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Risk Management Department

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March 6, 2007

Signature on File

TO: Ms. Camille Pontillo, Principal
Park Springs Elementary School

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

SUBJECT: Indoor Air Quality (IAQ) Assessment
FISH 136, 137, 138, 139 and 146

On February 14, 2007 I conducted an assessment of FISH 136, 137, 138, 139 and 146 at **Park Springs 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
Paul Bach, 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 3171
 Evaluation Requested January 12, 2007
 Evaluation Date February 14, 2007

Park Springs Elementary School

Time of Day 2:00 pm

Outdoor Conditions Temperature 87.1 Relative Humidity 45.2 Ambient CO2 379

Fish	Temperature	Range	Relative Humidity	Range	CO2	Range	# Occupants
136	66.3	72 - 78	63.1	30% - 60%	1447	Max 700 > Ambient	9
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	No	Yes	Yes	Clean with Wexcide disinfectant
Ceiling at Supply Grills	Yes	No	No	
Surfaces in Room	Yes	No	No	

Observations

Findings:

- No visible signs of microbial growth or water intrusion
- Dust and debris on HVAC return grills
- Temperature was low and humidity and CO2 level was elevated at the time of the assessment. HFSP advised that the temperature has been adjusted several times and the humidity levels still remain elevated.

-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:

- Evaluate HVAC for proper operation and adjust to increase temperature and lower humidity level
- Evaluate fresh air damper and repair as appropriate to lower CO2 level

IAQ Assessment

Location Number
 Evaluation Requested
 Evaluation Date

Park Springs Elementary School

Time of Day

Outdoor Conditions Temperature Relative Humidity Ambient CO2

Fish	Temperature	Range	Relative Humidity	Range	CO2	Range	# Occupants
<input type="text" value="137"/>	<input type="text" value="69.7"/>	<input type="text" value="72 - 78"/>	<input type="text" value="70"/>	<input type="text" value="30% - 60%"/>	<input type="text" value="1092"/>	<input type="text" value="Max 700 > Ambient"/>	<input type="text" value="8"/>
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"/>		<input type="text" value="No"/>	<input type="text" value="No"/>	<input type="text" value="None"/>		
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="No"/>	<input type="text" value="Yes"/>	<input type="text" value="Yes"/>	<input type="text" value="Clean with Wexcide disinfectant"/>
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:
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 - Dust and debris on HVAC return grills
 - Temperature was low and humidity level was elevated at the time of the assessment. HFSP advised that the temperature has been adjusted several times and the humidity levels still remain elevated.

-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:
 - Evaluate HVAC for proper operation and adjust to increase temperature and lower humidity level

IAQ Assessment

Location Number
 Evaluation Requested
 Evaluation Date

Park Springs Elementary School

Time of Day

Outdoor Conditions Temperature Relative Humidity Ambient CO2

Fish	Temperature	Range	Relative Humidity	Range	CO2	Range	# Occupants
<input type="text" value="138"/>	<input type="text" value="68.7"/>	<input type="text" value="72 - 78"/>	<input type="text" value="70"/>	<input type="text" value="30% - 60%"/>	<input type="text" value="1025"/>	<input type="text" value="Max 700 > Ambient"/>	<input type="text" value="5"/>
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="Drywall"/>		<input type="text" value="No"/>		<input type="text" value="No"/>		<input type="text" value="None"/>
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="No"/>	<input type="text" value="Yes"/>	<input type="text" value="Yes"/>	<input type="text" value="Clean with Wexcide disinfectant"/>
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:
 - No visible signs of microbial growth or water intrusion
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-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:
 - Evaluate HVAC for proper operation and adjust to increase temperature and lower humidity level

IAQ Assessment

Location Number 3171

Park Springs Elementary School

Evaluation Requested January 12, 2007

Time of Day 2:00 pm

Evaluation Date February 14, 2007

Outdoor Conditions Temperature 87.1 Relative Humidity 45.2 Ambient CO2 379

Fish	Temperature	Range	Relative Humidity	Range	CO2	Range	# Occupants
139	66.6	72 - 78	64.8	30% - 60%	1063	Max 700 > Ambient	4
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	<div style="border: 1px solid black; height: 20px; width: 100%;"></div>
Walls	Yes	No	No	<div style="border: 1px solid black; height: 20px; width: 100%;"></div>
Flooring	Yes	No	No	<div style="border: 1px solid black; height: 20px; width: 100%;"></div>
HVAC Supply Grills	Yes	No	No	<div style="border: 1px solid black; height: 20px; width: 100%;"></div>
HVAC Return Grills	Yes	No	No	<div style="border: 1px solid black; height: 20px; width: 100%;"></div>
Ceiling at Supply Grills	Yes	No	No	<div style="border: 1px solid black; height: 20px; width: 100%;"></div>
Surfaces in Room	Yes	No	No	<div style="border: 1px solid black; height: 20px; width: 100%;"></div>

Observations

Findings:
 - No visible signs of microbial growth or water intrusion
 - Temperature was low and humidity level was elevated at the time of the assessment. HFSP advised that the temperature has been adjusted several times and the humidity levels still remain 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 HVAC for proper operation and adjust to increase temperature and lower humidity level

IAQ Assessment

Location Number
 Evaluation Requested
 Evaluation Date

Park Springs Elementary School

Time of Day

Outdoor Conditions Temperature Relative Humidity Ambient CO2

Fish	Temperature	Range	Relative Humidity	Range	CO2	Range	# Occupants
<input type="text" value="146"/>	<input type="text" value="64.1"/>	<input type="text" value="72 - 78"/>	<input type="text" value="66.8"/>	<input type="text" value="30% - 60%"/>	<input type="text" value="949"/>	<input type="text" value="Max 700 > Ambient"/>	<input type="text" value="4"/>
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"/>		<input type="text" value="No"/>	<input type="text" value="No"/>	<input type="text" value="None"/>		
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:
 - Visible microbial growth on furniture
 - Temperature was low and humidity level was elevated at the time of the assessment. HFSP advised that the temperature has been adjusted several times and the humidity levels still remain elevated.

-Recommendations:

Site Based Maintenance:
 - Clean furniture 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 HVAC for proper operation and adjust to increase temperature and lower humidity level