

RISK MANAGEMENT...

managing risk with responsibility

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Risk Management Department

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June 19, 2007

Signature on File

TO: Ms. Robin David, Principal
Royal Palm Elementary School

FROM: Edward See, Project Manager
Risk Management Department

SUBJECT: Indoor Air Quality (IAQ) Assessment
FISH 603 and 604

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

On June 6, 2007 I conducted an assessment of FISH 603 and 604 at **Royal Palm 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. 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: Dr. Harry LaCava, Area Superintendent
Fran Bolden, Area Director
Jeffrey S. Moquin, Director, Risk Management
Robert Goode, Project Manager, Facilities and Construction Management
Gary Itzkowitz, 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
Robert Krickovich, Coordinator, LEA, Facilities and Construction Management

ES/tc
Enc.

IAQ Assessment

Location Number 1221
 Evaluation Requested May 21, 2007
 Evaluation Date June 6, 2007

Royal Palm Elementary School

Time of Day 8:15 am

Outdoor Conditions Temperature 89 Relative Humidity 62.3 Ambient CO2 564

Fish	Temperature	Range	Relative Humidity	Range	CO2	Range	# Occupants
603	75.4	72 - 78	60.5	30% - 60%	561	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	Vinyl		No	No	None		

	Clean	Minor Dust / Debris	Needs Cleaning	Corrective Action Required
Ceiling	Yes	No	No	
Walls	No	Yes	Yes	Clean as appropriate
Flooring	No	Yes	Yes	Clean and sanitize
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:

- Dust build up on floor
- Dust build up on South wall
- Air flowing out of supply grill. No gaps observed at doors or windows.
- Humidity level was slightly elevated at the time of the assessment
- Observed a row of ants on North wall at ceiling/wall interface

-Recommendations:

Site Based Maintenance:

- Clean and sanitize floor
- Clean South wall to remove dust
- 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 for proper operation and repair as appropriate to lower humidity level
- Initiate a work order for pest control to visit site

IAQ Assessment

Royal Palm Elementary School

Location Number 1221
 Evaluation Requested May 21, 2007
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Time of Day 8:15 am

Outdoor Conditions Temperature 89 Relative Humidity 62.3 Ambient CO2 564

Fish	Temperature	Range	Relative Humidity	Range	CO2	Range	# Occupants
604	72.8	72 - 78	67.4	30% - 60%	539	Max 700 > Ambient	1
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	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> No	
Walls	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> No	
Flooring	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	Clean and sanitize
HVAC Supply Grills	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> No	
HVAC Return Grills	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> No	
Ceiling at Supply Grills	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> No	
Surfaces in Room	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> No	

Observations

Findings:

- Dust build up on floor
- Air flowing out of supply grill. No gaps observed at doors or windows.
- Humidity level was elevated at the time of the assessment
- **FISH 607** - Mechanical Room - Visible microbial growth in drain pan and on chilled water lines. Rust on pipes.

-Recommendations:

Site Based Maintenance:

- Clean and sanitize floor
- 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 for proper operation and repair as appropriate to lower humidity level
- Clean drain pan in **FISH 607** - Mechanical Room - and evaluate chilled water lines and pipes and repair as appropriate.