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March 4, 2013

Signature on File

TO: Jocelyn Reid, Principal
Deerfield Park 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, 2012, I conducted an assessment at **Deerfield Park 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

Deerfield Park Elementary

Evaluation Date February 15, 2013

Time of Day 11:30

Outdoor Conditions Temperature 73.5

Relative Humidity 92.4

Ambient CO2 457

Fish	Temperature	Range	Relative Humidity	Range	CO ²	Range	# Occupants
306	71.4	72 - 78	49.8	30% - 60%	1082	MAX 700 > Ambient	2
Noticeable Odor		Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
Ceiling		Walls		Floor			
No		No		No			
2' X 4' Lay in		No		No			
Drywall		No		No			
12" x 12" Vinyl		No		No			

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"/> Yes		
Room Surfaces Clean	<input type="checkbox"/> Yes				

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"/> Yes	Drain Traps Wet	<input type="checkbox"/> Yes	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 313	Mechanical Room Clean	<input type="checkbox"/> No
Filters Installed Properly	<input type="checkbox"/> Yes	Filters Clean	<input type="checkbox"/> Yes
Condensate Pan Clean	<input type="checkbox"/> Yes	Cooling Coil Clean	<input type="checkbox"/> Yes
		Inside of HVAC Unit Clean	<input type="checkbox"/> Yes

Fresh Air Intake Location	Roof top	Fresh Air Intake Free of Obstruction	<input type="checkbox"/> Yes
Pollutant Sources Near Air Intake	None		

Observations

Complaint of microbial growth on both sides of door to 306A (non at time of assessment) - Supply grills permanently stained - Insect debris under sink - Water on floor of mechanical room FISH 313 - 1/2" deep

Corrective Actions to be Completed by Site Based Staff

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

Corrective Actions to be Completed by PPO

Repair leaking chilled water pipe	▼
clean water from floor of mechanical room	▼
Investigate insect debris under sink	▼
Evaluate HVAC supply grills for replacement	▼
	▼
	▼
	▼
	▼

IAQ Assessment

Deerfield Park Elementary

Evaluation Date February 15, 2013

Time of Day 11:30

Outdoor Conditions Temperature 73.5

Relative Humidity 92.4

Ambient CO2 457

Fish	Temperature	Range	Relative Humidity	Range	CO ²	Range	# Occupants
410	73.2	72 - 78	55.9	30% - 60%	856	MAX 700 > Ambient	2
Noticeable Odor		Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
Ceiling		Walls		Floor			
No		Yes		No		1 tile near window wall	
2' X 4' Lay in		Drywall		No			
12" x 12" Vinyl		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	N/A
Flooring Clean	Yes	Ceiling at Supply Grills Clean	No		
Room Surfaces Clean	Yes				

Trash Removed	Yes	Exhaust Fans Working	Yes	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 419	Mechanical Room Clean	Yes
Filters Installed Properly	No	Filters Clean	Yes
Condensate Pan Clean	Yes	Cooling Coil Clean	No
		Inside of HVAC Unit Clean	No

Fresh Air Intake Location	Roof top ▼	Fresh Air Intake Free of Obstruction	Yes
Pollutant Sources Near Air Intake	None ▼		

Observations

Spotty microbial growth on restroom door (has been cleaned & returns - replace door) - Supply grills permanently stained - Filters not installed properly missing some spacers others are on top of unit not installed - air is bypassing filter media - coils dirty - unit dirty inside

Corrective Actions to be Completed by Site Based Staff

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

Corrective Actions to be Completed by PPO

Evaluate and repair cause of stained ceiling tiles	▼
Replace door at restroom	▼
Install filler panels in HVAC unit	▼
Clean inside of HVAC unit and coils	▼
Evaluate HVAC supply grills for replacement	▼
	▼
	▼
	▼

IAQ Assessment

Deerfield Park Elementary

Evaluation Date February 15, 2013

Time of Day 11:30

Outdoor Conditions Temperature 73.5

Relative Humidity 92.4

Ambient CO2 457

Fish	Temperature	Range	Relative Humidity	Range	CO ²	Range	# Occupants
809	74.3	72 - 78	59.6	30% - 60%	914	MAX 700 > Ambient	23
Noticeable Odor		Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
No		No		No			
Ceiling	2' X 4' Lay in		No	No			
Walls	Drywall/Tackboard		No	No			
Floor	12" x 12" Vinyl		No	No			
Ceiling Clean	Yes	HVAC Supply Grills Clean	No	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	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	Yes	Food if Stored in Room is in Sealed Containers	N/A				
Mechanical Equipment Location	FISH 817			Mechanical Room Clean	No		
Filters Installed Properly	No	Filters Clean	No	Inside of HVAC Unit Clean	N/A		
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

Weather strip at back door needs replacement - no return grill (air returns through light fixtures) - Supply grills permanently stained - Filters not installed properly missing some spacers others are on top of unit not installed - air is bypassing filter media - coils dirty - unit dirty inside

Corrective Actions to be Completed by Site Based Staff

Clean ceilings around HVAC supply grills	▼
	▼
	▼
	▼
	▼
	▼
	▼
	▼

Corrective Actions to be Completed by PPO

Replace door weather strip	▼
Install filler panels in HVAC unit	▼
Clean inside of HVAC unit and coils	▼
Repair HVAC to reduce humidity level	▼
Evaluate HVAC supply grills for replacement	▼
	▼
	▼
	▼