THE SCHOOL BOARD OF BROWARD COUNTY, FLORIDA ENVIRONMENTAL HEALTH & SAFETY DEPARTMENT

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December 21	2016 Signature of	File <u>I</u>	For Custodial Supervisor Use Only
TO:	Dr. Sherri Wilson, Principal Plantation Middle		Custodial Issues Addressed Custodial Issues Not Addressed
FROM:	Daniel Meyer, Project Manger Environmental Health & Safety Depa	·tment —	
SUBJECT:	Indoor Air Quality (IAQ) Assessmen		

On December 20, 2016, I conducted an assessment at **Plantation Middle 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 754-321-4200.

DM:smn Enc.

cc: Shelley Meloni, Director, Pre-Construction Mark Dorsett, Manager, Zone 1, Physical Plant Operations Division Broward Teachers Union Federation of Public Employees Gerald Devio, Supervisor II Custodial Benjamin Osborne, Supervisor II Custodial Mark Murray, Supervisor II Custodial Sam Bays, Director, Maintenance Operations Kurt Wirz, Area Manager Trades

	IAQ Assessi	ment		
Plantati	on Middle Evaluation Dat	e December 20, 2016	5 Time of Day 10:	00 AM
Outdoor Conditions Temperatu	re 78.1 Relative	Humidity 91.0	Ambient CO2 4	25
Fish Temperature Range 119 73.8 72 - 3		Range CO % - 60% 105		ccupants 22
Noticeable Odor No	Visible water damage / staining?	Visible microbial growth?	Amount of material affected	
Ceiling2' X 4' Lay inWallsPlasterFloor12" x 12" Vinyl	No No	No No		
Ceiling Clean Yes Walls Clean Yes	HVAC Supply Grills Clean Inside of Supply	No	HVAC Return Grills Clean Inside of Return	No
Flooring Clean No Room Surfaces No Clean	Duct Clean Ceiling at Supply Grills Clean	No	Duct Clean	Yes
Trash Removed Yes Signs of Pests No	Exhaust Fans Working Drain Traps Wet	N/A	Unapproved Chemicals / Cleaners in Room	No
Room Cluttered No	Food if Stored in Room is in Sealed Containers	N/A	Air Fresheners in Room	No
Mechanical Equipment Location	FISH #159		Mechanical Room Clean	Yes
Filters Installed ProperlyYesCondensate Pan CleanYes	Filters Clean Cooling Coil Clean	Yes	Inside of HVAC Unit Clean	Yes
Pollutant Sources Near Air	Ducted to roof-top	▼ ▼	Fresh Air Intake Free of Obstruction	Yes
Observations High humidity levels in the classro Classroom surfaces are dusty. Tile			eturn grills need to be clea	aned

Corrective Actions to be Completed by Site Based Staff

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T	Clean dust build up on elevated surfaces
•	Thoroughly Clean Flooring
▼	Clean HVAC supply grill with wexcide
▼	Remove return grill and vacuum
▼	Clean ceilings around HVAC supply grills
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Repair HVAC to Reduce Humidity Levels	▼
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	IAQ Assessr	nent		
Planta	tion Middle Evaluation Date	e December 20, 2016	Time of Day 10:	00 AM
Outdoor Conditions Temperat	ture 78.1 Relative	Humidity 91.0	Ambient CO2 4	25
FishTemperatureRar13073.772		Range CO ² % - 60% 949	Range # O MAX 700 > Ambient	25
Noticeable Odor No	Visible water damage / staining?	Visible microbial growth?	Amount of material affected	
Ceiling2' X 4' Lay inWallsPlasterFloor12" x 12" Vinyl	Yes No	No No	2 tiles	
Ceiling CleanYesWalls CleanYesFlooring CleanYes	HVAC Supply Grills Clean Inside of Supply Duct Clean	No	HVAC Return Grills Clean Inside of Return Duct Clean	No Yes
Room Surfaces Yes Clean	Ceiling at Supply Grills Clean	No		
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 Yes		Yes Yes	Mechanical Room Clean Inside of HVAC Unit Clean	Yes
Bollutant Sources Near Air	Ducted to roof-top No	▼	Fresh Air Intake Free of Obstruction	Yes
Observations High humidity levels in the class need to be cleaned. 2 Ceiling tiles		grills need to be cleane	ed. Tiles around the supp	ly grills

