

Corrective Actions to be Completed by PPO

Clear clogged drains	▼
Evaluate and repair cause of water damage	▼
at exit door	▼
Remove and replace wall material as necessary	▼
Set temperature to 72 - 78 degrees	▼
	▼
	▼
	▼

IAQ Assessment

Norcrest Elementary

Evaluation Date January 23, 2013

Time of Day 12:00

Outdoor Conditions Temperature 77.9

Relative Humidity 40.5

Ambient CO2 473

Fish	Temperature	Range	Relative Humidity	Range	CO ²	Range	# Occupants
914	72.6	72 - 78	47.6	30% - 60%	547	MAX 700 > Ambient	2
Noticeable Odor		Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
Ceiling		Walls		Floor			
No		2' X 4' Lay in		Struck Block / Drywall		12" x 12" Vinyl	
No		No		No		3" x 12" by exit door	
No		No		No			
Ceiling Clean	Yes	HVAC Supply Grills Clean	Yes	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	N/A		
Signs of Pests	No	Drain Traps Wet	Yes	Air Fresheners in Room	N/A		
Room Cluttered	No	Food if Stored in Room is in Sealed Containers	N/A				
Mechanical Equipment Location	FISH 921				Mechanical Room Clean	Yes	
Filters Installed Properly	Yes	Filters Clean	Yes	Inside of HVAC Unit Clean	Yes		
Condensate Pan Clean	Yes	Cooling Coil Clean	Yes				
Fresh Air Intake Location	Over Door to Room ▼				Fresh Air Intake Free of Obstruction	Yes	
Pollutant Sources Near Air Intake	None ▼						

Observations

Sink drain clogged (sink does not drain well- visible growth and debris in drain) ---- HVAC Return grill heavy dust --- Small 3" x 12" area of water damaged wall material at back exit door

Corrective Actions to be Completed by Site Based Staff

Clean HVAC return grills with Wexcide	▼
	▼
	▼
	▼
	▼
	▼
	▼
	▼

Corrective Actions to be Completed by PPO

Clear clogged drain	▼
Evaluate and repair cause of water damage	▼
at exit door	▼
Remove and replace wall material as necessary	▼
	▼
	▼
	▼
	▼

IAQ Assessment

Norcrest Elementary

Evaluation Date January 23, 2013

Time of Day 12:00

Outdoor Conditions Temperature 77.9

Relative Humidity 40.5

Ambient CO2 473

Fish	Temperature	Range	Relative Humidity	Range	CO ²	Range	# Occupants
917	65.3	72 - 78	47.6	30% - 60%	534	MAX 700 > Ambient	1
Noticeable Odor		Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
Ceiling		Walls		Floor			
No		Yes		No		2 Tiles 2 exit door	
2' X 4' Lay in		No		No			
Struck Block / Drywall		No		No			
12" x 12" Vinyl		No		No			

Ceiling Clean	<input checked="" type="checkbox"/>	HVAC Supply Grills Clean	<input checked="" type="checkbox"/>	HVAC Return Grills Clean	<input type="checkbox"/>
Walls Clean	<input checked="" type="checkbox"/>	Inside of Supply Duct Clean	<input checked="" type="checkbox"/>	Inside of Return Duct Clean	<input checked="" type="checkbox"/>
Flooring Clean	<input checked="" type="checkbox"/>	Ceiling at Supply Grills Clean	<input checked="" type="checkbox"/>		
Room Surfaces Clean	<input checked="" type="checkbox"/>				

Trash Removed	<input checked="" type="checkbox"/>	Exhaust Fans Working	<input type="checkbox"/>	Unapproved Chemicals / Cleaners in Room	<input type="checkbox"/>
Signs of Pests	<input type="checkbox"/>	Drain Traps Wet	<input checked="" type="checkbox"/>	Air Fresheners in Room	<input type="checkbox"/>
Room Cluttered	<input type="checkbox"/>	Food if Stored in Room is in Sealed Containers	<input type="checkbox"/>		

Mechanical Equipment Location	FISH 921	Mechanical Room Clean	<input checked="" type="checkbox"/>
Filters Installed Properly	<input checked="" type="checkbox"/>	Filters Clean	<input checked="" type="checkbox"/>
Condensate Pan Clean	<input checked="" type="checkbox"/>	Cooling Coil Clean	<input checked="" type="checkbox"/>
		Inside of HVAC Unit Clean	<input checked="" type="checkbox"/>

Fresh Air Intake Location	Over Door to Room	Fresh Air Intake Free of Obstruction	<input checked="" type="checkbox"/>
Pollutant Sources Near Air Intake	None		

Observations

Standing water in sink - Drain clogged ---- Exhaust fan in restrooms 917C and 919B not working ----- Urine and toilet paper in bowl in 917C --- Room to cold -- stained ceiling tiles

Corrective Actions to be Completed by Site Based Staff

Clean HVAC return grills with Wexcide	▼
	▼
	▼
	▼
	▼
	▼
	▼
	▼

Corrective Actions to be Completed by PPO

Clear clogged drain	▼
Evaluate and repair exhaust fans	▼
Evaluate and repair cause of stained ceiling tiles	▼
Remove and replace ceiling tiles	▼
Set temperature to 72 - 78 degrees	▼
	▼
	▼
	▼

