

RISK MANAGEMENT...

managing risk with responsibility

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Risk Management Department

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May 2, 2008

Signature on File

TO: Mr. Ronald Forsman, Principal
Rickards Middle School

FROM: Edward See, Project Manager
Risk Management Department

SUBJECT: Indoor Air Quality (IAQ) Assessment
FISH 162 and Portable 927C

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

On March 26, 2008 I conducted an assessment of FISH 162 and Portable 927C at **Rickards 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. 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
Toni Weissberg, Area Director
Jeffrey S. Moquin, Director, Risk Management
Robert Goode, Project Manager, Facilities and Construction Management
Dane Ramson, 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

Rickards Middle School

Location Number
 Evaluation Requested
 Evaluation Date

Time of Day

Outdoor Conditions Temperature Relative Humidity Ambient CO2

Fish	Temperature	Range	Relative Humidity	Range	CO2	Range	# Occupants
<input type="text" value="162"/>	<input type="text" value="75.4"/>	<input type="text" value="72 - 78"/>	<input type="text" value="47.7"/>	<input type="text" value="30% - 60%"/>	<input type="text" value="672"/>	<input type="text" value="Max 700 > Ambient"/>	<input type="text" value="2"/>
Noticeable Odor		Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
<input type="text" value="No"/>		<input type="text" value="No"/>		<input type="text" value="No"/>		<input type="text" value="None"/>	
Ceiling Type	<input type="text" value="2 x 4 Lay In"/>		<input type="text" value="No"/>	<input type="text" value="No"/>	<input type="text" value="None"/>		
Wall Type	<input type="text" value="Drywall/Plaster"/>		<input type="text" value="No"/>	<input type="text" value="No"/>	<input type="text" value="None"/>		
Flooring	<input type="text" value="Vinyl Tile"/>		<input type="text" value="No"/>	<input type="text" value="No"/>	<input type="text" value="None"/>		

	Clean	Minor Dust / Debris	Needs Cleaning	Corrective Action Required
Ceiling	<input type="text" value="Yes"/>	<input type="text" value="No"/>	<input type="text" value="No"/>	<input type="text"/>
Walls	<input type="text" value="Yes"/>	<input type="text" value="No"/>	<input type="text" value="No"/>	<input type="text"/>
Flooring	<input type="text" value="Yes"/>	<input type="text" value="No"/>	<input type="text" value="No"/>	<input type="text"/>
HVAC Supply Grills	<input type="text" value="Yes"/>	<input type="text" value="No"/>	<input type="text" value="No"/>	<input type="text"/>
HVAC Return Grills	<input type="text" value="No"/>	<input type="text" value="Yes"/>	<input type="text" value="Yes"/>	<input type="text" value="Clean as appropriate"/>
Ceiling at Supply Grills	<input type="text" value="No"/>	<input type="text" value="Yes"/>	<input type="text" value="Yes"/>	<input type="text" value="Clean as appropriate"/>
Surfaces in Room	<input type="text" value="No"/>	<input type="text" value="Yes"/>	<input type="text" value="Yes"/>	<input type="text" value="Clean as appropriate"/>

Observations

Findings:

- No signs of water intrusion or microbial growth
- Dust build up inside HVAC return grills
- Dust on ceiling tile at HVAC supply grills
- Heavy dust build up on environmental surfaces. Room is cluttered with excessive amounts of items and paper.
- **FISH 225 (AHU)** - Dust and debris on coils and drain pan

Recommendations:

Site Based Maintenance:

- Clean ceiling at HVAC supply grills
- Thoroughly clean environmental surfaces throughout the room. Encourage occupant to reduce clutter to assist with cleaning efforts
- 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:

- Clean inside HVAC return grills
- Clean drain pan and coils - **FISH 225**

IAQ Assessment

Rickards Middle School

Location Number 2121
 Evaluation Requested March 17, 2008
 Evaluation Date March 26, 2008

Time of Day 11:00 am

Outdoor Conditions Temperature 79.4 Relative Humidity 43.7 Ambient CO2 450

Fish	Temperature	Range	Relative Humidity	Range	CO2	Range	# Occupants
P-927C	73.7	72 - 78	48.5	30% - 60%	1628	Max 700 > Ambient	2
Noticeable Odor		Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
No		Yes		No		4 ceiling tiles	
Ceiling Type	2 x 4 Lay In		Yes	No		4 ceiling tiles	
Wall Type	Tackable		Yes	No		West wall	
Flooring	12 x 12 Vinyl		No	No		None	

	Clean	Minor Dust / Debris	Needs Cleaning	Corrective Action Required
Ceiling	No	Yes	Yes	Remove and replace ceiling tiles
Walls	No	Yes	Yes	Repair wall material
Flooring	Yes	No	No	
HVAC Supply Grills	Yes	No	No	
HVAC Return Grills	Yes	No	No	
Ceiling at Supply Grills	No	Yes	Yes	Remove and replace ceiling tiles
Surfaces in Room	Yes	No	No	

Observations

Findings:

- 4 stained ceiling tiles (2 above each A/C unit)
- Damage on West wall under A/C shaker unit
- Dust on ceiling tile at HVAC supply grills
- Dust and debris on A/C filters
- Non-approved chemicals in room (air fresheners and sprays)

Recommendations:

Site Based Maintenance:

- Remove and replace ceiling tiles above A/C units
- Remove and replace A/C filters
- Remove non-approved chemicals (air fresheners and sprays)
- 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 West wall under A/C unit for cause of damage/staining and repair as appropriate. Repair/replace wall material.