

# RISK MANAGEMENT...

*managing risk with responsibility*

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Risk Management Department

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March 8, 2007

**Signature on File**

TO: Ms. Donna Morrison, Principal  
**Country Hills Elementary School**

FROM: Aston A. Henry, Jr., Supervisor  
Risk Management Department

SUBJECT: Indoor Air Quality (IAQ) Assessment  
**FISH 503 and 511**

On March 6, 2007 I conducted an assessment of FISH 503 and 511 at **Country Hills 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. 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.

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. Joanne Harrison, Area Superintendent  
Craig Anderson, Area Director  
Jeffrey S. Moquin, Director, Risk Management  
Philip Kaufold, Project Manager, Facilities and Construction Management  
Ruby Fitzgerald, Broward Teachers Union  
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

AAH/tc  
Enc.

**IAQ Assessment**

Location Number

3111

Country Hills Elementary School

Evaluation Requested

March 5, 2007

Time of Day

2:31 pm

Evaluation Date

March 6, 2007

Outdoor Conditions

Temperature

78.1

Relative Humidity

48.7

Ambient CO2

365

Fish	Temperature	Range	Relative Humidity	Range	CO2	Range	# Occupants
503	68.3	72 - 78	62.2	30% - 60%	1675	Max 700 > Ambient	6
Noticeable Odor	Yes		Visible water damage / staining?		Visible microbial growth?		Amount of material affected
Ceiling Type	2 x 4 Lay In		No		No		None
Wall Type	Drywall		No		No		None
Flooring	Carpet		Yes		No		Entire carpet

	Clean	Minor Dust / Debris	Needs Cleaning	Corrective Action Required
Ceiling	Yes	No	No	
Walls	Yes	No	No	
Flooring	No	Yes	Yes	Remove carpet and replace with tile
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:**

- No visible signs of microbial growth or water intrusion
- Temperature was low and humidity level was elevated
- CO2 level was elevated
- Odor is emanating from the carpet. Carpet is heavily stained and soiled.

**-Recommendations:****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:**

- Remove carpet and replace with tile

**Facilities and Construction Management:**

- Evaluate HVAC for proper operation and repair as appropriate to increase temperature and lower humidity level
- Evaluate fresh air damper and repair as appropriate to lower CO2 level

# IAQ Assessment

Location Number	3111
Evaluation Requested	March 5, 2007
Evaluation Date	March 6, 2007

Country Hills Elementary School

Time of Day 2:01 pm

Outdoor Conditions      Temperature 78.1      Relative Humidity 48.7      Ambient CO2 365

Fish	Temperature	Range	Relative Humidity	Range	CO2	Range	# Occupants
511	69.8	72 - 78	55.8	30% - 60%	1439	Max 700 > Ambient	22
Noticeable Odor	Yes		Visible water damage / staining?		Visible microbial growth?		Amount of material affected
Ceiling Type	2 x 4 Lay In		No		No		None
Wall Type	Drywall/Tackable		Yes		No		West wall
Flooring	Carpet		Yes		No		Entire carpet

	Clean	Minor Dust / Debris	Needs Cleaning	Corrective Action Required
Ceiling	Yes	No	No	
Walls	No	Yes	Yes	Remove and replace wall material
Flooring	No	Yes	Yes	Remove carpet and replace with tile
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:**

- No visible signs of microbial growth or water intrusion
- Elevated moisture content in entire West wall (interior).
- Temperature was low at the time of the assessment. Humidity level would have exceeded target range but was reduced because the teacher has a dehumidifier constantly running in the room.
- CO2 level was elevated
- Odor is emanating from the carpet. Carpet is heavily stained and soiled.

**-Recommendations:**

**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 cause of elevated moisture content in West wall and repair as appropriate. Remove and replace wall material as appropriate.
- Remove carpet and replace with tile

**Facilities and Construction Management:**

- Evaluate HVAC for proper operation and repair as appropriate to increase temperature and lower humidity level
- Evaluate fresh air damper and repair as appropriate to lower CO2 level