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Signature on File

TO: Ms. Constantina Robinson, Principal
Deerfield Park Elementary School

FROM: Robert J. Krickovich, Coordinator, LEA
Facilities and Construction Management, Environmental Division

SUBJECT: Indoor Air Quality (IAQ) Assessment
FISH 603, 604B, 803 and 810

On September 16, 2005 the IAQ Assessment Team conducted an assessment FISH 603, 604B, 803 and 810 at **Deerfield Park Elementary School**. The evaluation consisted of a walkthrough of the identified areas to assess the current condition of the location with regard to indoor air quality. This assessment included observations of the carpet, floor tile, ceiling tile, interior walls, false ceiling plenum, and accessible ventilation equipment.

Attached are the findings of this assessment along with recommendations for further assessment, remediation, or corrective actions, if needed.

Generally, the IAQ Assessment did not identify any existing conditions significantly impacting IAQ and thereby presenting immediate health and safety concerns 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 754-321-1638.

cc: Dr. Joanne Harrison, Area Superintendent
Craig Anderson, Area Director
Jeffrey S. Moquin, Director, Risk Management
Rigo Zubizarreta, Project Manager II, Facilities and Construction Management
LaFrances Trotter, Broward Teachers Union
Mark Dorsett, Manager 1, Physical Plant Operations Division, Zone 1
Roy Norton, Manager Custodial/Grounds, Physical Plant Operations Division

RK/tc
Enc.

IAQ Assessment

Location Number 0391
 Evaluation Requested September 15, 2005
 Evaluation Date September 16, 2005

Deerfield Park Elementary School

Time of Day 2:10 pm

Outdoor Conditions Temperature 89.6 Relative Humidity 63.5 Ambient CO2 411

Fish	Temperature	Range	Relative Humidity	Range	CO2	Range	# Occupants
603	74	72 - 78	63.5	30% - 60%	470	Max 700 > Ambient	8
Noticeable Odor		Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
No		Yes		Yes		3 ceiling tiles at return	
Ceiling Type	2 x 4 Lay In		Yes	Yes	Various - spotty growth		
Wall Type	Plaster		Yes	Yes	None		
Flooring	Carpet		No	No			

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

Observations

Findings:

- Visible microbial growth (spotty) on South wall and main corridor walls of building
- Heavy microbial growth on ceiling tiles around HVAC return grill
- Dust and debris on HVAC return grills
- Condensation on surfaces

Recommendations:

Site Based Maintenance:

- Clean HVAC return 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 Division:

- Clean classroom walls, corridor walls and ceiling tiles at HVAC return grill to remove microbial growth
- Evaluate and repair cause of condensation on surfaces - verify that fans are interlocked with HVAC and verify air handler shut down

IAQ Assessment

Location Number 0391
 Evaluation Requested September 15, 2005
 Evaluation Date September 16, 2005

Deerfield Park Elementary School

Time of Day 1:50 pm

Outdoor Conditions Temperature 89.6 Relative Humidity 63.5 Ambient CO2 411

Fish	Temperature	Range	Relative Humidity	Range	CO2	Range	# Occupants
604B	74.9	72 - 78	61	30% - 60%	541	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 Lay In		No	No	None		
Wall Type	Plaster		Yes	Yes	Various - spotty growth		
Flooring	12 x 12 vinyl		No	No	None		

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

Observations

Findings:

- Visible microbial growth (spotty) on walls of classroom and main corridor walls of building
- Dust and debris on HVAC supply grills
- Condensation on surfaces

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 Division:

- Clean classroom walls and corridor walls to remove microbial growth
- Evaluate and repair cause of condensation on surfaces - verify that fans are interlocked with HVAC and verify air handler shut down

IAQ Assessment

Location Number 0391
 Evaluation Requested September 15, 2005
 Evaluation Date September 16, 2005

Deerfield Park Elementary School

Time of Day 2:30 pm

Outdoor Conditions Temperature 89.6 Relative Humidity 63.5 Ambient CO2 411

Fish	Temperature	Range	Relative Humidity	Range	CO2	Range	# Occupants
803	73.4	72 - 78	57	30% - 60%	623	Max 700 > Ambient	2
Noticeable Odor		Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
Ceiling Type		No		No		None	
Wall Type		Yes		Yes		Along base of walls	
Flooring		No		No		None	

	Clean	Minor Dust / Debris	Needs Cleaning	Corrective Action Required
Ceiling	Yes	No	No	
Walls	No	Yes	Yes	Clean as appropriate
Flooring	Yes	No	No	
HVAC Supply Grills	No	Yes	Yes	Clean with Wexcide disinfectant
HVAC Return Grills				thorough light fixtures
Ceiling at Supply Grills	Yes	No	No	
Surfaces in Room	Yes	No	No	

Observations

Findings:

- Visible microbial growth (spotty) on tackboard walls of classroom just above cove base and main corridor walls of building
- Dust and debris on HVAC supply grills
- Condensation on surfaces

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 Division:

- Clean classroom walls and corridor walls to remove microbial growth
- Evaluate and repair cause of condensation on surfaces - verify that fans are interlocked with HVAC and verify air handler shut down

IAQ Assessment

Location Number 0391
 Evaluation Requested September 15, 2005
 Evaluation Date September 16, 2005

Deerfield Park Elementary School

Time of Day 2:45 pm

Outdoor Conditions Temperature 89.6 Relative Humidity 63.5 Ambient CO2 411

Fish	Temperature	Range	Relative Humidity	Range	CO2	Range	# Occupants
810	75.3	72 - 78	53.2	30% - 60%	694	Max 700 > Ambient	8
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				thorough light fixtures
Ceiling at Supply Grills	Yes	No	No	
Surfaces in Room	Yes	No	No	

Observations

Findings:

- Visible microbial growth on inside of all cabinet doors
- Weather strip on exterior door needs to be replaced
- Water damage inside sink base cabinet
- Condensation on metal cabinet in FISH 810B

Recommendations:

Site Based Maintenance:

- Clean inside of cabinet doors 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 Division:

- Evaluate and replace weather stripping on exterior door
- Evaluate and repair/replace sink base cabinet
- Evaluate and repair cause of condensation on surfaces - verify that fans are interlocked with HVAC and verify air handler shut down