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Risk Management Department

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January 24, 2008

**Signature on File**

TO: Mr. Scott Fiske, Principal  
**Western High School**

FROM: Jeffrey S. Moquin, Director  
Risk Management Department

SUBJECT: Indoor Air Quality (IAQ) Assessment  
**FISH 327D, 338, 339, 339A, 340, 341, 341A  
536, 722 and 724**

<b>For Custodial Supervisor Use Only</b>	
<input type="checkbox"/>	Custodial Issues Addressed
<input type="checkbox"/>	Custodial Issues Not Addressed
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On January 18, 2008 a walkthrough assessment of FISH 327D, 338, 339, 339A, 340, 341, 341A, 536, 722 and 724 was conducted by members of the IAQ Assessment Team, members of your site based IAQ Committee, and School Board Member Hope. The walkthrough was coordinated to address ongoing Indoor Air Quality concerns at your site.

The walkthrough did identify some items which need to be addressed by Physical Plant Operations and on site custodial staff. The detailed findings, along with the recommended corrective action can be found on the attached IAQ Assessment Worksheet. *Please ensure that your Head Facilities Serviceperson receives a copy of this correspondence so that the recommendations requiring their attention can be addressed. 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.* The items identified are primarily related to damage caused by previous water intrusion. As you are aware, Facilities and Construction Management completed a project to address the building envelope to prevent further water intrusion. Additionally, a project is scheduled to address damage related to previous water intrusion as well as HVAC upgrades.

Work orders are also in progress to address items previously identified during the November 9, 2007 walkthrough. Although the project being facilitated by Facilities and Construction Management is scheduled, the items identified during the January 18<sup>th</sup> walkthrough exceed the scope of this project and will be incorporated into Physical Plant Operations work orders.

Throughout this process, members of your IAQ Committee have repeatedly requested air samples to alleviate concerns with the air quality. Although there are significant limitations involving air sampling, I have decided to direct one of the District's independent Certified Industrial Hygienist consultants to conduct minimal air sampling in an effort to resolve these concerns. Tentatively, the sampling has been scheduled for February 11<sup>th</sup> in the early afternoon. Prior to February 11<sup>th</sup> I would like to schedule to meet with you and members of your IAQ Committee to discuss the sampling process.

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. Verda Farrow, Area Superintendent  
Margaret Underhill, Area Director  
Jeffrey S. Moquin, Director, Risk Management  
James Carballo, Project Manager, Facilities and Construction Management  
Ralph Eckhardt, Broward Teachers Union  
Roy Jarrett, National Federation of Public and Private Employees  
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

JSM/tc  
Enc.

# IAQ Assessment

Location Number

Western High School

Evaluation Requested

Time of Day

Evaluation Date

Outdoor Conditions      Temperature       Relative Humidity       Ambient CO2

Fish	Temperature	Range	Relative Humidity	Range	CO2	Range	# Occupants
<input style="width: 50px;" type="text" value="Various"/>	<input style="width: 50px;" type="text"/>	<input style="width: 50px;" type="text" value="72 - 78"/>	<input style="width: 50px;" type="text"/>	<input style="width: 50px;" type="text" value="30% - 60%"/>	<input style="width: 50px;" type="text"/>	<input style="width: 50px;" type="text" value="Max 700 &gt; Ambient"/>	<input style="width: 50px;" type="text"/>
Noticeable Odor		<input style="width: 50px;" type="text" value="No"/>	Visible water damage / staining?		Visible microbial growth?		Amount of material affected
Ceiling Type	<input style="width: 100px;" type="text" value="Various"/>		<input style="width: 50px;" type="text" value="No"/>	<input style="width: 50px;" type="text" value="No"/>	<input style="width: 100px;" type="text" value="None"/>		
Wall Type	<input style="width: 100px;" type="text" value="Various"/>		<input style="width: 50px;" type="text" value="No"/>	<input style="width: 50px;" type="text" value="Yes"/>	<input style="width: 100px;" type="text" value="Closets and Mechanical Room"/>		
Flooring	<input style="width: 100px;" type="text" value="Various"/>		<input style="width: 50px;" type="text" value="No"/>	<input style="width: 50px;" type="text" value="No"/>	<input style="width: 100px;" type="text" value="None"/>		

	Clean	Minor Dust / Debris	Needs Cleaning	Corrective Action Required
Ceiling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input style="width: 100%; height: 20px;" type="text"/>
Walls	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input style="width: 100%; height: 20px;" type="text"/>
Flooring	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input style="width: 100%; height: 20px;" type="text"/>
HVAC Supply Grills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input style="width: 100%; height: 20px;" type="text"/>
HVAC Return Grills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input style="width: 100%; height: 20px;" type="text"/>
Ceiling at Supply Grills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input style="width: 100%; height: 20px;" type="text"/>
Surfaces in Room	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input style="width: 100%; height: 20px;" type="text"/>

**Observations**

**Findings:**

- FISH 338 and 340 - Damaged tackable wall material and bubbling paint on plaster walls
- FISH 339 and 341 - Humidity level was extremely elevated. A/C project is scheduled to begin, however, this needs to be addressed.
- FISH 339A and 341A (closets) - Humidity level was extremely elevated. Visible microbial growth on both sides of doors and walls.
- FISH 536 and 724 - Damaged ceiling tiles
- FISH 722 (Mechanical Room) - Visible microbial growth and water dripping from ventilation duct
- FISH 327D - Carpet is heavily stained and worn

**Recommendations:**

**Site Based Maintenance:**

- FISH 339A and 341A (closets) - Remove all items from closets and do a thorough wipe down of the items and rooms (top to bottom) with Wexcide disinfectant solution after door under cut has been increased by Physical Plant Operations.
- 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**

- Old Science Building - 2nd Floor - Cut access panels in duct work to take pictures. Take appropriate corrective action based on findings.
- FISH 338 and 340 - Remove all tackable wall material throughout the rooms and remove and replace damaged plaster as necessary
- FISH 339 and 341 - Install data loggers for a minimum of 7 days to monitor temperature and humidity. Take appropriate action to repair AHU servicing this area to lower humidity level.
- FISH 339A and 341A (closets) - Increase under cut in bottom of doors to increase air ventilation.
- FISH 536 and 724 - Remove and replace all ceiling tiles
- FISH 722 (Mechanical Room) - Evaluate and repair ventilation duct as appropriate. Verify if work completed under work orders **CCL0183** and **CCLO184**
- FISH 327D - Remove and replace carpet with tile