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

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August 17, 20	17 Signature or	File	For Custodial Supervisor Use Only
TO:	Robert Pappas, Principal		Custodial Issues Addressed
	Gulfstream Academy of Halland	lale Beach	Custodial Issues Not Addressed
FROM:	Alison Witoshynsky, Project Man Environmental Health & Safety D		
SUBJECT:	Indoor Air Quality (IAQ) Assess	nent	

On August 16, 2017, I conducted an assessment at **Gulfstream Academy of Hallandale Beach 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.

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 Assessr	nent		
Gulfstream Academy of Hallan	dale Beach Evaluation Dat	e August 16, 2017	Time of Day	1045
Outdoor Conditions Tempera	ture 92.0 Relative	Humidity 73.1	Ambient CO2 4	82
		Range CO % - 60% 656		ccupants 1
Noticeable OdorNoCeiling2' X 4' Lay inWallsPlaster	Visible water damage / staining? No No	Visible microbial growth? No No	Amount of material affected	
Floor Carpet	No	No]
Ceiling CleanYesWalls CleanYesFlooring CleanYesRoom SurfacesYesCleanYes	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 RemovedYesSigns of PestsNoRoom ClutteredYes	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 Yes
Fresh Air Intake Location Pollutant Sources Near Air Intake	Roof top Not Accessible	▼ ▼	Fresh Air Intake Free of Obstruction	N/A
Observations Office Manager. Office space ind alone fan operating inside room.	•			

Clean Supply Grills with Wexcide	▼
Clean wall (soffitt) around HVAC supply grills	▼
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	IAQ Assessr	nent		
Gulfstream Academy of Hallan	ndale Beach Evaluation Dat	e August 16, 2017	Time of Day	045
Outdoor Conditions Tempera	ature 92.0 Relative	e Humidity 73.1	Ambient CO2 4	82
		Range CO ² % - 60% 456	Range # Oo MAX 700 > Ambient	ccupants 0
Noticeable Odor No	Visible water damage / staining?	Visible microbial growth?	Amount of material affected	
Ceiling 2' X 4' Lay in] No	No		
Walls Plaster	 No	No		
Floor Carpet	No	No		
Ceiling Clean Yes	HVAC Supply Grills Clean	Yes	HVAC Return Grills Clean	Yes
Flooring Clean Yes	Inside of Supply Duct 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	Drain Traps Wet	N/A		
Room Cluttered No	Food if Stored in Room is in Sealed Containers	N/A	Air Fresheners in Room	No
Mechanical Equipment Location	HVAC system is recessed in e	drop ceilng	Mechanical Room Clean	N/A
Filters Installed Properly Yes	Filters Clean	Yes	Inside of HVAC Unit Clean	N/A
Condensate Pan Clean Yes	Cooling Coil Clean	Yes		
Fresh Air Intake Location	Not readily accessible	▼	Fresh Air Intake Free of Obstruction	N/A
Pollutant Sources Near Air Intake	Not Accessible	▼	of obstruction	
Observations				
Media Center. Signs that mainte tiles missing in areas around/un		•	35, J814972, J816577). C	eiling

Thoroughly clean horizontal surfaces (book cases)	▼
Thoroughly clean ALL surfaces (tops of books)	▼
	▼
	▼
	▼
	▼
	▼
	▼

Evaluate and repair HVAC system as needed	▼
Set Temperature to 72 - 78 degrees	▼
Install new ceiling tile upon repair, cuts needed	▼
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	IAQ Assessr	nent		
Gulfstream Academy of Hallan	Indale Beach Evaluation Date	e August 16, 2017	Time of Day 1	045
Outdoor Conditions Tempera	ature 92.0 Relative	Humidity 73.1	Ambient CO2 4	82
		Range CO ² % - 60% 474	Range # Oo MAX 700 > Ambient	cupants 0
Noticeable Odor Yes	Visible water damage / staining?	Visible microbial growth?	Amount of material affected	
Ceiling 2' X 4' Lay in		No		
Walls Plaster Floor 12" x 12" Vinyl	No No	No		
Ceiling Clean Yes Walls Clean Yes	HVAC Supply Grills Clean	Yes	HVAC Return Grills Clean	Yes
Flooring Clean Yes	Inside of Supply Duct 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	N/A	Air Fresheners in Room	No
Mechanical Equipment Location	HVAC system is recessed in a	drop ceilng	Mechanical Room Clean	N/A
Filters Installed Properly Yes	Filters Clean	Yes	Inside of HVAC Unit Clean	N/A
Condensate Pan Clean Yes	Cooling Coil Clean	Yes		
Fresh Air Intake Location	Not readily accessible	▼	Fresh Air Intake Free of Obstruction	N/A
Pollutant Sources Near Air Intake	Not Accessible	▼	of obstruction	
Observations				
Classroom. Odor from existing with AC. Ceiling tiles missing in room stained, needs to be clean	areas around/under AC unit in	ງns that maintenance ceiling (J820542). Oເ	is currently working on is utside of plastic trashcan	sues for

