

managing risk with responsibility

Telephone: 754-321-3200 Facsimile: 754-321-3290

February	20,	200	19
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Signature on File

TO: Mr. Shawn Cerra,, Principal

Taravella High School

FROM: Edward See, Project Manager

Risk Management Department

SUBJECT: Indoor Air Quality (IAQ) Assessment

FISH 103, 115, 118, 120 and Front Office

<u>F</u>	or Custodial Supervisor Use Only
	Custodial Issues Addressed
	Custodial Issues Not Addressed

On January 28, 2009 I conducted an assessment of FISH 103, 115, 118, 120 and Front Office at Taravella High 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: Sharon Airaghi, Area Superintendent

Jackie Haywood, Area Director

Jeffrey S. Moguin, Executive Director, Support Operations

Gerry Devio, Project Manager, Facilities and Construction Management

Ruby Fitzgerald, 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.

	Tara	ella High School		Evaluation Re	quested January 14, 2009
Time of Day				Evalua	January 28, 2009
Outdoor Condition	ns Temperatu	re 72.1	Relative Humidity	78.6	Ambient CO2 390
Fish Ten	perature Range	Relative Humidity	/ Range	CO2	Range # Occupants
103	72.3 72 - 78	52.1	30% - 60%	1098	Max 700 > Ambient
Noticeable Odor	No	Visible water damage / stainin	Visible micro g? growth?	bial Amo	unt of material affected
Ceiling Type	2 x 4	No	No		None
Wall Type	Drywall/Plaster	No	No		None
Flooring	12 x 12 Vinyl	No	No		None
		r Dust Needs ebris Cleaning	3	Corrective A	Action Required
Ceiling	Yes	No No			
Walls	Yes	No			
Flooring	Yes	lo No			
HVAC Supply Gri	lls Yes	lo No			
HVAC Return Gri	IIs Yes	lo No			
Ceiling at Supply Grills	Yes	No No			
Surfaces in Roon	Yes N	o No			
bservations					
Findings: - No issues identifie	ed in room				
Recommendation: Site Based Mainte - Continue to monit appropriate	nance:	y signs of microbial (growth as well as dus	st and debris ad	ccumulation and clean as

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	Та	ıravella High	School		Evaluati	on Requested	January	14, 2009
Time of Day					E	Evaluation Date	January	28, 2009
Outdoor Condition	ons Temper	ature 7	2.1 F	Relative Humidity	78.6	Ambien	t CO2	390
Fish Te	mperature Rang	ge Relat	ive Humidity	Range	CO2	Rang	је #	Occupant
115	70.5 72 - 7	78	56.8	30% - 60%	1030	Max 700 >	- Ambient	1
Noticeable Odor	No		sible water age / staining?	Visible micro growth?	bial	Amount of mate affected	erial	
Ceiling Type	2 x 4		No	No		ı	None	
Wall Type	Drywall/Plaster		No	No		N	lone	
Flooring	12 x 12 Vinyl		No	No			None	
		inor Dust Debris	Needs Cleaning		Correc	ctive Action Rec	quired	
Ceiling	Yes	No	No					
Walls	Yes	No	No					
Flooring	Yes	No	No					
HVAC Supply Gr	ills Yes	No	No					
HVAC Return Gr	ills Yes	No	No					
Ceiling at Supply Grills	Yes	No	No					
Surfaces in Rooi	m Yes	No	No					
bservations								
Findings: - No issues identifi	ied in room							
Recommendation Site Based Maint - Continue to moni appropriate	enance:	any signs c	f microbial gro	owth as well as dus	t and de	bris accumulatio	n and clea	n as

