

managing risk with responsibility

Telephone: 754-321-3200

Facsimile: 754-321-3290

Jeffrey S. Moquin, Director Risk Management Department

May 22, 2007	Signature on File	For Custodial Supp

TO: Ms. Sarah Hausman,, Principal

Wingate Oaks Center

FROM: Robert Krickovich, Coordinator, LEA

Facilities and Construction Management

SUBJECT: Indoor Air Quality (IAQ) Assessment

FISH 701, 701A, 702, 702A, 703, 703A and 802

Fo	or Custodial Supervisor Use Only
	Custodial Issues Addressed
	Custodial Issues Not Addressed

On March 26, 2007 Richard Rosa conducted an assessment of FISH 701, 701A, 702, 702A, 703, 703A and 802 at **Wingate Oaks Center**. 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 754-321-1638.

cc: Dr. Harry LaCava, Area Superintendent

Toni Weissberg, Area Director

Jeffrey S. Moquin, Director, Risk Management

Robert Goode, Project Manager, Facilities and Construction Management

Dane Ramson, 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

RK/tc Enc.

Wingate Oaks Center Evaluation Requested March 23, 2007							
Time of Day 12:00 pm	Evaluation Date March 26, 2007						
Outdoor Conditions Temperature 77.8 Relative Humidit	ty 56.3 Ambient CO2 424						
Fish Temperature Range Relative Humidity Range 701 71.8 72 - 78 64.9 30% - 60% Noticeable Odor No Visible water damage / staining? Visible mice growth Ceiling Type 2 x 4 Lay In No No Wall Type Tackboard/Plaster No No	, initiality in the control of the c						
Flooring 12 x 12 Vinyl No No	None						
Clean Minor Dust Needs / Debris Cleaning	Corrective Action Required						
Ceiling Yes No No							
Walls Yes No No							
Flooring Yes No No							
HVAC Supply Grills No Yes Yes	Clean with Wexcide disinfectant						
HVAC Return Grills Yes No No							
Ceiling at Supply Yes No No Grills							
Surfaces in Room No Yes Yes	Clean as appropriate						
bservations							
Findings: - Dust and debris on HVAC supply grills - Humidity level was elevated at the time of the assessment - Minor dust build up on elevated surfaces -Recommendations:							
Site Based Maintenance: - Clean HVAC supply grills with Wexcide disinfectant solution - Clean elevated surfaces as appropriate - Continue to monitor this location for any signs of microbial growth as well as drappropriate	ust and debris accumulation and clean as						
Physical Plant Operations: - Evaluate HVAC system for proper operation and repair as appropriate to lower	r humidity level						

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	Wingate	Oaks Center	Evaluation Requested March 23, 2007				
Time of Day	12:20 pm				E	valuation Date	March 26, 2007
Outdoor Condition	ns Tem	nperature	77.8	Relative Humidity	56.3	Ambier	nt CO2 424
Fish Ter	mperature _F	Range F	Relative Humidity	Range	CO2	Ran	ge # Occupants
701A	70.7 7	72 - 78	66.2	30% - 60%	489	Max 700 :	> Ambient 1
Noticeable Odor	No	l	Visible water damage / staining	Visible micro growth?		Amount of mat affected	
Ceiling Type	2 x 4 Lay	In	Yes	No		4 Ce	iling Tiles
Wall Type	Drywall		No	No			None
Flooring	12 x 12 Vir	nyl	No	No			None
	Clean	Minor Du / Debris			Correc	tive Action Re	quired
Ceiling	No	Yes	Yes		Replace	stained ceilin	g tiles
Walls	Yes	No	No				
Flooring	Yes	No	No				
HVAC Supply Gr	rills No	Yes	Yes	С	lean with	n Wexcide disi	nfectant
HVAC Return Gr	ills					N/A	
Ceiling at Supply Grills	Yes	No	No				
Surfaces in Roor	m No	Yes	Yes		Clea	ın as appropria	ate
bservations							
- Dust build up on - 4 stained ceiling	s low and hum environmental tiles. A/C pipe	idity level water idity level water ideas.		e time of the assess source of water intru			
-Recommendatio							

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

Evaluate HVAC system for proper operation and repair as appropriate to increase temperature and lower humidity level Evaluate cause of stained ceiling tiles and repair as appropriate. A/C pipe above drop ceiling may be source of leak.

