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Risk Management Department

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March 4, 2013

Signature on File

TO: Dr. Daphene Watson, Principal
Park Ridge Elementary School

FROM: Robert Krickovich, Coordinator I, LEA
Facilities & 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 February 15, 2013, I conducted an assessment at **Park Ridge 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, 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, Supervisor, Risk Management
Sonja Coley, Senior Project Manager, Facilities & Construction
Broward Teachers Union
Federation of Public Employees

RK/tc
Enc.

IAQ Assessment

Park Ridge 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="116"/>	<input type="text" value="69.4"/>	<input type="text" value="72 - 78"/>	<input type="text" value="56.5"/>	<input type="text" value="30% - 60%"/>	<input type="text" value="738"/>	<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 4' Lay in"/>		<input type="text" value="Yes"/>		<input type="text" value="No"/>		<input type="text" value="3 stained tiles"/>
Walls	<input type="text" value="Drywall"/>		<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		<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="No"/>
Flooring Clean	<input type="text" value="Yes"/>	Ceiling at Supply Grills Clean		<input type="text" value="Yes"/>			
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="N/A"/>	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="N/A"/>			
Mechanical Equipment Location	<input type="text" value="Roof Top (raining @ time of assessment)"/>					Mechanical Room Clean	<input type="text" value="N/A"/>
Filters Installed Properly	<input type="text" value="N/A"/>	Filters Clean		<input type="text" value="N/A"/>	Inside of HVAC Unit Clean		<input type="text" value="N/A"/>
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"/>					Fresh Air Intake Free of Obstruction	<input type="text"/>
Pollutant Sources Near Air Intake	<input type="text"/>						

Observations

Two ceiling tiles have circles drawn around stain and marked 10/25/12, stain is larger than marks - inside of supply and return grills dirty

Corrective Actions to be Completed by Site Based Staff

<input type="text"/>	<input type="text" value="▼"/>
<input type="text"/>	<input type="text" value="▼"/>
<input type="text"/>	<input type="text" value="▼"/>
<input type="text"/>	<input type="text" value="▼"/>
<input type="text"/>	<input type="text" value="▼"/>
<input type="text"/>	<input type="text" value="▼"/>
<input type="text"/>	<input type="text" value="▼"/>
<input type="text"/>	<input type="text" value="▼"/>

Corrective Actions to be Completed by PPO

Set temperature to 72 - 78 degrees	<input type="text" value="▼"/>
Evaluate and repair cause of stained ceiling tiles	<input type="text" value="▼"/>
Remove and replace ceiling tiles	<input type="text" value="▼"/>
Clean HVAC supply drops	<input type="text" value="▼"/>
Clean HVAC return drops	<input type="text" value="▼"/>
<input type="text"/>	<input type="text" value="▼"/>
<input type="text"/>	<input type="text" value="▼"/>
<input type="text"/>	<input type="text" value="▼"/>

IAQ Assessment

Park Ridge 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="131"/>	<input type="text" value="72.1"/>	<input type="text" value="72 - 78"/>	<input type="text" value="76.6"/>	<input type="text" value="30% - 60%"/>	<input type="text" value="629"/>	<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 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 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	<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="No"/>
Flooring Clean	<input type="text" value="Yes"/>	Ceiling at Supply Grills Clean	<input type="text" value="Yes"/>		
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="N/A"/>		

Mechanical Equipment Location	<input type="text" value="Roof Top (raining @ time of assessment)"/>	Mechanical Room Clean	<input type="text" value="N/A"/>
Filters Installed Properly	<input type="text" value="N/A"/>	Filters Clean	<input type="text" value="N/A"/>
Condensate Pan Clean	<input type="text" value="N/A"/>	Cooling Coil Clean	<input type="text" value="N/A"/>
		Inside of HVAC Unit Clean	<input type="text" value="N/A"/>

Fresh Air Intake Location	<input type="text"/>	Fresh Air Intake Free of Obstruction	<input type="text"/>
Pollutant Sources Near Air Intake	<input type="text"/>		

