

RISK MANAGEMENT...

managing risk with responsibility

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October 12, 2009

Signature on File

TO: Mr. Frank Zagari, Principal
Indian Ridge Middle School

FROM: Edward See, Project Manager
Risk Management Department

SUBJECT: Indoor Air Quality (IAQ) Assessment
Portable QP370C, QP371C and QP393C

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

On October 6, 2009 I conducted an assessment of Portable QP370C, QP371C and QP393C at **Indian Ridge Middle 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. 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 754-321-1900.

cc: Dr. Leontine Butler, Area Superintendent
Jan Beal, Area Director
Jeffrey S. Moquin, Executive Director, Support Operations
Aston Henry, Supervisor, Risk Management
James Carballo, Project Manager, Facilities and Construction Management
Ralph Eckhardt, 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 3471

Indian Ridge Middle School

Evaluation Requested September 29, 2009

Time of Day 3:30 pm

Evaluation Date October 6, 2009

Outdoor Conditions Temperature 92.3 Relative Humidity 57.1 Ambient CO2 425

Fish	Temperature	Range	Relative Humidity	Range	CO2	Range	# Occupants
QP370C	75.5	72 - 78	52.8	30% - 60%	1206	Max 700 > Ambient	4
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	Homasote		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	No	Yes	Yes	Clean as appropriate

Observations

Findings:

- Non-approved chemicals in room - can of Glade air freshener
- Dust build up on window blinds

Recommendations:

Site Based Maintenance:

- Remove non-approved chemicals from room - can of Glade air freshener
- Clean window blinds to remove dust build up
- Continue to monitor this location for any signs of microbial growth as well as dust and debris accumulation and clean as appropriate

IAQ Assessment

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Indian Ridge Middle School

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Time of Day 3:30 pm

Evaluation Date October 6, 2009

Outdoor Conditions Temperature 92.3 Relative Humidity 57.1 Ambient CO2 425

Fish	Temperature	Range	Relative Humidity	Range	CO2	Range	# Occupants
QP371C	77.4	72 - 78	42.7	30% - 60%	2847	Max 700 > Ambient	4
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	Homasote		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	No	Yes	Yes	Clean as appropriate

Observations

Findings:

- Non-approved chemicals in room - air freshener
- Dust build up on cabinet near A/C shaker unit
- CO2 level was elevated at the time of the assessment

Recommendations:

Site Based Maintenance:

- Remove non-approved chemicals from room - air freshener
- Clean window blinds to remove dust build up
- 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

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Time of Day 3:30 pm

Evaluation Date October 6, 2009

Outdoor Conditions Temperature 92.3 Relative Humidity 57.1 Ambient CO2 425

Fish	Temperature	Range	Relative Humidity	Range	CO2	Range	# Occupants
QP393C	77.3	72 - 78	53.3	30% - 60%	462	Max 700 > Ambient	2
Noticeable Odor		Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
Yes		No		No		None	
Ceiling Type	2 x 4 Lay In		No	No	None		
Wall Type	Homasote		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:

- Odor from non-approved chemicals in room - 3 air fresheners
- Dust and debris on A/C filter - North shaker unit

Recommendations:

Site Based Maintenance:

- Remove non-approved chemicals from room - air fresheners
- Remove and replace A/C filter - North shaker unit
- Continue to monitor this location for any signs of microbial growth as well as dust and debris accumulation and clean as appropriate