

RISK MANAGEMENT...

managing risk with responsibility

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Risk Management Department

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November 21, 2007

Signature on File

TO: Mr. Washington Collado,, Principal
Lyons Creek Middle School

FROM: Aston Henry, Supervisor
Risk Management Department

SUBJECT: Indoor Air Quality (IAQ) Assessment
Portable 302C and 625C

<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 September 18, 2007 I conducted an assessment of Portable 302C and 625C at **Lyons Creek 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. Joanne Harrison, Area Superintendent
Sharon Airaghi, Area Director
Jeffrey S. Moquin, Director, Risk Management
Marshall Washington, 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
Robert Krickovich, Coordinator, LEA, Facilities and Construction Management

AH/tc
Enc.

IAQ Assessment

Lyons Creek Middle School

Location Number 3101
 Evaluation Requested September 12, 2007
 Evaluation Date September 18, 2007

Time of Day 1:35 pm

Outdoor Conditions Temperature 87.2 Relative Humidity 78.9 Ambient CO2 463

Fish	Temperature	Range	Relative Humidity	Range	CO2	Range	# Occupants
P-302C	67.4	72 - 78	64.8	30% - 60%	2121	Max 700 > Ambient	18
Noticeable Odor	No	Visible water damage / staining?	Yes	Visible microbial growth?	No	Amount of material affected	1 ceiling tile
Ceiling Type	2 x 4 Lay In		Yes	No	1 ceiling tile		
Wall Type	Gypsum Board		No	No	None		
Flooring	Tile		No	No	None		

	Clean	Minor Dust / Debris	Needs Cleaning	Corrective Action Required
Ceiling	No	Yes	Yes	Remove and replace ceiling tile
Walls	Yes	No	No	
Flooring	Yes	No	No	
HVAC Supply Grills	No	Yes	Yes	Clean with Wexcide disinfectant
HVAC Return Grills	No	Yes	Yes	Clean with Wexcide disinfectant
Ceiling at Supply Grills	Yes	No	No	
Surfaces in Room	Yes	No	No	

Observations

Findings:

- Dust build up, condensation and microbial growth on West unit A/C coils
- Dust build up on A/C supply and return grills
- Live plant (old) in room
- One stained ceiling tile
- False ceiling plenum was clean and dry. Appears that cold air from A/C unit is mixing with warm air from outside and causing condensation.
- Temperature was low and humidity and CO2 levels were slightly elevated

Recommendations:

Site Based Maintenance:

- Clean A/C supply and return grills
- Remove plant from room
- Remove and replace stained 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

- Clean coils on West A/C unit
- Evaluate A/C units for proper operation and repair as appropriate to increase temperature and lower CO2 and humidity level

NOTE: EQ01079 through EQ01083 were generated to address Physical Plant Operations recommendations

IAQ Assessment

Location Number
 Evaluation Requested
 Evaluation Date

Lyons Creek Middle School

Time of Day

Outdoor Conditions Temperature Relative Humidity Ambient CO2

Fish	Temperature	Range	Relative Humidity	Range	CO2	Range	# Occupants
<input type="text" value="P-625C"/>	<input type="text" value="78.3"/>	<input type="text" value="72 - 78"/>	<input type="text" value="62.7"/>	<input type="text" value="30% - 60%"/>	<input type="text" value="1532"/>	<input type="text" value="Max 700 > Ambient"/>	<input type="text" value="30"/>
Noticeable Odor	<input type="text" value="No"/>		Visible water damage / staining?		Visible microbial growth?		Amount of material affected
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="Gypsum Board"/>		<input type="text" value="Yes"/>		<input type="text" value="No"/>		<input type="text" value="East wall"/>
Flooring	<input type="text" value="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="Yes"/>	<input type="text" value="No"/>	<input type="text" value="No"/>	<input type="text"/>
Ceiling at Supply Grills	<input type="text" value="Yes"/>	<input type="text" value="No"/>	<input type="text" value="No"/>	<input type="text"/>
Surfaces in Room	<input type="text" value="Yes"/>	<input type="text" value="No"/>	<input type="text" value="No"/>	<input type="text"/>

Observations

Findings:

- Only one A/C unit was operating at the time of the assessment
- Elevated moisture content in East wall under A/C unit. Wall is bulging
- A/C filters and coils were clean on both units
- Humidity and CO2 level was slightly elevated

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 cause of elevated moisture in East wall under A/C unit and repair as appropriate. Repair/replace wall material as appropriate.
- Evaluate both A/C units for proper operation and repair as appropriate to lower humidity and CO2 level

NOTE: EQ01079 through EQ01083 were generated to address Physical Plant Operations recommendations