

# managing risk with responsibility

Aston A. Henry, Director	
Risk Management Department	

 Telephone:
 754 321-1900

 Fax:
 754 321-1917

September 2	4, 2014	Signature on File	For Custodial Supervisor Use Only
TO:		aolo, Principal <b>High School</b>	Custodial Issues Addressed Custodial Issues Not Addressed
FROM:		ckovich, Coordinator I, LEA gement Department	
SUBJECT:	Indoor Air	Quality (IAQ) Assessment	

On September 24, 2014, I conducted an assessment at **Plantation 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: Shelley Meloni, Executive Director, Facilities & Construction Mark Dorsett, Manager, Zone 1, Physical Plant Operations Division Roy Norton, Manager, Custodial/Grounds, Physical Plant Operations Division Aston Henry, Director, Risk Management Sonja Coley, Senior Project Manager, Facilities & Construction Broward Teachers Union Federation of Public Employees

DM/tc Enc.

	IAQ Assess	ment		
Plan	tation High Evaluation Dat	September 24, 2014	Time of Day	7:30
Outdoor Conditions Temperat	ture 75.9 Relative	e Humidity 95.0	Ambient CO2 5	89
		Range CO <sup>2</sup> % - 60% 842		20
Noticeable Odor No	Visible water damage / staining?	Visible microbial growth?	Amount of material affected	
Ceiling2' X 4' Lay inWallsPlaster/HomasoteFloor12" x 12" Vinyl	Yes No No	No No No	4 stained tiles	
Ceiling Clean Yes Walls Clean Yes Flooring Clean Yes	HVAC Supply Grills Clean Inside of Supply Duct Clean	Yes	HVAC Return Grills Clean Inside of Return Duct Clean	Yes Yes
Room Surfaces Yes Clean	Ceiling at Supply Grills Clean	Yes		
Trash RemovedYesSigns of PestsNoRoom ClutteredNo	Exhaust Fans Working Drain Traps Wet Food if Stored in Room is in Sealed Containers	N/A Yes N/A	Unapproved Chemicals / Cleaners in Room Air Fresheners in Room	No No
Mechanical Equipment Location Filters Installed Properly Yes Condensate Pan Clean Yes	-	Yes Yes	Mechanical Room Clean Inside of HVAC Unit Clean	Yes Yes
Pollutant Sources Near Air	Outside of Room None	▼ ▼	Fresh Air Intake Free of Obstruction	Yes
Observations Art Room - 4 stained ceiling tiles	- Paint stains, dirt, dust, debri	s under sink cabinets		

Clean debris from under sink cabinet	▼
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Evaluate and repair cause of stained ceiling tile	▼
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	IAQ Assess	ment	
Plar	ntation High Evaluation Date	te September 24, 2014	Time of Day 7:30
Outdoor Conditions Tempera	ture 75.9 Relative	e Humidity 95.0	Ambient CO2 589
		Range         CO <sup>2</sup> % - 60%         625	
Noticeable Odor No	Visible water damage / staining?	Visible microbial growth?	Amount of material affected
Ceiling2' X 4' Lay inWallsPlaster/HomasoteFloor12" x 12" Vinyl	Yes No No	No No	3 stained ceiling tiles
Ceiling Clean Yes Walls Clean Yes Flooring Clean Yes	HVAC Supply Grills Clean Inside of Supply Duct Clean	Yes	HVAC Return Grills Clean Yes Inside of Return Duct Clean Yes
Room Surfaces Yes Clean	Ceiling at Supply Grills Clean	Yes	
Trash Removed Yes	Exhaust Fans Working	N/A	Unapproved Chemicals / Cleaners in Room No
Signs of Pests No Room Cluttered No	Drain Traps Wet Food if Stored in Room is in Sealed Containers	Yes N/A	Air Fresheners No in Room
Mechanical Equipment Location	FISH 231E / 233E		Mechanical Room Clean Yes
Filters Installed ProperlyYesCondensate Pan CleanYes	_	Yes	Inside of HVAC Unit Clean Yes
Fresh Air Intake Location Pollutant Sources Near Air Intake	Outside of Room None	▼ ▼	Fresh Air Intake Free Yes of Obstruction
Observations Art Room - 3 stained ceiling tiles	- Paint stains, dirt, dust, debri	s under sink cabinets	

