

THE SCHOOL BOARD OF BROWARD COUNTY, FLORIDA

ENVIRONMENTAL HEALTH & SAFETY DEPARTMENT

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October 12, 2017

Signature on File

TO: Brad Mattair, Principal
Parkway Middle

FROM: Alison Witoshynsky, Project Manager
Environmental Health & Safety Department

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
<hr/>	
<hr/>	

On January 31, 2017, I conducted an assessment at **Parkway Middle**. 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.

AW:smn
Enc.

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

IAQ Assessment

Parkway Middle

Evaluation Date October 5, 2017

Time of Day 11:00 AM

Outdoor Conditions Temperature 81.2 Relative Humidity 95.9 Ambient CO2 458

Fish	Temperature	Range	Relative Humidity	Range	CO ²	Range	# Occupants
926	75.0	72 - 78	59.6	30% - 60%	1475	MAX 700 > Ambient	~20
Noticeable Odor		Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
Ceiling		Walls		Floor			
No		No		No			
Metal Deck		Concrete block		Wood			
No		No		No			

Ceiling Clean	<input type="checkbox"/> Yes	HVAC Supply Grills Clean	<input type="checkbox"/> Yes	HVAC Return Grills Clean	<input type="checkbox"/> No
Walls Clean	<input type="checkbox"/> No	Inside of Supply Duct Clean	<input type="checkbox"/> Yes	Inside of Return Duct Clean	<input type="checkbox"/> No
Flooring Clean	<input type="checkbox"/> Yes	Ceiling at Supply Grills Clean	<input type="checkbox"/> Yes		
Room Surfaces Clean	<input type="checkbox"/> N/a				

Trash Removed	<input type="checkbox"/> Yes	Exhaust Fans Working	<input type="checkbox"/> N/A	Unapproved Chemicals / Cleaners in Room	<input type="checkbox"/> No
Signs of Pests	<input type="checkbox"/> No	Drain Traps Wet	<input type="checkbox"/> N/A	Air Fresheners in Room	<input type="checkbox"/> No
Room Cluttered	<input type="checkbox"/> No	Food if Stored in Room is in Sealed Containers	<input type="checkbox"/> N/A		

Mechanical Equipment Location	FISH 927	Mechanical Room Clean	<input type="checkbox"/> No
Filters Installed Properly	<input type="checkbox"/> Yes	Filters Clean	<input type="checkbox"/> Yes
Condensate Pan Clean	<input type="checkbox"/> No	Cooling Coil Clean	<input type="checkbox"/> No
		Inside of HVAC Unit Clean	<input type="checkbox"/> No

Fresh Air Intake Location	Roof top	Fresh Air Intake Free of Obstruction	<input type="checkbox"/> N/A
Pollutant Sources Near Air Intake	Not readily accessible		

Observations

HFSP reports that the A/C for this room (located in FISH 927) is not working properly and is "too hot" in the room(s). During assessment the temperature was within acceptable range, however, it was raining outside. Relative humidity was on the high end during our assessment. A work order had been called in already for the AC in FISH 927 (J830531). There was a large amount of condensation on the outside of the unit during our Site visit. The return vent was heavily covered in dust. Dust was present on the sound panels on the upper portions of the wall.

Corrective Actions to be Completed by Site Based Staff

Clean dust from wall surfaces, sound panels	▼
	▼
	▼
	▼
	▼
	▼
	▼
	▼

Corrective Actions to be Completed by PPO

Evaluate and repair HVAC system as needed	▼
Confirm Set Temperature at 72 - 78 degrees	▼
Repair HVAC to Reduce CO2 Levels	▼
Repair HVAC to Reduce Humidity Levels	▼
Clean HVAC return grills and drops	▼
	▼
	▼
	▼

IAQ Assessment

Parkway Middle

Evaluation Date October 5, 2017

Time of Day 1100

Outdoor Conditions Temperature 81.2 Relative Humidity 95.9 Ambient CO2 458

Fish	Temperature	Range	Relative Humidity	Range	CO ²	Range	# Occupants
136	92.8	72 - 78	97.6	30% - 60%	668	MAX 700 > Ambient	6
Noticeable Odor		Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
Ceiling		Ceiling		Ceiling		Ceiling	
No		Yes		Yes		2 CT, 3 light lenses	
Walls		Walls		Walls		Walls	
Plaster / Drywall		No		No			
Floor		Floor		Floor		Floor	
12" x 12" Vinyl		No		No			
Ceiling Clean		HVAC Supply Grills Clean		HVAC Return Grills Clean			
Yes		Yes		No			
Walls Clean		Inside of Supply Duct Clean		Inside of Return Duct Clean			
Yes		Yes		N/A			
Flooring Clean		Ceiling at Supply Grills Clean					
Yes		Yes					
Room Surfaces Clean							
No							
Trash Removed		Exhaust Fans Working		Unapproved Chemicals / Cleaners in Room			
Yes		N/A		No			
Signs of Pests		Drain Traps Wet		Air Fresheners in Room			
No		N/A		Yes			
Room Cluttered		Food if Stored in Room is in Sealed Containers					
Yes		N/A					
Mechanical Equipment Location		Filters Installed Properly		Filters Clean		Mechanical Room Clean	
Above Ceiling		Yes		No		N/A	
Condensate Pan Clean		Cooling Coil Clean		Inside of HVAC Unit Clean			
N/A		N/A		N/A			
Fresh Air Intake Location		Pollutant Sources Near Air Intake		Fresh Air Intake Free of Obstruction			
Exterior Ceiling Soffit		No		Yes			

Observations

The HFSP was not aware of the issue/complaint prior to Worker's Comp sending a request for assessment to our offices. Therefore, the IAQ protocol could not be conducted prior to our assessment.

