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December 21, 2006

Signature on File

TO: Ms. Nancy A. Moore, Principal
Coral Park Elementary School

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

SUBJECT: Indoor Air Quality (IAQ) Assessment
FISH 120D, 501, 506, 513 and 514

On December 13, 2006 I conducted an assessment of FISH 120D, 501, 506, 513 and 514 at **Coral Park 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
Denise Cone, 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
 Evaluation Requested
 Evaluation Date

Coral Park 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="120D"/>	<input type="text"/>	<input type="text" value="72 - 78"/>	<input type="text" value="5"/>	<input type="text" value="30% - 60%"/>	<input type="text"/>	<input type="text" value="Max 700 > Ambient"/>	<input type="text"/>
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="Yes"/>		<input type="text" value="Rear 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="No"/>	<input type="text" value="Yes"/>	<input type="text" value="Yes"/>	<input type="text" value="Clean and repaint wall as appropriate"/>
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"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="N/A"/>
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 rear wall

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 microbial growth on rear wall and repair as appropriate. Clean wall to remove growth and repaint as appropriate.

IAQ Assessment

Coral Park Elementary School

Location Number 3041
 Evaluation Requested December 12, 2006
 Evaluation Date December 13, 2006

Time of Day 12:00 pm

Outdoor Conditions Temperature 78.5 Relative Humidity 67.8 Ambient CO2 380

Fish	Temperature	Range	Relative Humidity	Range	CO2	Range	# Occupants
501	72.5	72 - 78	76.3	30% - 60%	414	Max 700 > Ambient	4
Noticeable Odor	No		Visible water damage / staining?	Visible microbial growth?	Amount of material affected		
Ceiling Type	2 x 4 Lay In		Yes	No	One ceiling tile		
Wall Type	Drywall		No	No	None		
Flooring	Tile		No	No	None		

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

Observations

Findings:
 - One stained ceiling tile over sink area
 - Humidity level was elevated at the time of the assessment

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 stained ceiling tile over sink area and repair as appropriate. Remove and replace stained ceiling tile.
 - Evaluate and repair HVAC system to lower humidity level

IAQ Assessment

Location Number 3041
 Evaluation Requested December 12, 2006
 Evaluation Date December 13, 2006

Coral Park Elementary School

Time of Day 12:30 pm

Outdoor Conditions Temperature 78.5 Relative Humidity 67.8 Ambient CO2 380

Fish	Temperature	Range	Relative Humidity	Range	CO2	Range	# Occupants
506	74	72 - 78	59.3	30% - 60%	489	Max 700 > Ambient	4
Noticeable Odor		Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
Ceiling Type		Yes		No		One ceiling tile	
Wall Type		No		No		None	
Flooring		No		No		None	

	Clean	Minor Dust / Debris	Needs Cleaning	Corrective Action Required
Ceiling	No	Yes	Yes	Remove and replace one ceiling tile
Walls	Yes	No	No	
Flooring	Yes	No	No	
HVAC Supply Grills	Yes	No	No	
HVAC Return Grills	Yes	No	No	
Ceiling at Supply Grills				N/A
Surfaces in Room	No	Yes	Yes	Clean as appropriate

Observations

Findings:

- Visible microbial growth on wooden shelves
- One stained ceiling tile towards the front of the classroom
- Minor dust and debris on environmental surfaces

Recommendations:

Site Based Maintenance:

- Discard wood shelf cabinet
- Clean environmental surfaces as appropriate to remove minor dust and debris
- 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 stained ceiling tile in the front of the classroom and repair as appropriate. Remove and replace stained ceiling tile.

IAQ Assessment

Location Number 3041
 Evaluation Requested December 12, 2006
 Evaluation Date December 13, 2006

Coral Park Elementary School

Time of Day 12:50 pm

Outdoor Conditions Temperature 78.5 Relative Humidity 67.8 Ambient CO2 380

Fish	Temperature	Range	Relative Humidity	Range	CO2	Range	# Occupants
513	70.3	72 - 78	75.6	30% - 60%	476	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	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Walls	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Clean as appropriate
Flooring	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
HVAC Supply Grills	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
HVAC Return Grills	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Ceiling at Supply Grills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A
Surfaces in Room	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Observations

Findings:

- Minor dust and debris on walls
- Odor appears to be emanating from the carpet mats
- Humidity level was elevated at the time of the assessment

Recommendations:

Site Based Maintenance:

- Wipe down walls to remove minor dust and debris
- Clean or discard carpet mats
- 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 and repair HVAC system to lower humidity level

IAQ Assessment

Location Number
 Evaluation Requested
 Evaluation Date

Coral Park 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="514"/>	<input type="text"/>	<input type="text" value="72 - 78"/>	<input type="text"/>	<input type="text" value="30% - 60%"/>	<input type="text"/>	<input type="text" value="Max 700 > Ambient"/>	<input type="text"/>
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="Yes"/>	<input type="text" value="No"/>	<input type="text" value="No"/>	<input type="text"/>
Ceiling at Supply Grills	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="N/A"/>
Surfaces in Room	<input type="text" value="Yes"/>	<input type="text" value="No"/>	<input type="text" value="No"/>	<input type="text"/>

Observations

Findings:
 - Elevated moisture content in insulation in lower half of the HVAC unit.

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 insulation in lower half of HVAC unit and repair as appropriate and remove and replace insulation