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Outdoor Conditions Temperature Time of Day Outdoor Conditions Temperature Temperature Temperature Range Relative Humidity Range CO2 Range # Occupants 118 To.9 To.78 So.6 30% -60% To. Max 700 > Ambient Temperature Noticeable Odor No Wall Type Colling Type 2 x 4 No No No No No No No No No N			Taravel	la High School		Evaluation	on Requested	January	/ 14, 2009
Fish Temperature Range 118 70.9 72 -78 50.6 30% - 60% 970 Max 700 > Ambient 1 Noticeable Odor No Visible water damage / staining? No No None None No No None Storage / staining? No No None None None No No None None Storage / staining? No No None None None None None None Non	Time of Day					Е	valuation Date	January	28, 2009
118 70.9 72 - 78 50.6 30% - 60% 970 Max 700 > Amblent 1	Outdoor Condi	tions	Temperature	72.1	Relative Humidity	78.6	Ambie	nt CO2	390
118	Fish	Temperature	Pange	Relative Humidity	Danna	CO2	Pan	ao #	Occupants
Noticeable Odor No	l	-	–					J	
Ceiling Type	Noticeable Od	lor No	_		Visible micr			erial	
Wall Type Concrete/Stucco No No No None Flooring 12 x 12 Vinyl No No None Clean Minor Dust / Debris Cleaning Corrective Action Required Ceiling Yes No No No Flooring Yes No No No Corrective Action Required Ceiling Yes No No No Mo Flooring Yes No No No Mo	Ceiling Type	2 2	4			? Г	affected	None	
Flooring 12 x 12 Vinyl No No No None Clean Minor Dust / Debris Cleaning Corrective Action Required Ceiling Yes No No No Flooring Yes No No No No Flooring Yes No No No No Flooring Yes No No No No No Flooring Yes No No No No Flooring Yes No				<u> </u>					
Ceiling Yes No No No Cleaning Corrective Action Required Ceiling Yes No No No Cleaning Corrective Action Required Walls Yes No No No Ho HVAC Supply Grills Yes No No No Ceiling at Supply Grills Yes No No No Ceiling at Supply Yes No No No Surfaces in Room Yes No No No Surfaces in Room Yes No No No Root Surfaces in Room Yes No No No Root Surfaces in Room Yes No No No Root Surfaces in Room Yes No No Root Surfaces In Root Su		12 x 12	2 Vinyl			[None	
Walls Yes No No Flooring Yes No No HVAC Supply Grills Yes No No HVAC Return Grills Yes No No Ceiling at Supply Yes No No Grills Surfaces in Room Yes No No Surfaces in Room Yes No No Findings: - Teacher relocated to FISH 120 - Boxes stored on tops of shelves - Non-approved chemicals in room (Renuzit and Glade) - Small area of exposed concrete block on North wall (@1 square foot) Recommendations: Site Based Maintenance: - Remove boxed from shelves to prevent dust accumulation and HVAC supply blockage - Remove non-approved chemicals from room - 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		Oust Needs		Correc	tive Action Re	quired	
Flooring Yes No No No HVAC Supply Grills Yes No No No Ceiling at Supply Yes No No No Surfaces in Room Yes No No No Surfaces in Room Yes No No No Surfaces in Room Yes No No No Reidings: - Teacher relocated to FISH 120 - Boxes stored on tops of shelves - Non-approved chemicals in room (Renuzit and Glade) - Small area of exposed concrete block on North wall (@1 square foot) Recommendations: Site Based Maintenance: - Remove boxed from shelves to prevent dust accumulation and HVAC supply blockage - Remove non-approved chemicals from room - 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	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 Surfaces in Room Yes No No No No Surfaces in Room Yes No No No No Surfaces in Room Yes No No No Surfaces in Room Yes No No No No Surfaces in Room Yes No No No No Surfaces in Room Yes No	Flooring	Yes	No	No					
Ceiling at Supply Yes No No Surfaces in Room Yes No Surfaces in Room	HVAC Supply	Grills Yes	No	No					
Surfaces in Room Yes No No Disservations Findings: - Teacher relocated to FISH 120 - Boxes stored on tops of shelves - Non-approved chemicals in room (Renuzit and Glade) - Small area of exposed concrete block on North wall (@1 square foot) Recommendations: Site Based Maintenance: - Remove boxed from shelves to prevent dust accumulation and HVAC supply blockage - Remove non-approved chemicals from room - 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	Grills Yes	No	No					
Disservations Findings: - Teacher relocated to FISH 120 - Boxes stored on tops of shelves - Non-approved chemicals in room (Renuzit and Glade) - Small area of exposed concrete block on North wall (@1 square foot) Recommendations: Site Based Maintenance: - Remove boxed from shelves to prevent dust accumulation and HVAC supply blockage - Remove non-approved chemicals from room - 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:		ply Yes	No	No					
Findings: - Teacher relocated to FISH 120 - Boxes stored on tops of shelves - Non-approved chemicals in room (Renuzit and Glade) - Small area of exposed concrete block on North wall (@1 square foot) Recommendations: Site Based Maintenance: - Remove boxed from shelves to prevent dust accumulation and HVAC supply blockage - Remove non-approved chemicals from room - 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	oom Yes	No	No					
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	- Teacher reloca - Boxes stored of a Non-approved of Small area of the Recommendat Site Based Mainer - Remove boxed of the Remove non-a continue to mappropriate Thysical Plant	on tops of she chemicals in exposed conditions: Intenance: Intenan	elves room (Renuz crete block on es to prevent o micals from ro eation for any s	North wall (@1 sq lust accumulation a born signs of microbial g	and HVAC supply bl rowth as well as du	st and deb	oris accumulatio	on and clea	ın as

