

SUBJECT:

managing risk with responsibility

Jeffrey S. Moquin, DirectorTelephone:754-321-3200Risk Management DepartmentFacsimile:754-321-3290

June 9, 2008	Signature on File	For Custodial Supervisor Use Only
TO:	Mr. Dennis Sciullo, Principal Cooper City Elementary School	Custodial Issues Addressed Custodial Issues Not Addressed
FROM:	Aston A. Henry, Supervisor Risk Management Department	

Indoor Air Quality (IAQ) Assessment FISH 114, 116, 175, 176 and 185

On May 14, 2008 I conducted an assessment of FISH 114, 116, 175, 176 and 185 at Cooper City Elementary School. This evaluation included observations of the flooring system, ceiling tiles, false ceiling plenum, environmental surfaces, interior and exterior walls, and the accessible ventilation equipment. Additionally, environmental parameter measurements were taken to include temperature, relative humidity, and carbon dioxide. The detailed findings, along with the recommended corrective action can be found on the attached IAQ Assessment Worksheets.

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. Within two weeks a representative from the Custodial/Grounds Department will conduct a follow-up visit to ensure that all 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 me at 754-321-3200.

cc: Dr. Joel Herbst, Area Superintendent
Jacquelyn Box, Area Director
Jeffrey S. Moquin, Director, Risk Management
Bertram Lewars, Project Manager, Facilities and Construction Management
Ralph Eckhardt, Broward Teachers Union
Roy Jarrett, National Federation of Public and Private Employees
Mark Dorsett, Manager 1, Physical Plant Operations Division, Zone 1
Roy Norton, Manager Custodial/Grounds, Physical Plant Operations Division
Robert Krickovich, Coordinator, LEA, Facilities and Construction Management

ES/tc Enc.

	Соор	er City Eleme	entary School		Evaluation	n Requested [May 8, 2008	
Time of Day	12:05 pm				Eva	aluation Date	May 14, 2008	
Outdoor Cond	itions Te	emperature	88.3	Relative Humidity	48.7	Ambier	nt CO2 473	
Fish	Temperature	Range	Relative Humidity	Range	CO2	Ran	ge # Occupants	
114	73.5	72 - 78	57.7	30% - 60%	849	Max 700 :	> Ambient 2	
Noticeable Oc	dor No		Visible water damage / staining	Visible microbial Amount of material g? growth? affected				
Ceiling Type	2 x 4 La	ay In	Yes	No		2 ce	iling tiles	
Wall Type	Dryw	all	No	No			None	
Flooring	Tile		No	No			None	
	Clean Minor Dust Needs Corrective Action Required / Debris Cleaning							
Ceiling	No	Yes	Yes	R	emove and	d replace stai	ned tiles	
Walls	Yes	No	No					
Flooring	Yes	No	No					
HVAC Supply	Grills Yes	No	No					
HVAC Return	Grills No	Yes	Yes	0	Clean with	Wexcide disi	nfectant	
Ceiling at Sup Grills	pply Yes	No	No					
Surfaces in Ro	oom Yes	No	No					
bservations								
Findings: - Roof repair in progress at the time of assessment. 2 stained ceiling tiles from previous roof leak. - Dust and debris on HVAC return grills - No signs of visible microbial growth or water intrusion Recommendations: Site Based Maintenance: - Remove and replace stained ceiling tiles - Clean HVAC return grills with Wexcide disinfectant solution - Continue to monitor this location for any signs of microbial growth as well as dust and debris accumulation and clean as appropriate								

