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September 14, 2012

Signature on File

TO: David Jones, Principal  
**Western High School**

FROM: Richard Rosa, Project Manager  
Facilities Design and Construction

SUBJECT: Indoor Air Quality (IAQ) Assessment

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

On September 11, 2012, I conducted an assessment at **Western High School**. Attached are findings and recommendations for further assessment, remediation, or corrective actions 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 site based custodial 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 us at 754-321-1907.

cc: Directors, School Performance & Accountability  
Shelley Meloni, Executive Director, Facilities Design and Construction  
Mark Dorsett, Manager, Zone 1, Physical Plant Operations Division  
Roy Norton, Manager, Custodial/Grounds, Physical Plant Operations Division  
Aston Henry, Supervisor, Risk Management  
Sonja Coley, Senior Project Manager, Facilities Design and Construction  
Broward Teachers Union  
Federation of Public Employees

RR/tc  
Enc.

# IAQ Assessment

Western High

Evaluation Date September 11, 2012

Time of Day 1:20

Outdoor Conditions    Temperature 89.3

Relative Humidity 68.2

Ambient CO2 411

Fish	Temperature	Range	Relative Humidity	Range	CO <sup>2</sup>	Range	# Occupants
113	72.6	72 - 78	61.5	30% - 60%	1553	MAX 700 > Ambient	3
Noticeable Odor		Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
Ceiling		Walls		Floor			
No		2'x 4'		Drywall		12" x 12" Vinyl	
No		No		No		6 sq ft	
Ceiling Clean		Walls Clean		Flooring Clean		Room Surfaces Clean	
Yes		No		Yes		Yes	
HVAC Supply Grills Clean		Inside of Supply Duct Clean		Ceiling at Supply Grills Clean		HVAC Return Grills Clean	
Yes		Yes		Yes		Yes	
Trash Removed		Signs of Pests		Room Cluttered		Exhaust Fans Working	
Yes		No		No		N/A	
Drain Traps Wet		Food if Stored in Room is in Sealed Containers		Unapproved Chemicals / Cleaners in Room		Air Fresheners in Room	
N/A		N/A		No		No	
Mechanical Equipment Location				Mechanical Room Clean			
FISH 129				Yes			
Filters Installed Properly		Filters Clean		Condensate Pan Clean		Cooling Coil Clean	
Yes		Yes		N/A		N/A	
Inside of HVAC Unit Clean				Fresh Air Intake Location			
Yes				Not readily accessible ▼			
Fresh Air Intake Free of Obstruction				Pollutant Sources Near Air Intake			
N/A				Not readily accessible ▼			

**Observations**

**Principals office**

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**Repair / replace drywall under window, the lower portion of the drywall is wet from water intrusion. Evaluate and repair exterior of window and building to eliminate water intrusion into the building.**

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**Corrective Actions to be Completed by Site Based Staff**

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	▼
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	▼
	▼
	▼

**Corrective Actions to be Completed by PPO**

Repair HVAC to reduce humidity level	▼
Repair HVAC to reduce CO2 levels	▼
Evaluate and repair cause of water damage	▼
Remove and replace wall material as necessary	▼
See observations for details	▼
	▼
	▼
	▼

