

Aston A. Henry, Director
Risk Management Department

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July 30, 2013

Signature on File

TO: Susan Sasse, Principal
Pines Lakes Elementary School

FROM: Richard Rosa, Project Manager
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 July 18, 2013, I conducted an assessment at **Pines Lakes 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

RR/tc
Enc.

IAQ Assessment

Pines Lakes Elementary

Evaluation Date July 18, 2013

Time of Day 10:45

Outdoor Conditions Temperature 76.1

Relative Humidity 90.4

Ambient CO2 448

Fish	Temperature	Range	Relative Humidity	Range	CO ²	Range	# Occupants
854	79.7	72 - 78	82.6	30% - 60%	457	MAX 700 > Ambient	
Noticeable Odor		Yes	Visible water damage / staining?		Visible microbial growth?		Amount of material affected
Ceiling	2' x 4'		Yes		No		< 1 sq ft
Walls	Drywall		No		No		
Floor	12" x 12" Vinyl		No		No		

Ceiling Clean	No	HVAC Supply Grills Clean	No	HVAC Return Grills Clean	No
Walls Clean	Yes	Inside of Supply Duct Clean	Yes	Inside of Return Duct Clean	No
Flooring Clean	No	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	Yes	Drain Traps Wet	N/A	Air Fresheners in Room	No
Room Cluttered	Yes	Food if Stored in Room is in Sealed Containers	N/A		

Mechanical Equipment Location	Bard like HVAC system in classroom	Mechanical Room Clean	N/A
Filters Installed Properly	N/A	Filters Clean	N/A
Condensate Pan Clean	N/A	Cooling Coil Clean	N/A
		Inside of HVAC Unit Clean	N/A

Fresh Air Intake Location	Behind Bard unit/Exterior wall ▼	Fresh Air Intake Free of Obstruction	Yes
Pollutant Sources Near Air Intake	No ▼		

Observations

HVAC circuit breaker was turned off. Visible signs of insects above the drop ceiling and on classroom floor. The restroom exhaust fan was not functional - possibly due to the HVAC system being secured. Check work orders to see if South Area maintenance is working on the HVAC system prior to responding.

Corrective Actions to be Completed by Site Based Staff

Clean ceilings around HVAC supply grills	▼
Thoroughly clean and sanitize flooring	▼
Thoroughly clean all surfaces	▼
Generate a work order for pest control	▼
Replace damaged ceiling tiles	▼
	▼
	▼
	▼

Corrective Actions to be Completed by PPO

Evaluate and repair cause of stained ceiling tiles	▼
Set temperature to 72 - 78 degrees	▼
Repair HVAC to reduce humidity level	▼
	▼
Coordinate HVAC repair with South Area	▼
	▼
	▼
	▼

IAQ Assessment

Pines Lakes Elementary

Evaluation Date July 18, 2013

Time of Day 11:15

Outdoor Conditions Temperature 76.1

Relative Humidity 90.4

Ambient CO2 448

Fish	Temperature	Range	Relative Humidity	Range	CO ²	Range	# Occupants
855	77.0	72 - 78	89.3	30% - 60%	475	MAX 700 > Ambient	
Noticeable Odor		Yes	Visible water damage / staining?		Visible microbial growth?		Amount of material affected
Ceiling	2' x 4'		No		No		
Walls	Drywall		Yes		Yes		< 50 sq ft
Floor	12" x 12" Vinyl		No		No		
Ceiling Clean		Yes	HVAC Supply Grills Clean		No		HVAC Return Grills Clean No
Walls Clean		No	Inside of Supply Duct Clean		Yes		Inside of Return Duct Clean No
Flooring Clean		No	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		Yes	Drain Traps Wet		N/A		Air Fresheners in Room No
Room Cluttered		Yes	Food if Stored in Room is in Sealed Containers		N/A		
Mechanical Equipment Location			Bard like HVAC system in classroom			Mechanical Room Clean N/A	
Filters Installed Properly		N/A	Filters Clean		N/A		Inside of HVAC Unit Clean N/A
Condensate Pan Clean		N/A	Cooling Coil Clean		N/A		
Fresh Air Intake Location			Behind Bard unit/Exterior wall ▼			Fresh Air Intake Free of Obstruction Yes	
Pollutant Sources Near Air Intake			No ▼				

Observations

HVAC circuit breaker was locked and tagged out. Visible signs of insects on the classroom floor. The restroom exhaust fan was not functional possibly due to the HVAC system being secured. Check work orders to see if South Area maintenance is working on the HVAC system prior to responding. There is visible microbial growth in the restroom on wall surfaces, the wall is wet per moisture meter. There is also a section of wet wall in the classroom to the left of the restroom door.

Corrective Actions to be Completed by Site Based Staff

Wipe restroom door staining with wexcide	▼
Thoroughly clean and sanitize flooring	▼
Thoroughly clean all surfaces	▼
Generate a work order for pest control	▼
	▼
	▼
	▼
	▼

Corrective Actions to be Completed by PPO

Evaluate and repair cause of water damage	▼
Remove and replace wall material as necessary	▼
Set temperature to 72 - 78 degrees	▼
Repair HVAC to reduce humidity level	▼
	▼
Coordinate HVAC repair with South Area	▼
	▼
	▼

IAQ Assessment

Pines Lakes Elementary

Evaluation Date July 18, 2013

Time of Day 12:15

Outdoor Conditions Temperature 76.1

Relative Humidity 90.4

Ambient CO2 448

Fish	Temperature	Range	Relative Humidity	Range	CO ²	Range	# Occupants
P-271	77.5	72 - 78	80.4	30% - 60%	512	MAX 700 > Ambient	
Noticeable Odor		Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
No		Yes		No		entire ceiling	
Ceiling	Homasote		Yes	No			
Walls	Tack Board		No	No			
Floor	12" x 12" Vinyl		No	No			
Ceiling Clean	No	HVAC Supply Grills Clean	No	HVAC Return Grills Clean	No		
Walls Clean	Yes	Inside of Supply Duct Clean	N/A	Inside of Return Duct Clean	N/A		
Flooring Clean	No	Ceiling at Supply Grills Clean	No				
Room Surfaces Clean	No						
Trash Removed	No	Exhaust Fans Working	N/A	Unapproved Chemicals / Cleaners in Room	No		
Signs of Pests	Yes	Drain Traps Wet	N/A	Air Fresheners in Room	No		
Room Cluttered	Yes	Food if Stored in Room is in Sealed Containers	N/A				
Mechanical Equipment Location	Window unit			Mechanical Room Clean	N/A		
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	Window unit ▼			Fresh Air Intake Free of Obstruction	Yes		
Pollutant Sources Near Air Intake	Grass and landscape ▼						

Observations

The window HVAC units were secured at the time of assessment. I advised the Asst. Principal to remove all valuable contents due to the water damaged ceiling. The school staff advised me that the portable was supposed to be moved off the campus, please confirm.

Corrective Actions to be Completed by Site Based Staff

Remove contents of value from portable	▼
	▼
	▼
	▼
	▼
	▼
	▼
	▼
	▼

Corrective Actions to be Completed by PPO

Evaluate and repair cause of water damage	▼
to ceiling material	▼
Evaluate the replacement of the homasote ceiling	▼
	▼
Advise on removal of portable from site	▼
	▼
	▼
	▼

