

RISK MANAGEMENT...

managing risk with responsibility

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October 26, 2010

Signature on File

TO: Mr. Michael Walker, Principal
Park Ridge Elementary School

FROM: Edward See, Project Manager
Risk Management Department

SUBJECT: Indoor Air Quality (IAQ) Assessment
FISH 128, 148, 150 and 759

<u>For Custodial Supervisor Use Only</u>	
<input type="checkbox"/>	Custodial Issues Addressed
<input type="checkbox"/>	Custodial Issues Not Addressed

On October 25, 2010 I conducted an assessment of FISH 128, 148, 150 and 759 and a follow-up assessment of FISH 150 at **Park Ridge 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. 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
Anne Dilgen, Area Director
Jeffrey S. Moquin, Executive Director, Support Operations
Aston Henry, Supervisor, Risk Management
Dave Archer, Project Manager, Facilities and Construction Management
LaFrances Trotter, 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.

IAQ Assessment

Location Number 1951
 Evaluation Requested October 25, 2010
 Evaluation Date October 25, 2010

Park Ridge Elementary School

Time of Day 12:30 pm

Outdoor Conditions Temperature 84.4 Relative Humidity 75.1 Ambient CO2 394

Fish	Temperature	Range	Relative Humidity	Range	CO2	Range	# Occupants
128	72.3	72 - 78	63.7	30% - 60%	517	Max 700 > Ambient	2
Noticeable Odor		Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
No		No		No		None	
Ceiling Type	2 x 4 Lay In		No	No	None		
Wall Type	Drywall		No	No	None		
Flooring	12 x 12 Vinyl		No	No	None		

	Clean	Minor Dust / Debris	Needs 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 Grills	Yes	No	No	
Surfaces in Room	Yes	No	No	

Observations

Findings

- Humidity level was slightly elevated at the time of the assessment
- No signs of water intrusion or microbial growth

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

IAQ Assessment

Location Number 1951
 Evaluation Requested October 25, 2010
 Evaluation Date October 25, 2010

Park Ridge Elementary School

Time of Day 12:30 pm

Outdoor Conditions Temperature 84.4 Relative Humidity 75.1 Ambient CO2 394

Fish	Temperature	Range	Relative Humidity	Range	CO2	Range	# Occupants
148	72.8	72 - 78	59.7	30% - 60%	582	Max 700 > Ambient	17
Noticeable Odor		Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
No		Yes		No		1 ceiling tile	
Ceiling Type	2 x 4 Lay In		Yes	No		1 ceiling tile	
Wall Type	Drywall		No	No		None	
Flooring	12 x 12 Vinyl		No	No		None	

	Clean	Minor Dust / Debris	Needs Cleaning	Corrective Action Required
Ceiling	No	Yes	Yes	Remove and replace ceiling tile
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	

Observations

Findings

- 1 stained ceiling tile from previous water intrusion - leak has been repaired
- No signs of water intrusion or microbial growth
- Occupant in FISH 150 advised that FISH 148 triggers allergies.

Site Based Maintenance:

- Remove and replace stained ceiling tile.
- Continue to monitor this location for any signs of microbial growth as well as dust and debris accumulation and clean as appropriate

IAQ Assessment

Location Number 1951

Park Ridge Elementary School

Evaluation Requested October 25, 2010

Time of Day 12:30 pm

Evaluation Date October 25, 2010

Outdoor Conditions Temperature 84.4 Relative Humidity 75.1 Ambient CO2 394

Fish	Temperature	Range	Relative Humidity	Range	CO2	Range	# Occupants
150	77.8	72 - 78	56.2	30% - 60%	781	Max 700 > Ambient	3
Noticeable Odor		Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
Ceiling Type		No		No		None	
Wall Type		No		No		None	
Flooring		No		No		None	

	Clean	Minor Dust / Debris	Needs 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 Grills	Yes	No	No	
Surfaces in Room	Yes	No	No	

Observations

Findings

- Odor in room from air freshener -removed at the time of the assessment
- HVAC system not operating properly - work order generated by site based staff (J465146)
- No signs of water intrusion or microbial growth
- 2 ceiling tiles not seated properly
- 3 stained ceiling tiles in hallway outside of FISH 129 from previous water intrusion - leak has been repaired. Work order generated by site based staff to replace special cut tiles.
- Baseboard behind teacher's desk was pulled apart. Dark substance appears to be adhesive, not microbial growth. No moisture detected. Work order generated by site based staff.

Site Based Maintenance:

- Remove non-approved chemicals (air fresheners) from the room. Avoid use of air fresheners as they contain chemicals that are a source of allergies.
- Ensure that ceiling tiles are installed properly
- Follow up with Physical Plant Operations on open work orders
- Continue to monitor this location for any signs of microbial growth as well as dust and debris accumulation and clean as appropriate

IAQ Assessment

Location Number 1951
 Evaluation Requested October 25, 2010
 Evaluation Date October 25, 2010

Park Ridge Elementary School

Time of Day 12:30 pm

Outdoor Conditions Temperature 84.4 Relative Humidity 75.1 Ambient CO2 394

Fish	Temperature	Range	Relative Humidity	Range	CO2	Range	# Occupants
759	74.3	72 - 78	57.1	30% - 60%	412	Max 700 > Ambient	1
Noticeable Odor		Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
No		No		No		None	
Ceiling Type	2 x 4 Lay In		No	No	None		
Wall Type	Drywall		No	No	None		
Flooring	12 x 12 Vinyl		No	No	None		

	Clean	Minor Dust / Debris	Needs 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 Grills	Yes	No	No	
Surfaces in Room	No	Yes	Yes	Clean as appropriate

Observations

Findings

- Minor dust build up on window frames
- No signs of water intrusion or microbial growth

Site Based Maintenance:

- Thoroughly clean window frames to remove dust and debris
- Continue to monitor this location for any signs of microbial growth as well as dust and debris accumulation and clean as appropriate