

# RISK MANAGEMENT...

managing risk with responsibility

Aston A. Henry, Supervisor  
Risk Management Department

Telephone: 754 321-1900  
Fax: 754 321-1917

October 12, 2009

**Signature on File**

TO: Mr. Robert Schneider, Principal  
**Davie Elementary School**

FROM: Robert Krickovich, Coordinator, LEA  
Facilities and Construction Management

SUBJECT: Indoor Air Quality (IAQ) Assessment  
**FISH 118 and 121**

<b>For Custodial Supervisor Use Only</b>	
<input type="checkbox"/>	Custodial Issues Addressed
<input type="checkbox"/>	Custodial Issues Not Addressed
_____	
_____	

On September 16, 2009 I conducted an assessment of FISH 118 and 121 at **Davie Elementary School**. The assessment consisted of a reevaluation walkthrough of the previously identified areas to assess the current condition of the location with regard to indoor air quality. This assessment included reviewing previously generated work orders, if applicable, as well as observation of the area of concern as stated in the IAQ Assessments performed on October 23, 2006 and August 26, 2009 for FISH 121. Attached are the findings of this assessment along with recommendations for further assessment, remediation, or corrective actions, if needed.

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.

*Please ensure that your Head Facilities Serviceperson receives a copy of this correspondence so that the recommendations requiring their attention can be addressed. In an attempt to separate IAQ issues from general maintenance items, the attached assessment may contain direction for site based staff to generate a work order through COMPASS. Within two weeks a representative from the Custodial/Grounds Department will conduct a follow-up visit to ensure that all issues have been appropriately addressed.*

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. Joel Herbst, Area Superintendent  
Dr. Gina Eyerman, Area Director  
Jeffrey S. Moquin, Executive Director, Support Operations  
Aston Henry, Supervisor, Risk Management  
Frank Girardi, Project Manager, Facilities and Construction Management  
Diane Watts, Broward Teachers Union  
Roy Jarrett, Federation of Public Employees  
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 2801  
 Evaluation Requested September 10, 2009  
 Evaluation Date September 16, 2009

Davie Elementary School

Time of Day

Outdoor Conditions      Temperature 90.8      Relative Humidity 57.1      Ambient CO2 470

Fish	Temperature	Range	Relative Humidity	Range	CO2	Range	# Occupants
<span style="border: 1px solid black; padding: 2px;">118</span>	<span style="border: 1px solid black; padding: 2px;">72</span>	<span style="border: 1px solid black; padding: 2px;">72 - 78</span>	<span style="border: 1px solid black; padding: 2px;">48.5</span>	<span style="border: 1px solid black; padding: 2px;">30% - 60%</span>	<span style="border: 1px solid black; padding: 2px;">771</span>	<span style="border: 1px solid black; padding: 2px;">Max 700 &gt; Ambient</span>	<span style="border: 1px solid black; padding: 2px;">3</span>
Noticeable Odor		Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
<span style="border: 1px solid black; padding: 2px;">No</span>		<span style="border: 1px solid black; padding: 2px;">Yes</span>		<span style="border: 1px solid black; padding: 2px;">No</span>		<span style="border: 1px solid black; padding: 2px;">4 ceiling tiles</span>	
Ceiling Type	<span style="border: 1px solid black; padding: 2px;">2 x 4 Lay In</span>		<span style="border: 1px solid black; padding: 2px;">Yes</span>	<span style="border: 1px solid black; padding: 2px;">No</span>		<span style="border: 1px solid black; padding: 2px;">4 ceiling tiles</span>	
Wall Type	<span style="border: 1px solid black; padding: 2px;">Tackboard</span>		<span style="border: 1px solid black; padding: 2px;">No</span>	<span style="border: 1px solid black; padding: 2px;">No</span>		<span style="border: 1px solid black; padding: 2px;">None</span>	
Flooring	<span style="border: 1px solid black; padding: 2px;">12 x 12 Vinyl</span>		<span style="border: 1px solid black; padding: 2px;">No</span>	<span style="border: 1px solid black; padding: 2px;">No</span>		<span style="border: 1px solid black; padding: 2px;">None</span>	

