

## managing risk with responsibility

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Risk Management Department	Fax:	754 321-1917

December 14, 2010 Signature on File For Custodial Super

TO: Mr. Thomas Redshaw, Principal

**Park Trails Elementary School** 

FROM: Edward See, Project Manager

Risk Management Department

SUBJECT: Indoor Air Quality (IAQ) Assessment

FISH 101, 103, 109 and 311

On December 2, 2010 I conducted an assessment of FISH 101, 103, 109 and 311 at **Park Trails 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.

Generally, the IAQ Assessment did not identify any existing conditions significantly impacting IAQ and thereby presenting immediate health and safety concerns 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 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: Sharon Airaghi., Area Superintendent

David Hall, Area Director

Jeffrey S. Moquin, Executive Director, Support Operations

Aston Henry, Supervisor, Risk Management

Gerry Devio, Project Manager, Facilities and Construction Management

Gary Itzkowitz, 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.

	Park Trails Eler	nentary School		Evaluation Requested _	November 22, 2010
Time of Day 10	:30 am			Evaluation Date	December 2, 2010
Outdoor Conditions	Temperature	70.1	Relative Humidity	57.7 Ambient	CO2 390
Fish Tempe	rature Range 74.1 72 - 78	Relative Humidity 46.8	Range 30% - 60%	CO2 Rang 688 Max 700 >	
Noticeable Odor	No	Visible water damage / staining	Visible microl growth?	oial Amount of material affecte	ad.
Ceiling Type	2 x 4 Lay In	No No	No		lone
Wall Type	Drywall	No	No	N	one
Flooring	Carpet	No	No	N	lone
	Clean Minor			Corrective Action Req	uired
Ceiling	Yes	No			
Walls	Yes	No			
Flooring	Yes	No			
HVAC Supply Grills	Yes	No			
HVAC Return Grills	Yes	No			
Ceiling at Supply Grills	Yes	No			
Surfaces in Room	Yes No	No			
Observations					
Findings - Office recently paint - Staff advised that th		the carpet when it is	s cleaned twice a yea	àr.	
	notified when carpe			m to assist with ventilatio st and debris accumulatio	

**IAQ Assessment** 

3781

		IAQ As	sessment	<b>Location Number</b>	3781
	Park Trails Elem	entary School		<b>Evaluation Requested</b>	November 22, 2010
Time of Day 10	:30 am			<b>Evaluation Date</b>	December 2, 2010
Outdoor Conditions	Temperature	70.1	Relative Humidity	57.7 Ambie	nt CO2 390
Fish Temper 103 7  Noticeable Odor Ceiling Type Wall Type Flooring Ceiling	Prature Range 73.6 72 - 78  No 2 x 4 Lay In  Drywall  Carpet  Clean Minor D / Debr  Yes No	is Cleaning	Range 30% - 60%  Visible micro growth?  No  No  No	bial Amount o	> Ambient 22  feted None None
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	Yes No	No			
bservations					
Findings - No issues identified Site Based Maintenan		sessment			
		signs of microbial (	growth as well as du	st and debris accumula	tion and clean as

