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February 8, 2007

Signature on File

TO: Ms. Sherry Bees, Principal
Maplewood Elementary School

FROM: Aston A. Henry, Jr., Supervisor
Risk Management Department

SUBJECT: Indoor Air Quality (IAQ) Assessment
FISH 201A, 201B, 202 and Portable 974C

On January 16, 2007 I conducted an assessment of FISH 201A, 201B, 202 and Portable 974C at **Maplewood 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. 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.

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
Jackie Haywood, Area Director
Jeffrey S. Moquin, Director, Risk Management
Philip Kaufold, Project Manager, Facilities and Construction Management
Ruby Fitzgerald, Broward Teachers Union
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

AAH/tc
Enc.

IAQ Assessment

Location Number 2741

Maplewood Elementary School

Evaluation Requested

Time of Day 1:29 p.m.

Evaluation Date January 16, 2007

Outdoor Conditions Temperature 81.4 Relative Humidity 66 Ambient CO2 525

Fish	Temperature	Range	Relative Humidity	Range	CO2	Range	# Occupants
201A		72 - 78		30% - 60%		Max 700 > Ambient	
Noticeable Odor	No		Visible water damage / staining?	Visible microbial growth?	Amount of material affected		
Ceiling Type	Drywall		No	Yes	Various		
Wall Type	Drywall		No	Yes	Various		
Flooring	Tile		No	No	None		

	Clean	Minor Dust / Debris	Needs Cleaning	Corrective Action Required
Ceiling	No	Yes	Yes	Clean with Wexcide disinfectant
Walls	No	Yes	Yes	Clean with Wexcide disinfectant
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: (Restroom)
 - Visible microbial growth on ceiling and walls
 - HVAC return grill in FISH 201 was covered with cardboard

Recommendations:

Site Based Maintenance:
 - Clean walls and ceiling with Wexcide disinfectant solution
 - 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:
 - Action was taken by Physical Plant Operations to repair or replace back draft damper in exhaust fan and address the exhaust fan operation
 - Coordinate with Project Manager and/or contractor regarding blocked off return air grills

IAQ Assessment

Location Number 2741

Maplewood Elementary School

Evaluation Requested

Time of Day 1:29 p.m.

Evaluation Date January 16, 2007

Outdoor Conditions Temperature 81.4 Relative Humidity 66 Ambient CO2 525

Fish	Temperature	Range	Relative Humidity	Range	CO2	Range	# Occupants
201B		72 - 78		30% - 60%		Max 700 > Ambient	
Noticeable Odor	No		Visible water damage / staining?	Visible microbial growth?	Amount of material affected		
Ceiling Type	Drywall		No	Yes	Various		
Wall Type	Drywall		No	Yes	Various		
Flooring	Tile		No	No	None		

	Clean	Minor Dust / Debris	Needs Cleaning	Corrective Action Required
Ceiling	No	Yes	Yes	Clean with Wexcide disinfectant
Walls	No	Yes	Yes	Clean with Wexcide disinfectant
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: (Restroom)
 - Visible microbial growth on ceiling and walls

Recommendations:

Site Based Maintenance:
 - Clean walls and ceiling with Wexcide disinfectant solution
 - 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:
 - Action was taken by Physical Plant Operations to repair or replace back draft damper in exhaust fan and address the exhaust fan operation
 - Coordinate with Project Manager and/or contractor regarding blocked off return air grills

IAQ Assessment

Location Number 2741

Maplewood Elementary School

Evaluation Requested

Time of Day 1:29 p.m.

Evaluation Date January 16, 2007

Outdoor Conditions Temperature 81.4 Relative Humidity 66 Ambient CO2 525

Fish	Temperature	Range	Relative Humidity	Range	CO2	Range	# Occupants
202	72.6	72 - 78	53.9	30% - 60%	1594	Max 700 > Ambient	22
Noticeable Odor		Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
Ceiling Type		No		No		None	
Wall Type		No		Yes		West wall	
Flooring		No		No		None	

	Clean	Minor Dust / Debris	Needs Cleaning	Corrective Action Required
Ceiling	Yes	No	No	
Walls	No	Yes	Yes	Clean with Wexcide disinfectant
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 microbial growth on West wall behind posters
- HVAC return grill was covered with cardboard
- CO2 level was slightly elevated at the time of the assessment

Recommendations:

Site Based Maintenance:

- Remove posters from West wall and clean wall with Wexcide disinfectant solution
- 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:

- Coordinate with Project Manager and/or contractor regarding blocked off return air grills and elevated CO2 level

IAQ Assessment

Location Number 2741

Maplewood Elementary School

Evaluation Requested

Time of Day 1:00 p.m.

Evaluation Date January 16, 2007

Outdoor Conditions Temperature 81.4 Relative Humidity 66 Ambient CO2 525

Fish	Temperature	Range	Relative Humidity	Range	CO2	Range	# Occupants
P-974C	74.9	72 - 78	48.9	30% - 60%	2281	Max 700 > Ambient	22
Noticeable Odor	No		Visible water damage / staining?	Visible microbial growth?	Amount of material affected		
Ceiling Type	2 x 4 Lay In		No	No	None		
Wall Type	Tackable		Yes	Yes	All Walls		
Flooring	Tile		No	No	None		

	Clean	Minor Dust / Debris	Needs Cleaning	Corrective Action Required
Ceiling	Yes	No	No	
Walls	No	Yes	Yes	Clean with Wexcide disinfectant
Flooring	Yes	No	No	
HVAC Supply Grills	No	Yes	Yes	Clean with Wexcide disinfectant
HVAC Return Grills				N/A
Ceiling at Supply Grills	Yes	No	No	
Surfaces in Room	Yes	No	No	

Observations

Findings:

- Visible microbial growth on South wall and elevated moisture content in all walls
- Minor dust build up on HVAC supply grills
- T-1-11 appears soft in some areas
- CO2 level was elevated at the time of the assessment

Recommendations:

Site Based Maintenance:

- Clean HVAC supply grills with Wexcide disinfectant solution
- 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 microbial growth and elevated moisture and repair as appropriate. Remove and replace wall material as appropriate.
- Evaluate exterior of portable and repair as appropriate
- Evaluate HVAC system for proper operation and repair as appropriate to lower CO2 level