The HFSP reports that there are multiple leaks on the roof that are being addressed under multiple WOs (J817521, 824291, 813474, J009778).

Corrective Actions to be Completed by Site Based Staff

Room(s) too cluttered to clean properly	▼
Encourage occupant to reduce clutter	▼
Wipe light lense with Wexcide and evaluate/monitor	▼
Remove and replace stained ceiling tile	▼
Followup on COMPASS work order for Roof Leaks	▼
Remove and replace A/C Filters	▼
	▼
	▼

Corrective Actions to be Completed by PPO

Evaluate and repair HVAC system as needed	▼
Confirm Set Temperature at 72 - 78 degrees	▼
Repair HVAC to Reduce Humidity Levels	▼
Evaluate and repair cause of stained ceiling tile	▼
(roof leaks per multiple WO identified)	▼
Install new ceiling tile upon repair, cuts needed	▼
	▼
	▼

Multiple Room IAQ Assessment

Parkway Middle School

Evaluation Date October 5, 2017

Time of Day 1100

Outdoor Conditions Temperature 81.2

Relative Humidity 95.9

Ambient CO2 458

Fish # of rooms assessed

135, 136, 137A, 138

Temperature Range in the Rooms Assessed was Between 66.9 And 92.8 Acceptable Range 72 - 78

Relative Humidity Range in the Rooms Assessed was Between 65.2 And 97.6 Acceptable Range 30% - 60%

Co² Range in the Rooms Assessed was between 492 And 668 Acceptable Range MAX 700 > Ambient

Noticeable Odor	Visible water damage / staining?	Visible microbial growth?	Amount of material affected
No			
Ceiling 2' X 4' Lay in	Yes	Yes	1 CT (137A), 2 CT (136)
Walls Drywall	No	No	
Floor 12" x 12" Vinyl	No	No	

FISH 136: 3 light lenses are either have a water mark or are stained with brown color. Need to be opened and cleaned. Two cut ceiling tiles are wet/stained and need to be replaced.

FISH 137A: 1 stained ceiling tile

Ceiling Clean Yes	HVAC Supply Grills Clean Yes	HVAC Return Grills Clean No
Walls Clean Yes	Inside of Supply Duct Clean Yes	Inside of Return Duct Clean N/A
Flooring Clean Yes	Ceiling at Supply Grills Clean Yes	
Room Surfaces Clean No		
Trash Removed Yes	Exhaust Fans Working N/A	Unapproved Chemicals / Cleaners in Room No
Signs of Pests No	Drain Traps Wet N/A	Air Fresheners in Room Yes
Room Cluttered Yes	Food if Stored in Room is in Sealed Containers N/A	

FISH 137A, Air Freshener.

Lots of books, papers, cardboard boxes and other personal items throughout ALL rooms. FISH 138 is used as a storage room. In addition to it being cold and damp in the room, there is a lot of stuff stored here that is not clean.

Multiple Room IAQ Assessment

Parkway Middle School

Evaluation Date October 5, 2017

Time of Day 1100

Outdoor Conditions Temperature 81.2

Relative Humidity 95.9

Ambient CO2 458

HVAC System

Mechanical Equipment Location Above Ceiling

Mechanical Room Clean N/A

Filters Installed Properly Yes

Filters Clean Yes

Inside of HVAC Unit Clean N/A

Condensate Pan Clean N/A

Cooling Coil Clean N/A

N/A in this section = Not Accessible

Fresh Air Intake Location Exterior Ceiling Soffit ▼

Fresh Air Intake Free of Obstruction Yes

Pollutant Sources Near Air Intake No ▼

Observations

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Corrective Actions to be Completed by Site Based Staff

Room(s) too cluttered to clean properly	▼
Encourage occupant to reduce clutter	▼
Wipe light lense with Wexcide and evaluate/monitor	▼
Remove and replace stained ceiling tile	▼
Followup on COMPASS work order for Roof Leaks	▼
Remove and replace A/C Filters	▼
Remove air fresheners	▼
	▼
	▼
	▼
	▼
	▼
	▼
	▼
	▼

Corrective Actions to be Completed by PPO

Evaluate and repair HVAC system as needed	▼
Confirm Set Temperature at 72 - 78 degrees	▼
Repair HVAC to Reduce Humidity Levels	▼
Evaluate and repair cause of stained ceiling tile	▼
(roof leaks per multiple WO identified)	▼
Install new ceiling tile upon repair, cuts needed	▼
	▼
	▼
	▼
	▼
	▼
	▼
	▼
	▼