1211

Location Number

Noticeable Odor	Time of Day	12:05 pm				Eva	lluation Date May 14, 2008
116	Outdoor Condit	ions Te	emperature [88.3	Relative Humidity	48.7	Ambient CO2 473
Noticeable Odor No Visible water damage / staining? Visible microbial growth? Amount of material affected	Fish T	emperature	Range R	elative Humidity	Range	CO2	Range # Occupants
Ceiling Type	116	74.6	72 - 78	62.1	30% - 60%	869	Max 700 > Ambient 21
Wall Type Drywall No No None Clean Minor Dust / Debris No No None	Noticeable Odd	or No				bial A	
Clean Minor Dust / Debris Cleaning Corrective Action Required Ceiling Yes No No Walls Yes No No Flooring Yes No No HVAC Supply Grills Yes No No HVAC Return Grills No Yes Yes Clean with Wexcide disinfectant Ceiling at Supply Yes No No Surfaces in Room Yes No No Surfaces in Room Yes No No Recommendations: - Continue to monitor this location for any signs of microbial growth as well as dust and debris accumulation and clean as appropriate Physical Plant Operations:	Ceiling Type	2 x 4 La	ıy In	No	No		None
Ceiling Yes No No No Servations Findings: Roof repair in progress at the time of assessment - Dust and debris on HVAC return grills - Humidity level was slightly elevated at the time of assessment - No signs of visible microbial growth or water intrusion Recommendations: Site Based Maintenance: - Continue to monitor this location for any signs of microbial growth as well as dust and debris accumulation and clean as appropriate Physical Plant Operations:	Wall Type	Drywa	all	No	No		None
Ceiling Yes No No No Walls Yes No No No No HVAC Supply Grills Yes No No No Ceiling at Supply Grills No Yes Yes Clean with Wexcide disinfectant Ceiling at Supply Yes No No No Surfaces in Room Yes No No No No No Roord Findings: - Roof repair in progress at the time of assessment - Dust and debris on HVAC return grills - Humidity level was slightly elevated at the time of assessment - No signs of visible microbial growth or water intrusion Recommendations: Site Based Maintenance: - Clean HVAC return grills with Wexcide disinfectant solution - Continue to monitor this location for any signs of microbial growth as well as dust and debris accumulation and clean as appropriate Physical Plant Operations:	Flooring	Tile		No	No		None
Walls Yes No No Flooring Yes No No HVAC Supply Grills Yes No No HVAC Return Grills No Yes Yes Clean with Wexcide disinfectant Ceiling at Supply Yes No No Grills Surfaces in Room Yes No No Deservations Findings: Roof repair in progress at the time of assessment - Dust and debris on HVAC return grills - Humidity level was slightly elevated at the time of assessment - No signs of visible microbial growth or water intrusion Recommendations: Site Based Maintenance: - Clean HVAC return grills with Wexcide disinfectant solution - Continue to monitor this location for any signs of microbial growth as well as dust and debris accumulation and clean as appropriate Physical Plant Operations:		Clean				Correctiv	ve Action Required
Flooring Yes No No HVAC Supply Grills Yes No No HVAC Return Grills No Yes Yes Clean with Wexcide disinfectant Ceiling at Supply Yes No No Surfaces in Room Yes No No Surfaces in Room Yes No No Findings: Roof repair in progress at the time of assessment Dust and debris on HVAC return grills Humidity level was slightly elevated at the time of assessment No signs of visible microbial growth or water intrusion Recommendations: Site Based Maintenance: Clean HVAC return grills with Wexcide disinfectant solution Continue to monitor this location for any signs of microbial growth as well as dust and debris accumulation and clean as appropriate Physical Plant Operations:	Ceiling	Yes	No	No			
HVAC Supply Grills Yes No No Clean with Wexcide disinfectant Ceiling at Supply Yes No No Surfaces in Room Yes No No No Surfaces in Room Yes No No No Room Findings: - Roof repair in progress at the time of assessment - Dust and debris on HVAC return grills - Humidity level was slightly elevated at the time of assessment - No signs of visible microbial growth or water intrusion Recommendations: Site Based Maintenance: - Clean with Wexcide disinfectant solution - Continue to monitor this location for any signs of microbial growth as well as dust and debris accumulation and clean as appropriate Physical Plant Operations:	Walls	Yes	No	No			
HVAC Return Grills No Yes Yes Clean with Wexcide disinfectant Ceiling at Supply Grills Surfaces in Room Yes No No Surfaces in Room Yes No No Pindings: - Roof repair in progress at the time of assessment - Dust and debris on HVAC return grills - Humidity level was slightly elevated at the time of assessment - No signs of visible microbial growth or water intrusion Recommendations: Site Based Maintenance: - Clean HVAC return grills with Wexcide disinfectant solution - Continue to monitor this location for any signs of microbial growth as well as dust and debris accumulation and clean as appropriate Physical Plant Operations:	Flooring	Yes	No	No			
Ceiling at Supply Grills Surfaces in Room Yes No No No Surfaces in Room Yes No No No No Surfaces in Room Yes No	HVAC Supply 0	Grills Yes	No	No			
Surfaces in Room Yes No No Dibservations Findings: - Roof repair in progress at the time of assessment - Dust and debris on HVAC return grills - Humidity level was slightly elevated at the time of assessment - No signs of visible microbial growth or water intrusion Recommendations: Site Based Maintenance: - Clean HVAC return grills with Wexcide disinfectant solution - Continue to monitor this location for any signs of microbial growth as well as dust and debris accumulation and clean as appropriate Physical Plant Operations:	HVAC Return G	Brills No	Yes	Yes	CI	ean with \	Vexcide disinfectant
Disservations Findings: - Roof repair in progress at the time of assessment - Dust and debris on HVAC return grills - Humidity level was slightly elevated at the time of assessment - No signs of visible microbial growth or water intrusion Recommendations: Site Based Maintenance: - Clean HVAC return grills with Wexcide disinfectant solution - Continue to monitor this location for any signs of microbial growth as well as dust and debris accumulation and clean as appropriate Physical Plant Operations:		oly Yes	No	No			
Findings: - Roof repair in progress at the time of assessment - Dust and debris on HVAC return grills - Humidity level was slightly elevated at the time of assessment - No signs of visible microbial growth or water intrusion Recommendations: Site Based Maintenance: - Clean HVAC return grills with Wexcide disinfectant solution - Continue to monitor this location for any signs of microbial growth as well as dust and debris accumulation and clean as appropriate Physical Plant Operations:	Surfaces in Ro	om Yes	No	No			
 Roof repair in progress at the time of assessment Dust and debris on HVAC return grills Humidity level was slightly elevated at the time of assessment No signs of visible microbial growth or water intrusion Recommendations: Site Based Maintenance: Clean HVAC return grills with Wexcide disinfectant solution Continue to monitor this location for any signs of microbial growth as well as dust and debris accumulation and clean as appropriate Physical Plant Operations: 	L Observations						