Clean debris from under sink cabinet	▼
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Evaluate and repair cause of stained ceiling tile	▼
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	IAQ Assessi	ment		
Plar	tation High Evaluation Dat	September 24, 2014	Time of Day	7:30
Outdoor Conditions Tempera	ture 75.9 Relative	e Humidity 95.0	Ambient CO2 5	89
		Range         CO <sup>2</sup> % - 60%         620	Range # Oo MAX 700 > Ambient	2
Noticeable Odor No	Visible water damage / staining?	Visible microbial growth?	Amount of material affected	
Ceiling2' X 4' Lay inWallsPlaster/HomasoteFloor12" x 12" Vinyl	Yes Yes No	No No	20 stained ceiling til west wall damaged tack	
Ceiling Clean Yes Walls Clean Yes Flooring Clean Yes Room Surfaces Yes Clean	HVAC Supply Grills Clean Inside of Supply Duct Clean Ceiling at Supply Grills Clean	Yes Yes	HVAC Return Grills Clean Inside of Return Duct Clean	Yes Yes
Trash RemovedYesSigns of PestsNoRoom ClutteredNo	Exhaust Fans Working Drain Traps Wet Food if Stored in Room is in Sealed Containers	N/A Yes N/A	Unapproved Chemicals / Cleaners in Room Air Fresheners in Room	No No
Mechanical Equipment Location Filters Installed Properly Yes Condensate Pan Clean Yes	-	Yes Yes	Mechanical Room Clean Inside of HVAC Unit Clean	Yes Yes
Fresh Air Intake Location Pollutant Sources Near Air Intake	Outside of Room None	<ul><li>▼</li></ul>	Fresh Air Intake Free of Obstruction	Yes
Observations Art Room - 20 stained ceiling tile	s - Paint stains, dirt, dust, deb	ris under sink cabinets	-	

Clean debris from under sink cabinet	▼
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Evaluate and repair cause of stained ceiling tile	▼
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	IAQ Assess	ment		
Pla	ntation High Evaluation Dat	te September 24, 2014	] Time of Day	7:30
Outdoor Conditions Tempera	ature 75.9 Relative	e Humidity 95.0	Ambient CO2 5	89
		Range         CO <sup>2</sup> % - 60%         742	Range # Oo MAX 700 > Ambient	ccupants 4
Noticeable OdorNoCeiling2' X 4' Lay inWallsPlaster / Ceramic TileFloor12" x 12" Vinyl	Visible water damage / staining? Yes No	Visible microbial growth? No No	Amount of material affected 1 tile	
Ceiling Clean     Yes       Walls Clean     Yes       Flooring Clean     No       Room Surfaces     No       Clean     No	NO HVAC Supply Grills Clean Inside of Supply Duct Clean Ceiling at Supply Grills Clean	No Yes No	HVAC Return Grills Clean Inside of Return Duct Clean	Yes
Trash RemovedYesSigns of PestsNoRoom ClutteredNo	Exhaust Fans Working Drain Traps Wet Food if Stored in Room is in Sealed Containers	N/A N/A	Unapproved Chemicals / Cleaners in Room Air Fresheners in Room	No No
Mechanical Equipment Location Filters Installed Properly Yes Condensate Pan Clean No	_	Yes I Yes	Mechanical Room Clean nside of HVAC Unit Clean	Yes Yes
Fresh Air Intake Location Pollutant Sources Near Air Intake	Outside of Room None	▼	Fresh Air Intake Free of Obstruction	Yes
Observations Cafeteria - One stained ceiling t supply grills - tables and floors		dust and debris on HV	AC supply grills and ceili	ng at

Corrective Actions to be Completed by Site Based Staff

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Evaluate and repair cause of stained ceiling tile	▼
Repair HVAC to reduce humidity level	▼
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	IAQ Assessr	nent		
Planta	ation High Evaluation Dat	e September 24, 2014	Time of Day	7:30
Outdoor Conditions Temperate	ure 75.9 Relative	Humidity 95.0	Ambient CO2 5	89
Fish         Temperature         Ran           283         74.1         72 -		Range         CO <sup>2</sup> % - 60%         604		<b>ccupants</b> 10
Noticeable Odor No	Visible water damage / staining?	Visible microbial growth?	Amount of material affected	
CeilingPlasterWallsCeramic TileFloorTerrazo	Yes No No	No No	50 square feet	
Ceiling Clean Yes Walls Clean Yes Flooring Clean Yes	HVAC Supply Grills Clean Inside of Supply Duct Clean	N/a N/A	HVAC Return Grills Clean Inside of Return	N/a
Flooring Clean   Yes     Room Surfaces   Yes     Clean	Ceiling at Supply Grills Clean	N/a	Duct Clean	
Trash Removed Yes Signs of Pests No	Exhaust Fans Working Drain Traps Wet	Yes	Unapproved Chemicals / Cleaners in Room	No
Room Cluttered No	Food if Stored in Room is in Sealed Containers	Yes	Air Fresheners in Room	No
Mechanical Equipment Location	NONE		Mechanical Room Clean	
Filters Installed Properly	Filters Clean Cooling Coil Clean		Inside of HVAC Unit Clean	
Fresh Air Intake Location	Roof top	▼ ▼	Fresh Air Intake Free of Obstruction	
Observations Kitchen - No air conditioning - wa (286) above is leaking into kitcher work dripping condensation on flo kitchen ceiling space.	n ceiling - condensate pan lea	king - air conditioning	duct insulation damaged	- duct

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Repair/Replace condensate pan in FISH 286	▼
Repair/Replace duct insulation in FISH 286	▼
Remove and replace damaged plaster ceiling in 283	▼
FISH 283	▼
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