

# RISK MANAGEMENT...

managing risk with responsibility

Aston A. Henry, Supervisor  
Risk Management Department

Telephone: 754 321-1900  
Fax: 754 321-1917

August 31, 2009

**Signature on File**

TO: Ms. Roberta Ray, Principal  
**Norcrest Elementary School**

FROM: Robert Krickovich, Coordinator, LEA  
Facilities and Construction Management

SUBJECT: Indoor Air Quality (IAQ) Assessment  
**FISH 701, 703, 706, 708 and 709**

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

On August 25, 2009 I conducted an assessment of FISH 701, 703, 706, 708 and 709 at **Norcrest 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.

Generally, the IAQ Assessment did not identify any existing conditions significantly impacting IAQ and thereby presenting immediate health and safety concerns 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 754-321-1638.

cc: Sharon Airaghi, Area Superintendent  
Anne Dilgen, Area Director  
Jeffrey S. Moquin, Executive Director, Support Operations  
Aston Henry, Supervisor, Risk Management  
Robert Bellot, Project Manager, Facilities and Construction Management  
Lynn Cavall, 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

RK/tc  
Enc.

# IAQ Assessment

Location Number 0561

Norcrest Elementary School

Evaluation Requested August 25, 2009

Time of Day

Evaluation Date August 26, 2009

Outdoor Conditions      Temperature 87.4      Relative Humidity 64.5      Ambient CO2 431

Fish	Temperature	Range	Relative Humidity	Range	CO2	Range	# Occupants
701	78.4	72 - 78	46.5	30% - 60%	812	Max 700 > Ambient	27
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:**

- No issues identified at the time of the assessment.

**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

# IAQ Assessment

Location Number 0561  
 Evaluation Requested August 25, 2009  
 Evaluation Date August 26, 2009

Norcrest Elementary School

Time of Day

Outdoor Conditions      Temperature 87.4      Relative Humidity 64.5      Ambient CO2 431

Fish	Temperature	Range	Relative Humidity	Range	CO2	Range	# Occupants
703	77.3	72 - 78	46.8	30% - 60%	742	Max 700 > Ambient	23
Noticeable Odor		Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
Ceiling Type		Yes		No		None	
Wall Type		Yes		No		less than 1 square foot	
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	No	Yes	Yes	Clean a appropriate
Surfaces in Room	Yes	No	No	

## Observations

### Findings:

- Minor blistering paint on window sill (sill was dry at the time of the assessment).
- Minor dust build up on ceiling tiles around HVAC supply grills

### Recommendations:

#### Site Based Maintenance:

- Contact COMPASS to generate a work order to repair blistering paint on window sill.
- Clean ceiling tiles around HVAC supply grills
- 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 0561

Norcrest Elementary School

Evaluation Requested August 25, 2009

Time of Day

Evaluation Date August 26, 2009

Outdoor Conditions      Temperature 87.4      Relative Humidity 64.5      Ambient CO2 431

Fish	Temperature	Range	Relative Humidity	Range	CO2	Range	# Occupants
706	74.9	72 - 78	51.8	30% - 60%	772	Max 700 > Ambient	3
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:

- No issues identified at the time of the assessment.

### 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

# IAQ Assessment

Location Number 0561

Norcrest Elementary School

Evaluation Requested August 25, 2009

Time of Day

Evaluation Date August 26, 2009

Outdoor Conditions      Temperature 87.4      Relative Humidity 64.5      Ambient CO2 431

Fish	Temperature	Range	Relative Humidity	Range	CO2	Range	# Occupants
708	74.8	72 - 78	54.6	30% - 60%	959	Max 700 > Ambient	42
Noticeable Odor		Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
Ceiling Type		Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
Wall Type		Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
Flooring		Visible water damage / staining?		Visible microbial growth?		Amount of material affected	

	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:**

- No issues identified at the time of the assessment.

**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

# IAQ Assessment

Location Number 0561  
 Evaluation Requested August 25, 2009  
 Evaluation Date August 26, 2009

Norcrest Elementary School

Time of Day

Outdoor Conditions      Temperature 87.4      Relative Humidity 64.5      Ambient CO2 431

Fish	Temperature	Range	Relative Humidity	Range	CO2	Range	# Occupants
709	75.6	72 - 78	49.2	30% - 60%	815	Max 700 > Ambient	25
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	No	Yes	Yes	Clean with Wexcide disinfectant
Ceiling at Supply Grills	No	Yes	Yes	Clean a appropriate
Surfaces in Room	Yes	No	No	

## Observations

### Findings:

- 1 live plant in room - no visible microbial growth on soil
- Minor dust build up on HVAC return grills and on ceiling tiles around HVAC supply grills

### Recommendations:

#### Site Based Maintenance:

- Remove plant from room. Soil can be a source of microbial growth.
- Clean HVAC return grills with Wexcide disinfectant solution and clean ceiling tiles around HVAC supply grills
- Continue to monitor this location for any signs of microbial growth as well as dust and debris accumulation and clean as appropriate