Cooper City Elementary School

1211

May 8, 2008

Location Number
Evaluation Requested

	Cooper C	City Elementar	y School		Evaluat	ion Requested	May 8, 2008
Time of Day	12:05 pm				E	Evaluation Date	May 14, 2008
Outdoor Condi	tions Temp	erature 8	8.3	Relative Humidit	y 48.7	Ambie	nt CO2 473
l		ange Rela	tive Humidity	Range	CO2	Ran	
175	70.8 72	- 78	58.1	30% - 60%	1122	Max 700	> Ambient 24
Noticeable Od		dam	isible water age / staining	Visible mic growth		Amount of ma	
Ceiling Type	2 x 4 Lay Ir	1	Yes	No		3 cc	eiling tiles
Wall Type	Drywall		No	No			None
Flooring	Tile		No	No			None
	Clean	Minor Dust / Debris	Needs Cleaning			ctive Action Re	·
Ceiling	No	Yes	Yes	F	Remove a	nd replace sta	ined tiles
Walls	Yes	No	No				
Flooring	Yes	No	No				
HVAC Supply	Grills Yes	No	No				
HVAC Return	Grills No	Yes	Yes		Clean wit	h Wexcide disi	nfectant
Ceiling at Sup Grills	ply Yes	No	No				
Surfaces in Ro	oom Yes	No	No				
Observations							
	progress at the timis on HVAC return		ent. 3 stained	d ceiling tiles from բ	orevious r	oof leak.	

1211

Location Number

- Temperature was low at the time of assessment
- No signs of visible microbial growth or water intrusion

Recommendations:

Site Based Maintenance:

- Remove and replace stained ceiling tiles
- Clean HVAC return grills with Wexcide disinfectant solution
- Adjust thermostat to increase temperature
- Continue to monitor this location for any signs of microbial growth as well as dust and debris accumulation and clean as appropriate

	Cooper City Ele	mentary School		Evaluation Requested	May 8, 2008
Time of Day 12	::05 pm			Evaluation Date	May 14, 2008
Outdoor Conditions	Temperatur	e 88.3	Relative Humidity	48.7 Ambi	ent CO2 473
176 7	73.4 Range 72 - 78	Relative Humidity 54.9 Visible water	Range 30% - 60% Visible micro	1461 Max 70 0	nge # Occupants 0 > Ambient 20
Noticeable Odor	No	damage / staining			l
Ceiling Type	2 x 4 Lay In	No	No		None
Wall Type	Drywall	No	No		None
Flooring	Tile	No	No		None
	Clean Minor / Del		ı	Corrective Action R	equired
Ceiling	Yes	No			
Walls	Yes	No			
Flooring	Yes	No			
HVAC Supply Grills	Yes	No			
HVAC Return Grills	No	Yes	С	lean with Wexcide di	sinfectant
Ceiling at Supply Grills	Yes	No			
Surfaces in Room	Yes	No			
bservations					
Findings: - Minor dust and debric No signs of visible management Recommendations: Site Based Maintenary Clean HVAC return	nicrobial growth or viance: grills with Wexcide o	rater intrusion	growth as well as dus	et and debris accumula	tion and clean as

1211

Location Number

	Cooper City Ele	mentary School		Evaluation Request	ed May 8, 2008
Time of Day	12:05 pm			Evaluation D	ate May 14, 2008
Outdoor Condition	rs Temperatur	e 88.3	Relative Humidity	48.7 Am	bient CO2 473
Fish Tem	perature Range 72 72 - 78	Relative Humidity	30% - 60%	1313 Max 7	Range # Occupants 700 > Ambient 2
Noticeable Odor	No	Visible water damage / staining	Visible micro g? growth?		
Ceiling Type	2 x 4 Lay In	No	No		None
Wall Type	Drywall	No	No		None
Flooring	Tile	No	No		None
	Clean Minor / De		ı	Corrective Action	n Required
Ceiling	Yes	o No			
Walls	Yes	o No			
Flooring	Yes	o No			
HVAC Supply Gril	Is Yes N	o No			
HVAC Return Grill	Is No Ye	Yes	С	lean with Wexcide	disinfectant
Ceiling at Supply Grills	Yes	o No			
Surfaces in Room	Yes	No			
Observations					
- No signs of visible Recommendations Site Based Maintel - Clean HVAC return		vater intrusion disinfectant solution		st and debris accumu	ılation and clean as

1211

Location Number