# IAQ Assessment

Western High

Evaluation Date September 11, 2012

Time of Day 1:50

Outdoor Conditions    Temperature 89.3

Relative Humidity 68.2

Ambient CO2 411

Fish	Temperature	Range	Relative Humidity	Range	CO <sup>2</sup>	Range	# Occupants
<span style="border: 1px solid black; padding: 2px;">115</span>	<span style="border: 1px solid black; padding: 2px;">73.4</span>	<span style="border: 1px solid black; padding: 2px;">72 - 78</span>	<span style="border: 1px solid black; padding: 2px;">62.7</span>	<span style="border: 1px solid black; padding: 2px;">30% - 60%</span>	<span style="border: 1px solid black; padding: 2px;">1710</span>	<span style="border: 1px solid black; padding: 2px;">MAX 700 &gt; Ambient</span>	<span style="border: 1px solid black; padding: 2px;">2</span>
Noticeable Odor		<span style="border: 1px solid black; padding: 2px;">No</span>	Visible water damage / staining?		Visible microbial growth?		Amount of material affected
Ceiling	<span style="border: 1px solid black; padding: 2px;">2'x 4'</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;">2 sq ft</span>
Walls	<span style="border: 1px solid black; padding: 2px;">Drywall</span>		<span style="border: 1px solid black; padding: 2px;">No</span>		<span style="border: 1px solid black; padding: 2px;">No</span>		
Floor	<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>		
Ceiling Clean	<span style="border: 1px solid black; padding: 2px;">No</span>		HVAC Supply Grills Clean	<span style="border: 1px solid black; padding: 2px;">Yes</span>		HVAC Return Grills Clean	<span style="border: 1px solid black; padding: 2px;">Yes</span>
Walls Clean	<span style="border: 1px solid black; padding: 2px;">Yes</span>		Inside of Supply Duct Clean	<span style="border: 1px solid black; padding: 2px;">Yes</span>		Inside of Return Duct Clean	<span style="border: 1px solid black; padding: 2px;">Yes</span>
Flooring Clean	<span style="border: 1px solid black; padding: 2px;">Yes</span>		Ceiling at Supply Grills Clean	<span style="border: 1px solid black; padding: 2px;">Yes</span>			
Room Surfaces Clean	<span style="border: 1px solid black; padding: 2px;">Yes</span>						
Trash Removed	<span style="border: 1px solid black; padding: 2px;">Yes</span>		Exhaust Fans Working	<span style="border: 1px solid black; padding: 2px;">N/A</span>		Unapproved Chemicals / Cleaners in Room	<span style="border: 1px solid black; padding: 2px;">No</span>
Signs of Pests	<span style="border: 1px solid black; padding: 2px;">No</span>		Drain Traps Wet	<span style="border: 1px solid black; padding: 2px;">N/A</span>		Air Fresheners in Room	<span style="border: 1px solid black; padding: 2px;">No</span>
Room Cluttered	<span style="border: 1px solid black; padding: 2px;">No</span>		Food if Stored in Room is in Sealed Containers	<span style="border: 1px solid black; padding: 2px;">N/A</span>			
Mechanical Equipment Location	<span style="border: 1px solid black; padding: 2px;">FISH 129</span>					Mechanical Room Clean	<span style="border: 1px solid black; padding: 2px;">Yes</span>
Filters Installed Properly	<span style="border: 1px solid black; padding: 2px;">Yes</span>		Filters Clean	<span style="border: 1px solid black; padding: 2px;">Yes</span>		Inside of HVAC Unit Clean	<span style="border: 1px solid black; padding: 2px;">Yes</span>
Condensate Pan Clean	<span style="border: 1px solid black; padding: 2px;">N/A</span>		Cooling Coil Clean	<span style="border: 1px solid black; padding: 2px;">N/A</span>			
Fresh Air Intake Location	<span style="border: 1px solid black; padding: 2px;">Not readily accessible</span> ▼					Fresh Air Intake Free of Obstruction	<span style="border: 1px solid black; padding: 2px;">N/A</span>
Pollutant Sources Near Air Intake	<span style="border: 1px solid black; padding: 2px;">Not readily accessible</span> ▼						

**Observations**

The stained ceiling tile is located adjacent to the HVAC supply grill.

The room had 2 live plants.

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**Corrective Actions to be Completed by Site Based Staff**

Remove plants-Soil is a source of microbial growth	▼
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**Corrective Actions to be Completed by PPO**

Repair HVAC to reduce humidity level	▼
Repair HVAC to reduce CO2 levels	▼
Evaluate and repair cause of stained ceiling tiles	▼
Remove and replace ceiling tiles	▼
	▼
	▼
	▼
	▼