

managing risk with responsibility

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July 10, 2013	Signature on File	For Custodial Supervisor Use Only
TO:	Linda Pazos, Principal Lakeside Elementary School	Custodial Issues Addressed Custodial Issues Not Addressed
FROM:	Richard Rosa, Project Manager Risk Management Department	
SUBJECT:	Indoor Air Quality (IAQ) Assessment	

On June 5, 2013, I conducted an assessment at **Lakeside 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.

	L.	AQ Assessm	ent		
Lake	eside Elementary	Evaluation Date	June 5, 2013	Time of Day	11:45
Outdoor Conditions Ter	nperature 79.5	Relative H	lumidity 95.9	Ambient CO2	461
FishTemperatureP1169VE73.6	RangeRelative72 - 7848		ange <u>CC</u> - 60% 173		Occupants 13
Noticeable OdorNoCeilingHomasoteWallsHomasoteFloor12" x 12" Vinyl	Visible wate stain	ing?	Visible microbial growth? No Yes	Amount of material affected >350 sq ft wet wall b	oard
Ceiling Clean Yes Walls Clean No Flooring Clean Yes	HVA Grill Insid Duct	C Supply s Clean de of Supply t Clean	 Yes	HVAC Return Grills Clean Inside of Return Duct Clean	Yes
Room Surfaces No Clean		ng at Supply s Clean	Yes		
Trash RemovedYesSigns of PestsNoRoom ClutteredYes	Dra	ans Working ain Traps Wet ed in Room is ontainers	No N/A N/A	Unapproved Chemicals / Cleaners in Room Air Fresheners in Room	No
Mechanical Equipment Loca Filters Installed Properly Condensate Pan Clean	Yes	system in class Filters Clean Ig Coil Clean	room Yes N/A	Mechanical Room Clean Inside of HVAC Unit Clean	N/A N/A
Fresh Air Intake Location Pollutant Sources Near Air Intake	Behind Bard uni Grass and lands		▼▼	Fresh Air Intake Free of Obstruction	Yes

Observations

The HVAC system was off at the time of the assessment. I advised the HFSP that the HVAC system must be on to control the CO2. I turned down the temperature and the CO2 started to drop. There are spots throughout the portable with visible microbial growth, also identified the homasote panels with red X's that need to be replaced due to water intrusion. Evaluate the entire South exterior wall for replacement. Evaluate other exterior locations where the Red X's are located. Evaluate the removal of vegetation under the portable, possible growth breaching the water barrier.

Corrective Actions to be Completed by Site Based Staff

Thoroughly clean horizontal surfaces	▼
	▼
	▼
	▼
	▼
	▼
	▼
	▼

Corrective Actions to be Completed by PPO

Evaluate for normal function of exhaust fan	▼
Evaluate and repair cause of water damage	▼
Remove and replace material as necessary	▼
	▼
	▼
see observations for additional info	▼
	▼
	▼

	IAQ Assessr	ment		
Lakeside	Elementary Evaluation Dat	e June 5, 2013	Time of Day 1	0:15
Outdoor Conditions Tempera	ature 79.5 Relative	Humidity 95.9	Ambient CO2 4	61
		Range CO % - 60% 859		ccupants
Noticeable Odor No	Visible water damage / staining?	Visible microbial growth?	Amount of material affected	
Ceiling Homasote	Yes	No	< 2 sq ft	
Walls Homasote	No	No		
Floor 12" x 12" Vinyl	No	No		
Ceiling Clean No Walls Clean Yes	HVAC Supply Grills Clean	Yes	HVAC Return Grills Clean	Yes
Flooring Clean Yes	Inside of Supply Duct Clean	Yes	Inside of Return Duct Clean	Yes
Room Surfaces No	Ceiling at Supply Grills Clean	Yes		
Trash Removed Yes	Exhaust Fans Working	Yes	Unapproved Chemicals / Cleaners in Room	No
Signs of Pests No	Drain Traps Wet	N/A	Air Fresheners	No
Room Cluttered Yes	Food if Stored in Room is in Sealed Containers	N/A	in Room	
Mechanical Equipment Location	Bard like HVAC system in clas	ssroom	Mechanical Room Clean	N/A
Filters Installed Properly Yes	5 Filters Clean	Yes	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 wal	I V	Fresh Air Intake Free of Obstruction	Yes
Pollutant Sources Near Air Intake	Grass and landscape	▼	of Obstruction	
Observations				
Evaluate the roof in the area of t outside the restroom. Also there				

School staff to clean, paint and monitor.

Corrective Actions to be Completed by Site Based Staff

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Corrective Actions to be Completed by PPO

Evaluate roofing for water tight integrity	▼
	▼
	▼
	▼
see observations for additional info	▼
	▼
	▼
	▼

	IAQ Assessi	ment		
Lakesi	de Elementary Evaluation Dat	e June 5, 2013	Time of Day 1	1:00
Outdoor Conditions Temp	erature 79.5 Relative	Humidity 95.9	Ambient CO2 4	61
		Range CO % - 60% 122		ccupants 13
Noticeable Odor No	Visible water damage / staining?	Visible microbial growth?	Amount of material affected	
Ceiling Drywall Walls Homasote	Yes	No	< 1 sq ft	
Floor 12" x 12" Vinyl	No	No		
Ceiling Clean No Walls Clean Yes	HVAC Supply Grills Clean	Yes	HVAC Return Grills Clean	Yes
Flooring Clean Yes	Inside of Supply Duct Clean	Νο	Inside of Return Duct Clean	Yes
Room Surfaces Yes Clean	Ceiling at Supply Grills Clean	Yes		
Trash Removed Yes	Exhaust Fans Working	Yes	Unapproved Chemicals / Cleaners in Room	No
Signs of Pests No Room Cluttered Yes	Drain Traps Wet Food if Stored in Room is in Sealed Containers	N/A	Air Fresheners in Room	No
Mechanical Equipment Locatio		ssroom	Mechanical Room Clean	N/A
Filters Installed Properly	Yes Filters Clean	Yes	Inside of HVAC Unit Clean	N/A
Condensate Pan Clean	I/A Cooling Coil Clean	N/A		
Fresh Air Intake Location	Behind Bard unit/Exterior wal	I V	Fresh Air Intake Free of Obstruction	Yes
Pollutant Sources Near Air Intake	Grass and landscape	▼		
Observations				

The HVAC system was off at the time of the assessment. I advised the HFSP that the HVAC system must be on to control the CO2. I turned down the temperature and the CO2 started to drop. There is a minor ceiling stain adjacent to HVAC supply grill due to condensation. School staff to clean, paint and monitor. The instructor states that in the past there was mold on the HVAC supply grills. It appears that the ductwork may be fiberglass.

Corrective Actions to be Completed by Site Based Staff

Monitor ceiling for returning stain	▼
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Corrective Actions to be Completed by PPO

Clean HVAC supply drops	▼
	▼
	▼
	▼
	▼
	▼
	▼
	▼