Clean HVAC supply grills with Wexcide disinfectant solution

Thoroughly clean surfaces throughout the room

Evaluate door for possible return - undercut door

appropriate

Physical Plant Operations:

IAQ Assessment

0991

Time of Day	12:40 pm				Eva	luation Date March 26, 2007
Outdoor Condi	tions Te	emperature 7	7.8 Re	lative Humidity	56.3	Ambient CO2 424
Fish	Temperature	Range Rela	tive Humidity	Range	CO2	Range # Occupants
702	70.5	72 - 78		% - 60%	594	Max 700 > Ambient 1
Noticeable Od	or No		/isible water age / staining?	Visible micro growth?		mount of material affected
Ceiling Type	2 x 4 La	ay In	No	No		None
Wall Type	Tackboard	/Plaster	No	No		None
Flooring	12 x 12 \	Vinyl	No	No		None
	Clean	Minor Dust / Debris	Needs Cleaning		Correctiv	re 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	С	lean with V	Vexcide disinfectant
Ceiling at Sup Grills	ply No	Yes	Yes		Clean	as appropriate
Surfaces in Ro	oom No	Yes	Yes		Clean	as appropriate
L Observations						
Findings:						
- Dust and debri	vas low and hu d up on elevat	turn grills and on c imidity level was e ed surfaces			ment	
-Recommendat	tions:					
 Clean elevated Remove live pl 	eturn grills with I surfaces as a lants					s accumulation and clean as
Physical Plant - Evaluate HVA		roper operation ar	nd repair as appro	opriate to increas	se temperat	ure and lower humidity level

Wingate Oaks Center

0991

March 23, 2007

Location Number

Evaluation Requested

Wingate Oaks Center E						Evaluation Requested March 23, 2007		
Time of Day 1				E۱	valuation Date	March 26, 2007		
Outdoor Conditions	3 Temp	perature 7	77.8	Relative Humidity	56.3	Ambier	nt CO2 424	
Fish Temp	perature R	lange Relat	tive Humidity	Range	CO2	Ranç	ge # Occupants	
702A	6 9.7 72	2 - 78	65.7	30% - 60%	609	Max 700 >	> Ambient 1	
Noticeable Odor	No	= :	/isible water lage / staining	Visible micro g? growth?		Amount of mate affected		
Ceiling Type	2 x 4 Lay Ir	n	Yes	No 4 Ceiling Tiles			ling Tiles	
Wall Type	Drywall		No	No			None	
Flooring	12 x 12 Viny	yl	No	No			None	
	Clean	Minor Dust / Debris	Needs Cleaning		Correct	tive Action Rec	quired	
Ceiling	No	Yes	Yes		Replace	stained ceiling	g tiles	
Walls	Yes	No	No					
Flooring	Yes	No	No					
HVAC Supply Grills	s No	Yes	Yes	С	lean with	Wexcide disir	nfectant	
HVAC Return Grills	š				N/A			
Ceiling at Supply Grills	Yes	No	No					
Surfaces in Room	No	Yes	Yes		Clear	n as appropria	te	
Dbservations								
Findings: - Dust and debris on - Temperature was lo - Minor dust build up - 4 stained ceiling tile	ow and humic on elevated	dity level was el surfaces		e time of the assessr				
-Recommendations)E							
Site Based Mainten	ance:							

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

Evaluate HVAC system for proper operation and repair as appropriate to increase temperature and lower humidity level Evaluate cause of stained ceiling tiles and repair as appropriate. A/C pipe above drop ceiling may be source of leak.

