

FISH 403, 503 and 707

# managing risk with responsibility

Aston A. Henr Risk Managen	ry, Supervisor nent Department	Telephone: Fax:	754 321-1900 754 321-1917		
May 22, 2009	Signature on File	For Custodial Supervisor Use C			
TO:	Mr. Lincoln Pasteur, Principal Collins Elementary School		ues Addressed ues Not Addressed		
FROM:	Edward See, Project Manager Risk Management Department				
SUBJECT:	Indoor Air Quality (IAQ) Assessment		+		

On May 15, 2009 I conducted an assessment of FISH 403, 503 and 707 at Collins 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 754-321-1900.

CC: Dr. Joel Herbst, Area Superintendent
 Valerie Wanza, Area Director
 Jeffrey S. Moquin, Director, Risk Management
 Bob Sharps, Project Manager, Facilities and Construction Management
 Jamie Daniels, Broward Teachers Union
 Roy Jarrett, Federation of Public 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.

	Collins Elementary School	Evaluation Requested April 13, 2009				
Time of Day 2:0	0 pm	Evaluation Date May 15, 2009				
Outdoor Conditions	Temperature 81.8 Relative Hum	nidity 68.8 Ambient CO2 373				
Flooring 1	72 - 78	CO2 Range # Occupants 600 Max 700 > Ambient 4  microbial Amount of material affected None None Corrective Action Required				
Ceiling	Yes No No					
Walls	Yes No No					
Flooring	Yes No No					
HVAC Supply Grills	Yes No No					
HVAC Return Grills	Yes No No					
Ceiling at Supply Grills	Yes No No					
Surfaces in Room	No Yes Yes	Clean as appropriate				
Dbservations Findings: - Non-approved chemicals in room (tile adhesive, open bag of sheetrock repair material, liquid wrench). HFSP removed at the time of the assessment Dust build up on environmental surfaces  Recommendations: Site Based Maintenance: - Remove non-approved chemicals from room - Clean environmental surfaces throughout the room - Continue to monitor this location for any signs of microbial growth as well as dust and debris accumulation and clean as appropriate						

IAQ Assessment

0331

**Location Number** 

	Cc	ollins Element	tary School		Evaluati	ion Requested [	April 13, 2009	
Time of Day 2	2:00 pm	]			E	Evaluation Date	May 15, 2009	
Outdoor Conditions	s Ten	mperature	81.8	Relative Humi	dity 68.8	Ambier	nt CO2 373	
Fish Tomp	oroturo		1.4. 11. 1.114			_		
l ———		Range Re 72 - 78	70.3	Range 30% - 60%	<b>CO2</b> 561	Rang Max 700	ge # Occupants > Ambient 2	
		72-73 <u> </u>	Visible water	Visible m		Amount of		
Noticeable Odor	Yes	d;	amage / staining			material affect		
Ceiling Type	Tectum	<u>n</u>	No				None	
Wall Type	Tackabl	le	No	No	,	None		
Flooring	12 x 12 Vi	inyl	No	No	)		None	
Clean Minor Dust Needs Corrective Action Required / Debris Cleaning						quired		
Ceiling	Yes	No	No					
Walls	Yes	No	No					
Flooring	Yes	No	No					
HVAC Supply Grill	s Yes	No	No					
HVAC Return Grill	s Yes	No	No					
Ceiling at Supply Grills	Yes	No	No					
Surfaces in Room	No	Yes	Yes		Clea	an as appropria	ate	
) Dbservations								
Findings:								
- Odor in room appe		om off gassin	g of new wall ma	aterial and spac	kle (recent r	epairs complete	d)	
- One potted plant in room								
- Construction debris left on tables - Humidity level was elevated at the time of the assessment								
Recommendations Site Based Mainter - Remove potted pla	nance:	om. Soil is a s	ource of microb	ial growth.				
- Clean environmental surfaces throughout the room to remove construction debris and dust								

- Continue to monitor this location for any signs of microbial growth as well as dust and debris accumulation and clean as

**IAQ Assessment** 

0331

**Location Number** 

# Physical Plant Operations:

appropriate

- Evaluate HVAC system for proper operation and repair as appropriate to lower humidity level

Collins Elementary School				1	Evaluation Requested April 13, 2009			
Time of Day 2:00 pm					Evaluation Date May 15, 20			
Outdoor Cond	itions To	emperature [	81.8	Relative Humidity	68.8	Ambier	nt CO2	373
Fish	Temperature	Range Re	lative Humidity	Range	CO2	Ran	ge # (	Occupants
707	71.6	72 - 78	55.4	30% - 60%	1604	Max 700	> Ambient	3
Noticeable Oc	dor No	da	Visible water mage / staining	Visible microk growth?		Amount of terial affect		
Ceiling Type	Tectu	ım	No	No			None	
Wall Type	Tacka	ble	No	No			None	
Flooring	12 x 12	Vinyl	No	No			None	
	Clean	Minor Dust	Needs Cleaning		Corrective A	Action Re	quired	
Ceiling	No	Yes	Yes	Rei	move and re	place bro	ken tiles	
Walls	Yes	No	No					
Flooring	No	Yes	Yes		Clean a	nd sanitiz	e	
HVAC Supply	Grills Yes	No	No					
HVAC Return	Grills Yes	No	No					
Ceiling at Sup Grills	oply Yes	No	No					
Surfaces in Ro	oom No	Yes	Yes		Clean as	appropria	ate	
)boom rotions								

IAQ Assessment

0331

**Location Number** 

#### **Observations**

# Findings:

- A/C return vent was blocked. HFSP removed covering during assessment.
- 2 broken ceiling tiles
- Observed food crumbs inside desks
- 2 potted plants in room
- Clutter on top of book shelves
- Dust and debris on environmental surfaces
- CO2 level was slightly elevated at the time of the assessment

#### Recommendations:

### Site Based Maintenance:

- Remove and replace broken ceiling tiles
- Clean crumbs from inside desks and remind students to clean up
- Remove potted plants from room. Soil is a source of microbial growth.
- Clean environmental surfaces throughout the room. Occupant to reduce clutter to assist with cleaning efforts.
- 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:**

- Evaluate HVAC system for proper operation and repair as appropriate to CO2 level