Fish Temperature Range Relative Humidity Range CO2 Range # Occupants  109			IAQ Asses	sment	Location Number	3781	
Outdoor Conditions  Temperature  Range Relative Humidity Range CO2 Range # Occupants 109 70.7 72-78 52.1 30%-60% 571 Max 700 > Ambient C12  Noticeable Odor No Visible water damage/ staining? Visible microbal growth? No		Park Trails Elementar	y School		Evaluation Requested	November 22, 2010	
Fish Temperature Range Relative Humidity Range CO2 Range # Occupants  109	Time of Day 10:	30 am			Evaluation Date	December 2, 2010	
109   70.7   72 - 78   52.1   30% - 60%   571   Max 700 > Ambient   12	Outdoor Conditions	Temperature 7	'0.1 Rel	ative Humidity	57.7 Ambie	nt CO2 390	
Noticeable Odor No damage / staining? Visible microbial growth? Amount of material affected spread of the provided of the prov				Range		·	
Ceiling Type	109 70						
Wall Type Drywall No No None  Flooring Carpet No No No None  Clean Minor Dust / Debris Cleaning Corrective Action Required  Ceiling Yes No	Noticeable Odor	INO I			7		
Flooring Carpet No No No None  Clean Minor Dust / Debris Cleaning Corrective Action Required  Ceiling Yes No	Ceiling Type	2 x 4 Lay In	No	No		None	
Clean Minor Dust / Debris Cleaning Corrective Action Required  Ceiling Yes No No No  Walls Yes No No No  Flooring Yes No No No  HVAC Supply Grills Yes No No No  Ceiling at Supply Yes No No No  Ceiling at Supply Yes No No No  Surfaces in Room Yes No No No  Site Based Maintenance:  - Ensure that dehumidifier is checked and emptied regularly - Continue to monitor this location for any signs of microbial growth as well as dust and debris accumulation and clean as	Wall Type	Drywall	No	No		None	
Ceiling Yes No	Flooring	Carpet	No	No		None	
Walls Yes No No					Corrective Action Re	equired	
Flooring Yes No No No HVAC Supply Grills Yes No No No HVAC Return Grills Yes No No No Grills Yes No No No Surfaces in Room Yes No No No Surfaces in Room Yes No No Surfaces in Room Yes No No Surfaces in Room Yes No No No Supply Grills Supply Grills Surfaces in Room Yes No No No Supply Grills Surfaces in Room Yes No No No Supply Grills Surfaces in Room Yes No No No Supply Grills Surfaces in Room Yes No No No Supply Grills Surfaces in Room Yes No No No Supply Grills Surfaces in Room Yes No No No Supply Grills Surfaces in Room Yes No No No Supply Grills Surfaces in Room Yes No No No Supply Grills Surfaces in Room Yes No No No Supply Grills Surfaces in Room Yes No No No Supply Grills Surfaces in Room Yes No No No Supply Grills Surfaces in Room Yes No No No No Supply Grills Surfaces in Room Yes No No No No Supply Grills Surfaces in Room Yes No No No No Supply Grills Surfaces in Room Yes No No No No Supply Grills Surfaces in Room Yes No No No Supply Grills Surfaces in Room Yes No No No No Supply Grills Surfaces in Room Yes No No No Supply Grills Surfaces in Room Yes No No No No Supply Grills Surfaces in Room Yes No No No Supply Grills Surfaces in Room Yes No No No Supply Grills Surfaces in Room Yes No No No Supply Grills Surfaces in Room Yes No No No Supply Grills Surfaces in Room Yes No No No Supply Grills Surfaces in Room Yes No No No Supply Grills Surfaces in Room Yes No No No Supply Grills Surfaces in Room Yes No No No Supply Grills Surfaces in Room Yes No No No Supply Grills Surfaces in Room Yes No No No Supply Grills Surfaces in Room Yes No No No Supply Grills Surfaces in Room Yes No No No Supply Grills Surfaces in Room Yes No No No Supply Grills Surfaces in Room Yes No No No No Supply Grills Surfaces in Room Yes No No No No Supply Grills Surfaces in Room Yes No No No No Supply Grills Surfaces in Room Yes No No No No No No Supply Grills Surfaces in Room Yes No	Ceiling	Yes	No				
HVAC Supply Grills Yes No No No	Walls	Yes No	No				
HVAC Return Grills Yes No No No Ceiling at Supply Yes No No No Grills  Surfaces in Room Yes No No No Servations  Findings - Dehumidifier in room and bucket was full of water  Site Based Maintenance: - Ensure that dehumidifier is checked and emptied regularly - Continue to monitor this location for any signs of microbial growth as well as dust and debris accumulation and clean as	Flooring	Yes No	No				
Ceiling at Supply Yes No No Surfaces in Room Yes No No No Servations  Findings - Dehumidifier in room and bucket was full of water  Site Based Maintenance: - Ensure that dehumidifier is checked and emptied regularly - Continue to monitor this location for any signs of microbial growth as well as dust and debris accumulation and clean as	<b>HVAC Supply Grills</b>	Yes No	No				
Surfaces in Room Yes No No Servations  Findings - Dehumidifier in room and bucket was full of water  Site Based Maintenance: - Ensure that dehumidifier is checked and emptied regularly - Continue to monitor this location for any signs of microbial growth as well as dust and debris accumulation and clean as	HVAC Return Grills	Yes No	No				
Site Based Maintenance: - Ensure that dehumidifier is checked and emptied regularly - Continue to monitor this location for any signs of microbial growth as well as dust and debris accumulation and clean as		Yes No	No				
Findings - Dehumidifier in room and bucket was full of water  Site Based Maintenance: - Ensure that dehumidifier is checked and emptied regularly - Continue to monitor this location for any signs of microbial growth as well as dust and debris accumulation and clean as	Surfaces in Room	Yes No	No				
<ul> <li>Dehumidifier in room and bucket was full of water</li> <li>Site Based Maintenance:</li> <li>Ensure that dehumidifier is checked and emptied regularly</li> <li>Continue to monitor this location for any signs of microbial growth as well as dust and debris accumulation and clean as</li> </ul>							
<ul> <li>Ensure that dehumidifier is checked and emptied regularly</li> <li>Continue to monitor this location for any signs of microbial growth as well as dust and debris accumulation and clean as</li> </ul>		າ and bucket was full of wa	ater				
<ul> <li>Ensure that dehumidifier is checked and emptied regularly</li> <li>Continue to monitor this location for any signs of microbial growth as well as dust and debris accumulation and clean as</li> </ul>	Site Based Maintenand	ce:					
	- Ensure that dehumidifier is checked and emptied regularly						
1							

	Par	k Trails Eleme	entary School		Evaluati	on Requested	Novembe	r 22, 2010
Time of Day	10:30 am				E	valuation Date	Decembe	er 2, 2010
Outdoor Condition	ons T	emperature	70.1	Relative Humic	lity 57.7	Ambie	nt CO2	390
I — — —	mperature	Range	Relative Humidity	Range	CO2	Ran	ge # (	Occupants
311	75.4	72 - 78	50.5	30% - 60%	876	Max 700	> Ambient	2
Noticeable Odo	r No		Visible water damage / staining	Visible mi grow ? ج		Amount of material affec		
Ceiling Type	2 x 4 L	ay In	No	No	r		None	
Wall Type	Dryw	all	No	No	<b>]</b> [		None	
Flooring	12 x 12	Vinyl	No	No			None	
	Clean	Minor Debri			Correc	tive Action Re	quired	
Ceiling	Yes	No	No					
Walls	Yes	No	No					
Flooring	Yes	No	No					
HVAC Supply G	rills Yes	No	No					
HVAC Return G	rills Yes	No	No					
Ceiling at Suppl Grills	y Yes	No	No					
Surfaces in Roo	m No	Yes	Yes		Clea	ın as appropri	ate	
Dbservations								
Findings - Occupant comp - Minor dust on er - Room is adjacer  Site Based Mainte - Encourage occu	nvironmentant to bus loannet.  nance:  upant to reduce to reduce the comment of t	I surfaces due ding zone uce clutter to a ers during bus	e to clutter assist with cleanir		dust and de	ebris accumulat	tion and clea	an as

**IAQ Assessment** 

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