Clean HVAC supply grills with Wexcide disinfectant solution

Evaluate door for possible return - undercut door

Clean elevated surfaces

Physical Plant Operations:

appropriate

IAQ Assessment

0991

		Evaluation Requested March 23, 2007							
Time of Day	1:20 pm]			Evaluation Date	March 26, 2007			
Outdoor Condition	ıs Ten	mperature	77.9 F	Relative Humidity	56.3 Ambie	nt CO2 424			
l	-	Range Rela	ative Humidity	Range	CO2 Ran				
703	68.7	72 - 78	64.9	30% - 60%	663 Max 700	> Ambient 6			
Noticeable Odor	No		Visible water nage / staining?						
Ceiling Type	2 x 4 Lay	^r In	No	No		None			
Wall Type	Tackboard/F	laster	No	No		None			
Flooring	12 x 12 Vi	nyl	No	No		None			
	Clean Minor Dust Needs Corrective Action Required / Debris Cleaning								
Ceiling	Yes	No	No						
Walls	Yes	No	No						
Flooring	Yes	No	No						
HVAC Supply Gril	Is No	Yes	Yes	CI	ean with Wexcide disi	nfectant			
HVAC Return Grill	ls No	Yes	Yes	Cl	lean with Wexcide disi	nfectant			
Ceiling at Supply Grills	No	Yes	Yes		Clean as appropri	ate			
Surfaces in Room	No	Yes	Yes		Clean as appropri	ate			
 Observations									
Findings: - Dust and debris on HVAC supply and return grills and on ceiling at supply grills - Temperature was low and humidity level was elevated at the time of the assessment - Minor dust build up on elevated surfaces - Bowed ceiling tiles									
-Recommendation	-Recommendations:								
Site Based Maintenance: - Clean HVAC supply and return grills with Wexcide disinfectant solution and clean ceiling at supply grills - Clean elevated surfaces as appropriate - Remove and replace ceiling tiles that are bowed - 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 increase temperature and lower humidity level									

0991

Location Number

Evaluation Requested

Wingate Oaks Center					Evaluation	Requested	March 2	23, 2007
Time of Day 1	:20 pm				Eva	luation Date	March 2	26, 2007
Outdoor Conditions	S Tempe	rature 7	77.8	Relative Humidity	56.3	Ambier	nt CO2	424
Fish Temp	erature Ran	ige Rela	tive Humidity	Range	CO2	Ran	ge #	Occupants
703A	69 72 -	78	65.4	30% - 60%	621	Max 700 :	> Ambient	1
Noticeable Odor	No		/isible water nage / staining	Visible micro g? growth?	bial A	mount of mate		
Ceiling Type	2 x 4 Lay In		Yes	No		2 Ce	iling Tiles	
Wall Type	Drywall		No	No			None	
Flooring	12 x 12 Vinyl		No	No			None	
		linor Dust / Debris	Needs Cleaning		Correctiv	ve Action Re	quired	
Ceiling	No	Yes	Yes		Replace s	tained ceilin	g tiles	
Walls	Yes	No	No					
Flooring	Yes	No	No					
HVAC Supply Grills	s No	Yes	Yes	CI	ean with V	Wexcide disi	nfectant	
HVAC Return Grills	;					N/A		
Ceiling at Supply Grills	Yes	No	No					
Surfaces in Room	No	Yes	Yes		Clean	as appropria	ite	
) Dbservations								
- Minor dust build up	ow and humidity on elevated su es. A/C pipe ab	y level was e ırfaces		e time of the assessn source of water intrus				
 Clean HVAC supply Clean elevated surface 	grills with Wex	ccide disinfe	ctant solution	ı				

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

Evaluate HVAC system for proper operation and repair as appropriate to increase temperature and lower humidity level Evaluate cause of stained ceiling tiles and repair as appropriate. A/C pipe above drop ceiling may be source of leak.

appropriate

Physical Plant Operations:

Evaluate door for possible return - undercut door

IAQ Assessment

0991

Wingate Oaks Center

0991

March 23, 2007

Location Number

Evaluation Requested