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		Taravella	a High School		Evaluation	on Requested [January 14, 2009
Time of Day					Ev	valuation Date	January 28, 2009
Outdoor Condi	tions T	emperature	72.1	Relative Humidit	y 78.6	Ambie	nt CO2 390
I	Temperature	Range	Relative Humidity		CO2	Ran	
120	74.1] 72 - 78 	51.4	30% - 60%	1044		> Ambient 1
Noticeable Od	or No		Visible water damage / stainin	Visible mic g? growth		Amount of mat affected	erial
Ceiling Type	2 x	4	No	No			None
Wall Type	Concrete	/Stucco	No	No			None
Flooring	12 x 12	Vinyl	No	No			None
	Clean	Minor D / Debri		9	Correct	tive Action Re	quired
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 Sup Grills	ply Yes	No	No				
Surfaces in Ro	oom Yes	No	No				
Recommendat Site Based Mai	nandler unit ro ions: ntenance:		cked and no issue	es were found growth as well as du	ust and deb	oris accumulatic	on and clean as

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	7	Γaravella Hig∣	h School		Evaluati	on Requested	January 14, 2009
Time of Day					E	valuation Date	January 28, 2009
Outdoor Condition	ons Tempe	erature 7	'2.1 F	Relative Humidity	78.6	Ambient	CO2 390
Fish Tel	71.1 72 -		tive Humidity	Range 30% - 60%	CO2 1051	Range Max 700 > A	
Noticeable Odor	No		/isible water age / staining?	Visible micro growth?	bial	Amount of materi	al
Ceiling Type	2 x 4		No No	No			one
Wall Type	Drywall/Plaste	er	No	No		No	ne
Flooring	12 x 12 Vinyl		No	No		No	one
	Clean I	Minor Dust / Debris	Needs Cleaning		Correc	tive Action Requ	iired
Ceiling	Yes	No	No				
Walls	Yes	No	No				
Flooring	Yes	No	No				
HVAC Supply Gr	ills Yes	No	No				
HVAC Return Gr	ills Yes	No	No				
Ceiling at Supply Grills	y Yes	No	No				
Surfaces in Room	m Yes	No	No				
bservations							
Findings: - No issues identif	ied in room						
Recommendation Site Based Maint - Continue to moni appropriate	enance:	or any signs o	of microbial gro	owth as well as dus	t and de	bris accumulation	and clean as

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