Replace stained ceiling tiles	▼
Clean ceilings around HVAC supply grills	▼
Clean HVAC supply grill with wexcide	▼
Remove return grill and vacuum	▼
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Repair HVAC to Reduce Humidity Levels	▼
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IAQ Assessment					
Plantati	on Middle Evaluation Dat	e December 20, 2016	Time of Day 10:	00 AM	
Outdoor Conditions Temperatu	ure 78.1 Relative	Humidity 91.0	Ambient CO2 4	25	
Fish Temperature Range 131 73.3 72 - 100000000000000000000000000000000000		Range CO ² % - 60% 103 ⁷		ccupants 26	
Noticeable Odor No	Visible water damage / staining?	Visible microbial growth?	Amount of material affected		
Ceiling2' X 4' Lay inWallsPlasterFloor12" x 12" Vinyl	No No	No No			
Ceiling Clean Yes Walls Clean Yes Flooring Clean Yes	HVAC Supply Grills Clean Inside of Supply Duct Clean	No	HVAC Return Grills Clean Inside of Return Duct Clean	No Yes	
Room Surfaces Yes Clean	Ceiling at Supply Grills Clean	No			
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 Yes	FISH #159 Filters Clean Cooling Coil Clean	Yes Yes	Mechanical Room Clean Inside of HVAC Unit Clean	Yes	
Bollutant Sources Near Air	Ducted to roof-top No	▼	Fresh Air Intake Free of Obstruction	Yes	
Observations High humidity levels in the classro need to be cleaned.	oom. Both supply and return y	grills need to be clean	ed. Tiles around the supp	oly grills	

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Clean ceilings around HVAC supply grills	▼
Clean HVAC supply grill with wexcide	▼
Remove return grill and vacuum	▼
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Repair HVAC to Reduce Humidity Levels	▼
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	IAQ Assessr	nent		
Plant	ation Middle Evaluation Dat	e December 20, 2016	Time of Day 10:	00 AM
Outdoor Conditions Tempera	ature 78.1 Relative	Humidity 91.0	Ambient CO2 4	25
		Range CO ² % - 60% 968	Range # Oo MAX 700 > Ambient	ccupants 16
Noticeable OdorNoCeiling2' X 4' Lay inWallsPlaster	Visible water damage / staining? No	Visible microbial growth? No No	Amount of material affected	
Floor 12" x 12" Vinyl	No	No		
Ceiling CleanYesWalls CleanYesFlooring CleanYes	HVAC Supply Grills Clean Inside of Supply Duct Clean	No Yes	HVAC Return Grills Clean Inside of Return Duct Clean	No No
Room Surfaces Yes Clean	Ceiling at Supply Grills Clean	No		
Trash RemovedYesSigns of PestsNoRoom ClutteredNo	Exhaust Fans Working Drain Traps Wet Food if Stored in Room is in Sealed Containers	N/A 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 Yes	-	Yes II	Mechanical Room Clean nside of HVAC Unit Clean	Yes Yes
Fresh Air Intake Location Pollutant Sources Near Air Intake	Ducted to roof-top No	▼	Fresh Air Intake Free of Obstruction	Yes
Observations High humidity levels in the class need to be cleaned. Remove ret			d. Tiles around the supp	ly grills

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Repair HVAC to Reduce Humidity Levels	▼
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	IAQ Assess	ment		
Planta	ation Middle Evaluation Dat	December 20, 2016	Time of Day 10:0	0 AM
Outdoor Conditions Tempera	ature 78.1 Relative	e Humidity 91.0	Ambient CO2 42	5
		Range CO ² % - 60% 728	Range # Oc MAX 700 > Ambient	cupants 1
Noticeable Odor No Ceiling 2' X 4' Lay in	Visible water damage / staining? Yes	Visible microbial growth?	Amount of material affected 2 tiles	
Walls Plaster Floor 12" x 12" Vinyl	No No	No		
Ceiling CleanYesWalls CleanYesFlooring CleanYesRoom Surfaces CleanYes	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	No
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 Yes	-	Yes I Yes	Mechanical Room Clean nside of HVAC Unit Clean	Yes Yes
Fresh Air Intake Location Pollutant Sources Near Air Intake	Ducted to roof-top No	▼	Fresh Air Intake Free of Obstruction	Yes
Observations High humidity levels in the class need to be cleaned.	sroom. Both supply and return	grills need to be cleane	d. Tiles around the suppl	y grills

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Repair HVAC to Reduce
Ceiling tile cuts needed ar

	IAQ Assess	ment		
Planta	ation Middle Evaluation Dat	December 20, 2016	Time of Day 10:0	MA 00
Outdoor Conditions Tempera	ature 78.1 Relative	e Humidity 91.0	Ambient CO2 42	25
		Range CO ² % - 60% 1015	Range # Oc MAX 700 > Ambient	28
Noticeable Odor No Ceiling 2' X 4' Lay in	Visible water damage / staining? No	Visible microbial growth?	Amount of material affected	
Walls Plaster Floor 12" x 12" Vinyl	No	No		
Ceiling CleanYesWalls CleanYesFlooring CleanYesRoom Surfaces CleanYes	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	No No
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 Yes	-	Yes I Yes	Mechanical Room Clean nside of HVAC Unit Clean	Yes Yes
Fresh Air Intake Location Pollutant Sources Near Air Intake	Ducted to roof-top No	▼	Fresh Air Intake Free of Obstruction	Yes
Observations High humidity levels in the class need to be cleaned.	room. Both supply and return	grills need to be cleane	d. Tiles around the supp	ly grills

Remove return grill and vacuum	▼
Clean ceilings around HVAC supply grills	▼
Clean HVAC supply grill with wexcide	▼
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Repair HVAC to Reduce Humidity Levels	▼
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