

RISK MANAGEMENT...

managing risk with responsibility

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Risk Management Department

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March 14, 2008

Signature on File

TO: Mr. Donald Cottrell, Principal
Broadview Elementary School

FROM: Edward See, Project Manager
Risk Management Department

SUBJECT: Indoor Air Quality (IAQ) Assessment
FISH 104A, 119 and 149

<u>For Custodial Supervisor Use Only</u>	
<input type="checkbox"/>	Custodial Issues Addressed
<input type="checkbox"/>	Custodial Issues Not Addressed
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On March 12, 2008 I conducted an assessment of FISH 104A, 119 and 149 at **Broadview 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. Leontine Butler, Area Superintendent
Dr. Desmond Blackburn, Area Director
Jeffrey S. Moquin, Director, Risk Management
Israel Rodriguez-Soto, Project Manager, Facilities and Construction Management
Gary Itzkowitz, 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

0811

Broadview Elementary School

Evaluation Requested

March 3, 2008

Time of Day

3:30 pm

Evaluation Date

March 12, 2008

Outdoor Conditions

Temperature

79.1

Relative Humidity

61.6

Ambient CO2

471

Fish	Temperature	Range	Relative Humidity	Range	CO2	Range	# Occupants
104A	79	72 - 78	49.1	30% - 60%	543	Max 700 > Ambient	1
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/Plaster		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:

- Temperature was elevated at the time of the assessment. Room is being used for computer equipment.
- Two laminators in the room appear to be cause of odor. A/C vent at East side is not working.

Recommendations:

Site Based Maintenance:

- Keep door to the library open for additional air circulation
- 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 temperature
- Evaluate A/C vent at East side for proper operation and repair as appropriate

- Evaluate HVAC for proper operation and repair as appropriate to lower humidity level

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Ambient CO2

471

Fish	Temperature	Range	Relative Humidity	Range	CO2	Range	# Occupants
149	71.2	72 - 78	68.7	30% - 60%	1720	Max 700 > Ambient	1
Noticeable Odor		Yes		Visible water damage / staining?		Visible microbial growth?	
Ceiling Type		2 x 4 Lay In		No		None	
Wall Type		Drywall/Plaster		No		None	
Flooring		12 x 12 Vinyl		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 as appropriate
Ceiling at Supply Grills	Yes	No	No	
Surfaces in Room	No	Yes	Yes	Clean as appropriate

Observations

Findings:

- Humidity and CO2 levels were elevated at the time of the assessment
- Musty odor in room
- Heavy dust and debris inside of HVAC return
- Dust build up on environmental surfaces throughout the room
- Dust and debris and rust in AHU drain pan - **FISH 165**

Recommendations:

Site Based Maintenance:

- Clean environmental surfaces throughout the room
- 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 and CO2 levels
- Clean inside HVAC returns to remove dust and debris
- **FISH 165** - Evaluate drain pan in AHU and clean as appropriate