

managing risk with responsibility

Aston A. Henry, Supervisor	Telephone:	754 321-190
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September 20, 2010 Signature on File

TO: Ms. Sonja Smith Braziel, Principal

Pompano Beach Middle School

FROM: Aston A. Henry, Supervisor

Risk Management Department

SUBJECT: Indoor Air Quality (IAQ) Assessment

FISH 125, 131, 133, 410, 413 and 415

Custodial Issues Addressed
Custodial Issues Not Addressed

On August 19, 2010 I conducted an assessment of FISH 125, 131, 133, 410, 413 and 415 at **Pompano Beach Middle 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. 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

Jackie Haywood, Area Director

Jeffrey S. Moquin, Executive Director, Support Operations

Mark Dorsett, Acting Director, Physical Plant Operations Division, Maintenance

Dave Archer, Project Manager, Facilities and Construction Management

LaFrances Trotter, Broward Teachers Union

Roy Jarrett, Federation of Public Employees

Roy Norton, Manager Custodial/Grounds, Physical Plant Operations Division Robert Krickovich, Coordinator, LEA, Facilities and Construction Management

AH/tc Enc.

			IAQ As	sessment	Location Number	0021
	Pompan	o Beach Middle	School		Evaluation Requested	August 19, 2010
Time of Day	4:20 pm				Evaluation Date	August 19, 2010
Outdoor Conditi	ons Tem	perature 9	4.1	Relative Humidit	y 60.1 Ambie	ent CO2 377
Fish Te	emperature R	Range Relat	ive Humidity	Range	CO2 Rar	nge # Occupants
125	71.1 7 2	2 - 78	68.3	30% - 60%	491 Max 700	> Ambient
Noticeable Odo	or No		isible water age / staining	Visible micr growth		
Ceiling Type	2 x 4 Lay I	n	No	No		None
Wall Type	Drywall		No	No		None
Flooring	Tile		No	No		None
	Clean	Minor Dust / Debris	Needs Cleaning		Corrective Action Re	equired
Ceiling	Yes	No	No			
Walls	Yes	No	No			
Flooring	Yes	No	No			
HVAC Supply G	Frills Yes	No	No			
HVAC Return G	irills Yes	No	No			
Ceiling at Supp Grills	ly Yes	No	No			
Surfaces in Roc	om Yes	No	No			
bservations						
Findings - Humidity level v	was elevated at	the time of the	assessment			
Site Based Mair		n for any signs	of microbial	growth as well as o	lust and debris accumula	ation and clean as
appropriate		,,		g		
Physical Plant C - Evaluate HVAC	-	per operation a	nd repair as	appropriate to lowe	r humidity level	
NOTE: Work or	der EQ01421 g	enerated				

	IAQ Assessment	Location Number 0021
Pompano Bea	ach Middle School	Evaluation Requested August 19, 2010
Time of Day 4:20 pm		Evaluation Date August 19, 2010
Outdoor Conditions Temperat	eure 94.1 Relative Humidity	60.1 Ambient CO2 377
Fish Temperature Range		CO2 Range # Occupants
131 71.4 72 - 78		611 Max 700 > Ambient
Noticeable Odor No	Visible water Visible micro damage / staining? growth?	bial Amount of material affected
Ceiling Type 2 x 4 Lay In	No No	None
Wall Type Drywall	No No	None
Flooring Tile	No No	None
	or Dust Needs 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 Yes	No No	
Ceiling at Supply Yes Grills	No No	
Surfaces in Room Yes	No No	
bservations		
Findings - Humidity level was elevated at the tire	ne of the assessment	
Site Based Maintenance: - Continue to monitor this location for a appropriate	any signs of microbial growth as well as du	ust and debris accumulation and clean as
Physical Plant Operations: - Evaluate HVAC system for proper op	peration and repair as appropriate to lower	humidity level
NOTE: Work order EQ01421 genera	ated	

	Pompano Beach	n Middle School		Evaluation R	equested Augu	ıst 19, 2010
Time of Day 4	:20 pm			Evalu	ation Date Augu	ıst 19, 2010
Outdoor Conditions	Temperatur	e 94.1	Relative Humidity	60.1	Ambient CO2	377
I — — —	erature Range 71.3 72 - 78	Relative Humidity 68.7		CO2 549	Range	# Occupants
		Visible water	30% - 60% Visible micro		Max 700 > Ambie	ent
Noticeable Odor	No	damage / staining			aterial affected	
Ceiling Type	2 x 4 Lay In	No	No		None	
Wall Type	Drywall	No	No		None	
Flooring	Tile	No	No		None	
	Clean Minor	Dust Needs				
	/ Del		I	Corrective	Action Required	
Ceiling	Yes	o No				
Walls	Yes	o No				
Flooring	Yes	o No				
HVAC Supply Grills	s Yes N	o No				
HVAC Return Grills	s Yes N	o No				
Ceiling at Supply Grills	Yes	o No				
Surfaces in Room	Yes	No				
L Observations						
Findings						
- Humidity level was	elevated at the time	of the assessment				
Site Based Mainten - Continue to monito appropriate		y signs of microbial	growth as well as d	ust and debris	s accumulation and	clean as
Physical Plant Ope - Evaluate HVAC sys		ration and repair as	appropriate to lowe	r humidity lev	el	
NOTE: Work order	EQ01421 generate	ed				