	Clean	Minor Dust / Debris	Needs Cleaning	Corrective Action Required
Ceiling	<span style="border: 1px solid black; padding: 2px;">Yes</span>	<span style="border: 1px solid black; padding: 2px;">No</span>	<span style="border: 1px solid black; padding: 2px;">No</span>	<span style="border: 1px solid black; display: inline-block; width: 100%; height: 15px;"></span>
Walls	<span style="border: 1px solid black; padding: 2px;">Yes</span>	<span style="border: 1px solid black; padding: 2px;">No</span>	<span style="border: 1px solid black; padding: 2px;">No</span>	<span style="border: 1px solid black; display: inline-block; width: 100%; height: 15px;"></span>
Flooring	<span style="border: 1px solid black; padding: 2px;">Yes</span>	<span style="border: 1px solid black; padding: 2px;">No</span>	<span style="border: 1px solid black; padding: 2px;">No</span>	<span style="border: 1px solid black; display: inline-block; width: 100%; height: 15px;"></span>
HVAC Supply Grills	<span style="border: 1px solid black; padding: 2px;">Yes</span>	<span style="border: 1px solid black; padding: 2px;">No</span>	<span style="border: 1px solid black; padding: 2px;">No</span>	<span style="border: 1px solid black; display: inline-block; width: 100%; height: 15px;"></span>
HVAC Return Grills	<span style="border: 1px solid black; padding: 2px;">Yes</span>	<span style="border: 1px solid black; padding: 2px;">No</span>	<span style="border: 1px solid black; padding: 2px;">No</span>	<span style="border: 1px solid black; display: inline-block; width: 100%; height: 15px;"></span>
Ceiling at Supply Grills	<span style="border: 1px solid black; padding: 2px;">Yes</span>	<span style="border: 1px solid black; padding: 2px;">No</span>	<span style="border: 1px solid black; padding: 2px;">No</span>	<span style="border: 1px solid black; display: inline-block; width: 100%; height: 15px;"></span>
Surfaces in Room	<span style="border: 1px solid black; padding: 2px;">No</span>	<span style="border: 1px solid black; padding: 2px;">Yes</span>	<span style="border: 1px solid black; padding: 2px;">Yes</span>	<span style="border: 1px solid black; padding: 2px;">Clean as appropriate</span>

## Observations

**Findings:**

- 4 stained ceiling tiles
- Minor dust build up on elevated surfaces
- Visible microbial growth inside tall cabinet
- Dust build up in return air duct
- Sink cabinetry was recently replaced. Occupant advised that the contractor that installed the cabinetry placed the cabinet over microbial growth that was on the wall. HFSP stated that they cleaned the visible growth on the wall above the backsplash after the cabinet was installed and growth has not returned.

**Recommendations:**

**Site Based Maintenance:**

- Remove and replace 4 stained ceiling tiles. If stains return, contact COMPASS to generate a work order for Physical Plant Operations to evaluate for cause.
- Wipe down tall cabinet with Wexcide disinfectant solution
- Clean elevated 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 Operation:**

- Clean return air duct work

**Facilities and Construction Management:**

- Have contractor remove cabinets and clean wall surfaces behind cabinets

# IAQ Assessment

Location Number 2801

Davie Elementary School

Evaluation Requested September 10, 2009

Time of Day

Evaluation Date September 16, 2009

Outdoor Conditions      Temperature 90.8      Relative Humidity 57.1      Ambient CO2 470

Fish	Temperature	Range	Relative Humidity	Range	CO2	Range	# Occupants
121	71.6	72 - 78	49.6	30% - 60%	723	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	Tackboard		No	No		None	
Flooring	12 x 12 Vinyl		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	Yes	No	No	
Ceiling at Supply Grills	Yes	No	No	
Surfaces in Room	Yes	No	No	

**Observations**

**Findings:**  
 - Dust build up in return air duct

**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 Operation:**  
 - Clean return air duct work