

Aston A. Henry, Supervisor
Risk Management Department

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June 21, 2010

Signature on File

TO: Mr. Steven Williams, Principal
Driftwood Middle School

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

SUBJECT: Indoor Air Quality (IAQ) Assessment
FISH 802, 953 and 953B

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

On June 21, 2010, I conducted an assessment of FISH 802, 953 and 953B at **Driftwood Middle 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.

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
Mark Dorsett, Acting Director, Physical Plant Operations Division, Maintenance
Aston Henry, Supervisor, Risk Management
Bob Sharps, Project Manager, Facilities and Construction Management
Iris Froehlich, Broward Teachers Union
Roy Jarrett, Federation of Public Employees
Roy Norton, Manager Custodial/Grounds, Physical Plant Operations Division

RK/tc
Enc.

IAQ Assessment

Location Number 0861

Driftwood Middle School

Evaluation Requested June 14, 2010

Time of Day 8:00 am

Evaluation Date June 21, 2010

Outdoor Conditions Temperature 76.1 Relative Humidity 99.9 Ambient CO2 379

Fish	Temperature	Range	Relative Humidity	Range	CO2	Range	# Occupants
802	74.7	72 - 78	64.2	30% - 60%	405	Max 700 > Ambient	4
Noticeable Odor		Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
Ceiling Type		Yes		No		None	
Wall Type		No		No		50 square feet	
Flooring		Yes		No		None	

	Clean	Minor Dust / Debris	Needs Cleaning	Corrective Action Required
Ceiling	Yes	No	No	
Walls	No	Yes	Yes	Evaluate and repair - North wall
Flooring	Yes	No	No	
HVAC Supply Grills	Yes	No	No	
HVAC Return Grills	No	Yes	Yes	Clean with Wexcide disinfectant
Ceiling at Supply Grills	Yes	No	No	
Surfaces in Room	Yes	No	No	

Observations

Findings	<ul style="list-style-type: none"> - Visible water damage on North wall - one foot up almost entire length of wall (@ 50 square feet) - Dust and debris on HVAC return grills - Humidity level was elevated at the time of the assessment
Site Based Maintenance:	<ul style="list-style-type: none"> - Clean HVAC return grills with Wexcide disinfectant solution - 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:	<ul style="list-style-type: none"> - Evaluate for cause of water intrusion to North wall and repair as appropriate. Repair/replace wall material as necessary. - Evaluate HVAC system for proper operation and repair as appropriate to lower humidity level - Ensure that exhaust fans in the building are tied in to HVAC controls

IAQ Assessment

Location Number 0861

Driftwood Middle School

Evaluation Requested June 14, 2010

Time of Day 8:00 am

Evaluation Date June 21, 2010

Outdoor Conditions Temperature 76.1 Relative Humidity 99.9 Ambient CO2 379

Fish	Temperature	Range	Relative Humidity	Range	CO2	Range	# Occupants
953	67.5	72 - 78	65.7	30% - 60%	375	Max 700 > Ambient	2
Noticeable Odor		Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
Ceiling Type		Yes		No		None	
Wall Type		Yes		No		4 square feet	
Flooring		No		No		None	

	Clean	Minor Dust / Debris	Needs Cleaning	Corrective Action Required
Ceiling	Yes	No	No	
Walls	No	Yes	Yes	Evaluate and repair- West wall
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

- Visible water damage on West wall under fresh air intake (@ 4 square feet)
- Humidity level was elevated at the time of the assessment
- HFSP stated that exhaust fans in the building do not turn off with the HVAC

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 for cause of water intrusion to West wall and repair as appropriate. Repair/replace wall material as necessary.
- Evaluate HVAC system for proper operation and repair as appropriate to lower humidity level
- Ensure that exhaust fans in the building are tied in to HVAC controls

IAQ Assessment

Location Number 0861

Driftwood Middle School

Evaluation Requested June 14, 2010

Time of Day 8:00 am

Evaluation Date June 21, 2010

Outdoor Conditions Temperature 76.1 Relative Humidity 99.9 Ambient CO2 379

Fish	Temperature	Range	Relative Humidity	Range	CO2	Range	# Occupants
953B	69.3	72 - 78	82.6	30% - 60%	373	Max 700 > Ambient	2
Noticeable Odor		Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
No		Yes		No		6 square feet	
Ceiling Type	Drywall		Yes	No		None	
Wall Type	Drywall		No	No		None	
Flooring	Concrete		No	No		None	

	Clean	Minor Dust / Debris	Needs Cleaning	Corrective Action Required
Ceiling	No	Yes	Yes	Clean with Wexcide disinfectant
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

- Door to FISH 958 (boiler room) blocked open allowing unconditioned air into space
- Visible water damage and microbial growth on ceiling over door to FISH 958 due to temperature in room being too cold, humidity being too high and door to FISH 958 being blocked open.
- Visible microbial on backs of doors to FISH 953 and vinyl items in room
- Humidity level was elevated at the time of the assessment most likely due to the door to FISH 958 being blocked open allowing hot humid air into the room.

Site Based Maintenance:

- Wipe down ceiling, backs of doors, vinyl items and any other stained items with Wexcide disinfectant solution
- Ensure that door to boiler room is kept closed at all times
- 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 HVAC system for proper operation and repair as appropriate to lower humidity level
- Ensure that exhaust fans in the building are tied in to HVAC controls