IAQ Assessment

0021

			IAQ Ass	sessment	Location N	lumber	0021
	Pompar	no Beach Middl	le School		Evaluation	Requested [August 19, 2010
Time of Day	4:20 pm				Eval	uation Date [August 19, 2010
Outdoor Condi	tions Ten	nperature (94.1	Relative Humidity	60.1	Ambie	nt CO2 377
Fish T 410		Range Rela 72 - 78	69.1	Range 30% - 60%	CO2 423	Ran Max 700	ge # Occupants > Ambient
Noticeable Od	or No		Visible water nage / staining?	Visible micro growth?		Amount of naterial affec	
Ceiling Type	2 x 4 Lay	In	Yes	Yes		\	/arious
Wall Type	Drywall		No	No			None
Flooring	Tile		No	No			None
	Clean	Minor Dust / Debris	Needs Cleaning		Correctiv	e Action Re	quired
Ceiling	No	Yes	Yes	Re	emove and	replace cei	ling tiles
Walls	Yes	No	No				
Flooring	Yes	No	No				
HVAC Supply	Grills Yes	No	No				
HVAC Return	Grills Yes	No	No				
Ceiling at Sup Grills	ply Yes	No	No				
Surfaces in Ro	oom Yes	No	No				
bservations							
	ial growth on cei was elevated at	_		grills - hot air blow	ing slightly	from return ç	grill

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:

- Evaluate HVAC system for proper operation and repair as appropriate to lower humidity level
- Evaluate for cause of stained ceiling tiles around HVAC return grills and repair as appropriate. Remove and replace ceiling tiles as needed.

NOTE: Work order EQ01421 generated

			IAQ As	sessment	Locatio	n Number	0021	
	Pompai	no Beach Midd	le School		Evaluation	on Requested	August 19, 2010	
Time of Day	4:20 pm]			E	valuation Date	August 19, 2010	
Outdoor Condit	ions Ten	nperature _	94.1	Relative Humidi	ty 60.1	Ambie	nt CO2 377	
I ——— —			ative Humidity	Range	CO2	Ran	ge # Occupants	s S
413	76.7	72 - 78	80	30% - 60%	413	Max 700	> Ambient	
Noticeable Odd	or No		Visible water nage / staining	Visible mic growth		Amount of material affect		
Ceiling Type	2 x 4 Lay	In	Yes	Yes] [,	Various	
Wall Type	Drywal	I	No	No] [None	
Flooring	Tile		No	No] [None	l
	Clean	Minor Dust / Debris	Needs Cleaning		Correc	tive Action Re	equired	
Ceiling	No	Yes	Yes		Remove a	nd replace ce	iling tiles	
Walls	Yes	No	No					
Flooring	Yes	No	No					
HVAC Supply 0	Grills Yes	No	No					
HVAC Return G	Grills Yes	No	No					
Ceiling at Supp Grills	oly Yes	No	No					
Surfaces in Ro	om Yes	No	No					
bservations								
Findings								_

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- Visible microbial growth on ceiling tiles around HVAC return grills
- Humidity level was elevated at the time of the assessment

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:

- Evaluate HVAC system for proper operation and repair as appropriate to lower humidity level
- Evaluate for cause of stained ceiling tiles around HVAC return grills and repair as appropriate. Remove and replace ceiling tiles as needed.

NOTE: Work order EQ01421 generated

	Pompar	no Beach Middle	School		Evaluation	on Requested L	August	19, 2010
Time of Day [4:20 pm				E	valuation Date	August	19, 2010
Outdoor Condi	tions Ten	nperature 94	4.1	Relative Humidity	y 60.1	Ambier	nt CO2	377
Fish 415		Range Relati	ive Humidity	Range 30% - 60%	CO2 417	Rang Max 700 s	ge # > Ambient	Occupants
Noticeable Od		 Vi	isible water	Visible micr	obial	Amount of material affect		·
Ceiling Type	2 x 4 Lay		No	No	. [None	
Wall Type	Drywall		No	No	[ı	None	
Flooring	Tile		No	No			None	
	Clean	Minor Dust / Debris	Needs Cleaning		Correc	tive Action Re	quired	
Ceiling	Yes	No	No					
Walls	No	Yes	Yes	Clear	with We	xcide disinfect	ant soluti	on
Flooring	Yes	No	No					
HVAC Supply	Grills Yes	No	No					
HVAC Return	Grills No	Yes	Yes	Clear	with We	xcide disinfect	ant soluti	on
Ceiling at Sup Grills	oply Yes	No	No					
Surfaces in Ro	oom Yes	No	No					
bservations								
	oial growth on HV I was elevated at	_						
	return grills and v			nt solution growth as well as d	ust and d	ebris accumulat	tion and cl	ean as
Physical Plant - Evaluate HVA	<u>-</u>	per operation ar	nd repair as a	appropriate to lowe	r humidity	/ level		
NOTE: Work of	order EQ01421 (generated						

IAQ Assessment

0021