

RISK MANAGEMENT...

managing risk with responsibility

Aston A. Henry, Supervisor
Risk Management Department

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

June 22, 2009

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 148, 149 and 150

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

On March 31, 2009 I conducted an assessment of FISH 148, 149 and 150 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 754-321-1900.

cc: Dr. Leontine Butler, Area Superintendent
Dr. Desmond Blackburn, Area Director
Jeffrey S. Moquin, Executive Director, Support Operations
Aston A. Henry, Supervisor, Risk Management
Henry Verdugo, 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 18, 2009

Time of Day 11:30 am

Evaluation Date March 31, 2009

Outdoor Conditions Temperature 84.7 Relative Humidity 70.3 Ambient CO2 363

Fish	Temperature	Range	Relative Humidity	Range	CO2	Range	# Occupants
148	71.8	72 - 78	58.7	30% - 60%	1043	Max 700 > Ambient	1
Noticeable Odor		Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
No		Yes		Yes		3 stained ceiling tiles	
Ceiling Type	2 x 4		Yes	Yes	Window and Windowsill - North		
Wall Type	Drywall/Plaster		Yes	No	None		
Flooring	12 x 12 Vinyl		No	No	None		

	Clean	Minor Dust / Debris	Needs Cleaning	Corrective Action Required
Ceiling	No	Yes	Yes	Replace ceiling tiles
Walls	No	Yes	Yes	Evaluate and repair
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:

- Visible water damage/staining around window and windowsill - North wall
- 3 stained ceiling tiles with visible microbial growth

Recommendations:

Site Based Maintenance:

- Remove and replace stained ceiling tiles and monitor for return of staining. If stains return contact COMPASS to generate a work order for Physical Plant Operations to evaluate.
- 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 damaged/staining around window and windowsill on North wall and repair as appropriate. Repair/replace wall material as necessary.

IAQ Assessment

Location Number 0811

Broadview Elementary School

Evaluation Requested March 18, 2009

Time of Day 11:30 am

Evaluation Date March 31, 2009

Outdoor Conditions Temperature 84.7 Relative Humidity 70.3 Ambient CO2 363

Fish	Temperature	Range	Relative Humidity	Range	CO2	Range	# Occupants
149	71.7	72 - 78	56.7	30% - 60%	1451	Max 700 > Ambient	25
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:

- CO2 level was slightly elevated 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

Physical Plant Operations:

- Evaluate HVAC system for proper operation and repair as appropriate to lower CO2 level

IAQ Assessment

Location Number 0811

Broadview Elementary School

Evaluation Requested March 18, 2009

Time of Day 11:30 am

Evaluation Date March 31, 2009

Outdoor Conditions Temperature 84.7 Relative Humidity 70.3 Ambient CO2 363

Fish	Temperature	Range	Relative Humidity	Range	CO2	Range	# Occupants
150	73	72 - 78	47.5	30% - 60%	1201	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		No	No	None		
Wall Type	Drywall/Plaster		Yes	No	@ 2 square feet - baseboard		
Flooring	12 x 12 Vinyl		No	No	None		

	Clean	Minor Dust / Debris	Needs Cleaning	Corrective Action Required
Ceiling	No	Yes	Yes	Install missing ceiling tile
Walls	No	Yes	Yes	Evaluate and repair
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:

- Visible water damage/staining on @ 2 square feet of baseboard - Northwest corner of room
- Missing ceiling tile

Recommendations:

Site Based Maintenance:

- Replace missing ceiling tile
- 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 damaged/stained baseboard (Northwest corner of room) and repair as appropriate. Repair/replace baseboard material as necessary.