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

FACSIMILE: (754) 321-4285

TELEPHONE (754) 321-4200

December 14	, 2016 Signature on File	For Custodial Supervisor Use Only
TO:	Riquelme Antonio Rodriguez, Principal	Custodial Issues Addressed
	Sea Castle Elementary	Custodial Issues Not Addressed
FROM:	Robert Krickovich, Coordinator, LEA Environmental Health & Safety Department	
SUBJECT:	Indoor Air Quality (IAQ) Assessment	

On December 13, 2016, I conducted an assessment at **Sea Castle Elementary 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.

RK:smn Enc.

cc: Sam Bays, Director, Maintenance Operations Mark Dorsett, Manager, Zone 1, Physical Plant Operations Division

Gerald Devio, Supervisor II Custodial Benjamin Osborne, Supervisor II Custodial Shelley Meloni, Director, Pre-Construction Mark Murray, Supervisor II Custodial Kurt Wirz, Area Manager Trades Broward Teachers Union Federation of Public Employees

Mechanical Equipment Location	Above Ceiling	Mechanical Room Clean	N/A

Filters Installed Properly N/A Filters Clean N/A Inside of HVAC Unit Clean N/A

Condensate Pan Clean N/A Cooling Coil Clean N/A

Fresh Air Intake Location

Pollutant Sources Near Air
Intake

Unknown

Fresh Air Intake Free of Obstruction

Observations

Carpet worn and stained - HVAC Supply grill dirty - Ceiling at supply grill dirty		

Corrective Actions to be Completed by Site Based Staff

Corrective Actions to be completed by one Based	- Otali
Clean Supply Grills with Wexcide	▼
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Corrective Actions to be Completed by PPO

Corrective Actions to be completed by 110	
Replace ceiling tile at HVAC supply grill (cuts)	▼
Evaluate carpet for replacement	▼
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Clean HVAC Return Grill with Wexcide	▼
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Sea Castle	Elementary Evaluation Date	December 13, 2016	Time of Day 1:0	0 PM
Outdoor Conditions Tempera	ture 87.3 Relative	Humidity 62.2	Ambient CO2 44	1 5
		Range CO ² 514	Range # Oc MAX 700 > Ambient	ecupants 2
Noticeable Odor No Ceiling 2' X 4' Lay in Walls Drywall Floor Carpet	Visible water damage / staining? No No No	Visible microbial growth? No No No	Amount of material affected	
Ceiling Clean Yes Walls Clean Yes Flooring Clean Yes Room Surfaces Clean	HVAC Supply Grills Clean Inside of Supply Duct Clean Ceiling at Supply Grills Clean	No Yes Yes	HVAC Return Grills Clean Inside of Return Duct Clean	Yes
Trash Removed Yes Signs of Pests No Room Cluttered No	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 N/A	Above Ceiling Filters Clean	N/A II	Mechanical Room Clean	N/A

Observations

Intake

Condensate Pan Clean

Fresh Air Intake Location

Pollutant Sources Near Air

Carpet worn and stained - HVAC supply grill dirty.
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105 Carpet water damaged and stained - PPO to replace carpet with tile

Cooling Coil Clean

N/A

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Corrective Actions to be Completed by Site Based Staff

N/A

corrective Actions to be completed by one base	u olu
Clean Supply Grills with Wexcide	▼
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Corrective Actions to be Completed by PPO

Fresh Air Intake Free of Obstruction

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IAQ Assessment

Evaluation Date Sea Castle Elementary December 13, 2016 Time of Day 1:00 PM **Outdoor Conditions Temperature** 87.3 **Relative Humidity** 62.2 **Ambient CO2** 445 Fish CO^2 **Temperature Relative Humidity** Range Range # Occupants Range 693 MAX 700 > 72.4 301 72 - 78 65.4 20 30% - 60% **Ambient** Visible microbial Amount of Visible water damage / **Noticeable Odor** Yes material affected growth? staining? 4' x 4' Panels Ceiling No No Walls Drywall No No Floor Carpet No No **Ceiling Clean** Yes **HVAC Supply HVAC Return** Yes No **Grills Clean Grills Clean** Walls Clean Yes Inside of Supply Inside of Return Yes Yes Flooring Clean Yes **Duct Clean Duct Clean Room Surfaces** No **Ceiling at Supply** No **Grills Clean** Clean **Trash Removed** Yes **Exhaust Fans Working** N/A **Unapproved Chemicals /** No **Cleaners in Room** Signs of Pests No **Drain Traps Wet** N/A Air Fresheners No Food if Stored in Room is **Room Cluttered** No in Room N/A in Sealed Containers **Mechanical Equipment Location FISH 306** Mechanical Room Clean No Filters Installed Properly Yes **Filters Clean** Yes Inside of HVAC Unit Clean No No **Condensate Pan Clean Cooling Coil Clean** No Roof top ▼ Fresh Air Intake Location Fresh Air Intake Free Yes of Obstruction **Pollutant Sources Near Air** None ▼ Intake **Observations** Media Center - Musty Odor - Books and shelves dusty - Water stain in light fixture by door exiting toward building 2. Standing water on floor in mechanical room - dried slime on floor most likely from condensate leak - coils worn / dirty Corrective Actions to be Completed by Site Based Staff Corrective Actions to be Completed by PPO

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Corrective Actions to be completed by 110	
Evaluate and repair HVAC system as needed	▼
Repair HVAC to Reduce Humidity Levels	▼
Clean HVAC coil and pan	▼
Evaluate / Repair condensate drains as needed	▼
Evaluate and repair cause of water stained	▼
light fixture by door exiting toward building 2	▼
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Musty odor in room - Humidity elevated - HVAC supply grills dirty - Ceilings at supply grills dirty - HVAC return grill dirty - 2 stained ceiling tiles

Corrective Actions to be Completed by Site Based Staff

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Remove and replace stained ceiling tile	▼
If stains return, contact COMPASS for work order	▼
Clean Supply Grills with Wexcide	▼
Clean ceilings around HVAC supply grills	▼
Clean HVAC Return Grill with Wexcide	▼
Encourage occupant to reduce clutter	▼
Room to cluttered to clean properly	▼
	▼

Corrective Actions to be Completed by PPO

Corrective Actions to be completed by 11 C	
Evaluate and repair HVAC system as needed	▼
Repair HVAC to Reduce Humidity Levels	▼
Replace ceiling tiles at HVAC Supply grills (cuts)	▼
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