Observations

Science lab - 8 sinks - traps leaking in the 2 tall sinks right side of room right of exit door - Trap leaking on left side of room second sink from door - inside of supply and return grills dirty

Corrective Actions to be Completed by Site Based Staff

<input type="text"/>	<input type="text" value="▼"/>
<input type="text"/>	<input type="text" value="▼"/>
<input type="text"/>	<input type="text" value="▼"/>
<input type="text"/>	<input type="text" value="▼"/>
<input type="text"/>	<input type="text" value="▼"/>
<input type="text"/>	<input type="text" value="▼"/>
<input type="text"/>	<input type="text" value="▼"/>
<input type="text"/>	<input type="text" value="▼"/>

Corrective Actions to be Completed by PPO

Repair HVAC to reduce humidity level	<input type="text" value="▼"/>
Replace leaking drain traps	<input type="text" value="▼"/>
See observations for location of sinks	<input type="text" value="▼"/>
Clean HVAC supply drops	<input type="text" value="▼"/>
Clean HVAC return drops	<input type="text" value="▼"/>
<input type="text"/>	<input type="text" value="▼"/>
<input type="text"/>	<input type="text" value="▼"/>
<input type="text"/>	<input type="text" value="▼"/>

IAQ Assessment

Park Ridge Elementary

Evaluation Date February 15, 2013

Time of Day 10:30

Outdoor Conditions Temperature 75.3

Relative Humidity 82.8

Ambient CO2 504

Fish	Temperature	Range	Relative Humidity	Range	CO ²	Range	# Occupants
133	73.7	72 - 78	68.5	30% - 60%	632	MAX 700 > Ambient	18
Noticeable Odor		Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
Ceiling		Ceiling		Ceiling		Ceiling	
No		No		No			
Walls		Walls		Walls		Walls	
2' X 4' Lay in		No		No			
Floor		Floor		Floor		Floor	
Plaster		No		No			
12" x 12" Vinyl		No		No			
Ceiling Clean		HVAC Supply Grills Clean		HVAC Return Grills Clean			
Yes		Yes		No			
Walls Clean		Inside of Supply Duct Clean		Inside of Return Duct Clean			
Yes		Yes		No			
Flooring Clean		Ceiling at Supply Grills Clean					
Yes		Yes					
Room Surfaces Clean		Exhaust Fans Working		Unapproved Chemicals / Cleaners in Room			
Yes		N/A		No			
Trash Removed		Drain Traps Wet		Air Fresheners in Room			
Yes		Yes		No			
Signs of Pests		Food if Stored in Room is in Sealed Containers					
No		N/A					
Room Cluttered							
No							
Mechanical Equipment Location		Filters Clean		Mechanical Room Clean			
Roof Top (raining @ time of assessment)		N/A		N/A			
Filters Installed Properly		Cooling Coil Clean		Inside of HVAC Unit Clean			
N/A		N/A		N/A			
Condensate Pan Clean							
N/A							
Fresh Air Intake Location				Fresh Air Intake Free of Obstruction			
				<input type="checkbox"/>			
Pollutant Sources Near Air Intake							

Observations

Sink Cabinet water damaged - back splash not caulked - live plant in room and two tubs of soil with dead vegetation all with microbial growth on soil - Inside of supply and return grills dirty - 2 stained ceiling tiles in 133A

Corrective Actions to be Completed by Site Based Staff

Remove plants-Soil is a source of microbial growth	▼
Clean HVAC return grills with Wexcide	▼
	▼
	▼
	▼
	▼
	▼
	▼
	▼

Corrective Actions to be Completed by PPO

Repair cause of stained ceiling tiles in 133A	▼
Remove and replace ceiling tiles	▼
Repair HVAC to reduce humidity level	▼
Evaluate and repair sink cabinet as necessary	▼
Caulk sink back splash	▼
Clean HVAC supply drops	▼
Clean HVAC return drops	▼
	▼