

Aston A. Henry, Supervisor
Risk Management Department

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

October 12, 2009

Signature on File

TO: Ms. Susan Bruining, Principal
Plantation High School

FROM: Richard Rosa, Project Manager
Facilities and Construction Management

SUBJECT: Indoor Air Quality (IAQ) Assessment
FISH 181, 2505 and 2506

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

On October 8, 2009 I conducted an assessment of FISH 181, 2505 and 2506 at **Plantation High 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. This assessment also included reviewing previously generated work orders, if applicable, as well as observation of the area of concern as stated in the IAQ Assessment performed on September 17, 2009 for FISH 181. 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 754-321-1637.

cc: Dr. Leontine Butler, Area Superintendent
Michaelle Pope, Area Director
Jeffrey S. Moquin, Executive Director, Support Operations
Aston Henry, Supervisor, Risk Management
Frank Alfieri, 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
Robert Krickovich, Coordinator, LEA, Facilities and Construction Management

RR/tc
Enc.

IAQ Assessment

Location Number 1451

Plantation High School

Evaluation Requested September 30, 2009

Time of Day 7:00 am

Evaluation Date October 8, 2009

Outdoor Conditions Temperature 79.7 Relative Humidity 65 Ambient CO2 252

Fish	Temperature	Range	Relative Humidity	Range	CO2	Range	# Occupants
181	71.7	72 - 78	55.4	30% - 60%	375	Max 700 > Ambient	2
Noticeable Odor		Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
Yes		No		No		None	
Ceiling Type	2 x 4 Lay In		No	No		None	
Wall Type	Drywall		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	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	Yes	No	No	

Observations

Findings:

- Odor prevalent in classroom area - false ceiling plenum was clean and dry with no odor
- Two A/C units servicing area - roof and local - dust build up in duct work
- Dust and debris on HVAC supply and return grills

Recommendations:

Site Based Maintenance:

- Clean HVAC supply and return grills with Wexicide 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:

- Clean duct work for both units (10 feet back)

NOTE: Work order EQ01326 generated by PPO

IAQ Assessment

Location Number 1451

Plantation High School

Evaluation Requested September 30, 2009

Time of Day 7:00 am

Evaluation Date October 8, 2009

Outdoor Conditions Temperature 79.7 Relative Humidity 65 Ambient CO2 252

Fish	Temperature	Range	Relative Humidity	Range	CO2	Range	# Occupants
2505	72.7	72 - 78	53.5	30% - 60%	597	Max 700 > Ambient	20
Noticeable Odor		Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
Yes		No		No		None	
Ceiling Type	2 x 4 Lay In		No	No		None	
Wall Type	Drywall		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	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:

- Excessive dust build up on surfaces throughout the room
- Dust and debris on HVAC return grills

Recommendations:

Site Based Maintenance:

- Thoroughly wipe down all surfaces throughout the room to remove dust buildup
- Clean HVAC return grills with Wexicide disinfectant solution
- 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 1451

Plantation High School

Evaluation Requested September 30, 2009

Time of Day 7:00 am

Evaluation Date October 8, 2009

Outdoor Conditions Temperature 79.7 Relative Humidity 65 Ambient CO2 252

Fish	Temperature	Range	Relative Humidity	Range	CO2	Range	# Occupants
2506	74.1	72 - 78	52.3	30% - 60%	265	Max 700 > Ambient	2
Noticeable Odor		Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
Yes		No		No		None	
Ceiling Type	2 x 4 Lay In		No	No		None	
Wall Type	Drywall		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	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:

- Spotty microbial growth on surfaces
- Dust and debris on HVAC supply and return grills
- Dust and debris on HVAC coils
- Glue and dirt build up on floor
- Thermostat was recently replaced by Physical Plant Operations and fresh air fans and compressor are currently cycling properly.

Recommendations:

Site Based Maintenance:

- Thoroughly wipe down all surfaces and walls with Wexcide disinfectant solution
- Clean HVAC supply and return grills with Wexcide disinfectant solution
- Thoroughly clean floor - strip, clean and wax
- 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:

- Clean HVAC coils once room has been thoroughly wiped down. Coordinate with HFSP.