

Jeffrey S. Moquin, Director
Risk Management Department

Telephone: 754-321-3200
Facsimile: 754-321-3290

September 6, 2006

Signature on File

TO: Mr. Kenneth Fulop, Principal
Cross Creek School

FROM: Kenneth I. Partee, Project Manager Occupational Health and Environmental Control
Risk Management Department

SUBJECT: Indoor Air Quality (IAQ) Assessment
FISH 127, 402, 404 and 407

On August 31, 2006 I conducted an assessment of FISH 127, 402, 404 and 407 at **Cross Creek 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.

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
Joe DeLillo, Project Manager, Facilities and Construction Management
Jamie Daniels, 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

KP/tc
Enc.

IAQ Assessment

Location Number 3222

Cross Creek School

Evaluation Requested August 31, 2006

Time of Day 12:00 pm

Evaluation Date August 31, 2006

Outdoor Conditions Temperature 94.2 Relative Humidity 66.1 Ambient CO2 512

Fish	Temperature	Range	Relative Humidity	Range	CO2	Range	# Occupants
127	69	72 - 78	56.8	30% - 60%	650	Max 700 > Ambient	3
Noticeable Odor		Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
Ceiling Type		Yes		No		3 Ceiling Tiles	
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 ceiling tiles
Walls	No	Yes	Yes	Clean as appropriate
Flooring	No	Yes	Yes	Clean and sanitize
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	No	Yes	Yes	Clean as appropriate

Observations

Findings:

- 3 stained ceiling tiles to the left above lockers
- Dust build up on walls
- Dust and debris on HVAC supply and return grills
- Dust and debris on floor
- Dust build up on environmental surfaces

Recommendations:

Site Based Maintenance:

- Clean walls as appropriate
- Clean HVAC supply and return grills with Wexcide disinfectant solution
- Clean and sanitize floor
- Clean environmental surfaces throughout the room
- 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:

- Remove and replace 3 stained ceiling tiles requiring cut. Leak was recently repaired.

IAQ Assessment

Location Number 3222
 Evaluation Requested August 31, 2006
 Evaluation Date August 31, 2006

Cross Creek School

Time of Day 12:00 pm

Outdoor Conditions Temperature 94.2 Relative Humidity 66.1 Ambient CO2 512

Fish	Temperature	Range	Relative Humidity	Range	CO2	Range	# Occupants
402		72 - 78		30% - 60%		Max 700 > Ambient	
Noticeable Odor	No		Visible water damage / staining?	Visible microbial growth?	Amount of material affected		
Ceiling Type	2 x 4 Lay In		Yes	No	1 ceiling tile		
Wall Type	Plaster		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 tiles
Walls	No	Yes	Yes	Clean as appropriate
Flooring	No	Yes	Yes	Clean and sanitize
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	No	Yes	Yes	Clean as appropriate

Observations

Findings:

- Stained ceiling tile at rear of room
- Dust build up on walls
- Dust and debris on HVAC supply and return grills
- Dust and debris on floor
- Dust build up on environmental surfaces

Recommendations:

Site Based Maintenance:

- Clean walls as appropriate
- Clean HVAC supply and return grills with Wexcide disinfectant solution
- Clean and sanitize floor
- Clean environmental surfaces throughout the room
- 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 for leak at rear of room and repair. Remove and replace stained ceiling tiles as appropriate.

IAQ Assessment

Location Number
 Evaluation Requested
 Evaluation Date

Cross Creek School

Time of Day

Outdoor Conditions Temperature Relative Humidity Ambient CO2

Fish	Temperature	Range	Relative Humidity	Range	CO2	Range	# Occupants
<input type="text" value="404"/>	<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="Plaster"/>		<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="No"/>	<input type="text" value="Yes"/>	<input type="text" value="Yes"/>	<input type="text" value="Clean as appropriate"/>
Flooring	<input type="text" value="No"/>	<input type="text" value="Yes"/>	<input type="text" value="Yes"/>	<input type="text" value="Clean and sanitize"/>
HVAC Supply Grills	<input type="text" value="No"/>	<input type="text" value="Yes"/>	<input type="text" value="Yes"/>	<input type="text" value="Clean with Wexcide disinfectant"/>
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="No"/>	<input type="text" value="Yes"/>	<input type="text" value="Yes"/>	<input type="text" value="Clean as appropriate"/>

Observations

Findings:

- Visible microbial growth on log in room
- Dust build up on walls
- Dust and debris on HVAC supply and return grills
- Dust and debris on floor
- Dust build up on environmental surfaces

Recommendations:

Site Based Maintenance:

- Remove log with visible microbial growth
- Clean walls as appropriate
- Clean HVAC supply and return grills with Wexcide disinfectant solution
- Clean and sanitize floor
- Clean environmental surfaces throughout the room
- Continue to monitor this location for any signs of microbial growth as well as dust and debris accumulation and clean as appropriate

IAQ Assessment

Location Number 3222
 Evaluation Requested August 31, 2006
 Evaluation Date August 31, 2006

Cross Creek School

Time of Day 12:00 pm

Outdoor Conditions Temperature 94.2 Relative Humidity 66.1 Ambient CO2 512

Fish	Temperature	Range	Relative Humidity	Range	CO2	Range	# Occupants
407		72 - 78		30% - 60%		Max 700 > Ambient	
Noticeable Odor	No		Visible water damage / staining?	Visible microbial growth?	Amount of material affected		
Ceiling Type	2 x 4 Lay In		Yes	No	Various		
Wall Type	Plaster		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 tiles
Walls	No	Yes	Yes	Clean as appropriate
Flooring	No	Yes	Yes	Clean and sanitize
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	No	Yes	Yes	Clean as appropriate

Observations

Findings:

- Stained ceiling tile above teacher's desk and at rear of room above whiteboard
- Dust build up on walls
- Dust and debris on HVAC supply and return grills
- Dust and debris on floor
- Dust build up on environmental surfaces

Recommendations:

Site Based Maintenance:

- Clean walls as appropriate
- Clean HVAC supply and return grills with Wexcide disinfectant solution
- Clean and sanitize floor
- Clean environmental surfaces throughout the room
- 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 for leak over teacher's desk and repair. Remove and replace stained ceiling tiles requiring cut - over teacher's desk and at rear of room above whiteboard.