Corrective Actions to be Completed by Site Based Staff

Thoroughly clean ALL surfaces (outside of trashcan)	▼
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ew ceiling tile upon repair, cuts needed	▼
te and repair HVAC system (J816484)	▼
t Temperature to 72 - 78 degrees	▼
ir HVAC to Reduce Humidity Levels	▼
	▼
	▼
	▼
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	IAQ Assess	ment		
Gulfstream Academy of Hallan	Idale Beach Evaluation Date	e August 16, 2017	Time of Day 1	045
Outdoor Conditions Tempera	ature 92.0 Relative	Humidity 73.1	Ambient CO2 4	32
		Range CO ² % - 60% 525	Range # Oc MAX 700 > Ambient	cupants 0
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	Yes 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 N/A	Unapproved Chemicals / Cleaners in Room Air Fresheners in Room	No No
Mechanical Equipment Location Filters Installed Properly Yes Condensate Pan Clean Yes			Mechanical Room Clean Inside of HVAC Unit Clean	N/A N/A
Fresh Air Intake Location Pollutant Sources Near Air Intake	Not readily accessible Not Accessible	▼	Fresh Air Intake Free of Obstruction	N/A
Observations A/C unit off, signs that maintena around/under AC unit in ceiling. Existing Work order for repairs t		U	iles missing in areas	

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Evaluate and repair HVAC system per WO	▼
Set Temperature to 72 - 78 degrees	▼
Repair HVAC to Reduce Humidity Levels	▼
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	IAQ Assessr	nent		
Gulfstream Academy of Hallan	dale Beach Evaluation Dat	e August 16, 2017	Time of Day 1	045
Outdoor Conditions Tempera	ature 92.0 Relative	Humidity 73.1	Ambient CO2 4	82
		Range CO ² % - 60% 488	Range # Oo MAX 700 > Ambient	cupants 0
Noticeable Odor No	Visible water damage / staining?	Visible microbial growth?	Amount of material affected	
Ceiling 2' X 4' Lay in	No	No		
Walls Plaster / Drywall	No	No		
Floor 12" x 12" Vinyl	No	No		
Ceiling Clean Yes	HVAC Supply Grills Clean	Yes	HVAC Return Grills Clean	Yes
Flooring Clean Yes	Inside of Supply Duct 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	Drain Traps Wet	N/A		
Room Cluttered No	Food if Stored in Room is in Sealed Containers	N/A	Air Fresheners in Room	No
Mechanical Equipment Location	HVAC system is recessed in o	drop ceilng	Mechanical Room Clean	N/A
Filters Installed Properly Yes	Filters Clean	Yes	Inside of HVAC Unit Clean	N/A
Condensate Pan Clean Yes	Cooling Coil Clean	Yes		
Fresh Air Intake Location	Not readily accessible	▼	Fresh Air Intake Free of Obstruction	N/A
Pollutant Sources Near Air Intake	Not Accessible	▼	of obstruction	
Observations				<u> </u>
Cardboard boxes. File cabinet d All containers stated should be u			tic cleaners observed in	room

Remove cardboard boxes	▼
Thoroughly clean horizontal surfaces	▼
(inside file cabinet)	▼
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Evaluate and repair HVAC system (J810189)	▼
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	IAQ Assess	nent		
Gulfstream Academy of Hallan	dale Beach Evaluation Dat	e August 16, 2017	Time of Day	045
Outdoor Conditions Tempera	ature 92.0 Relative	Humidity 73.1	Ambient CO2 4	82
		Range CO ² % - 60% 467		ccupants 0
Noticeable OdorNoCeiling2' X 4' Lay inWallsPlaster	Visible water damage / staining? Yes No	Visible microbial growth? No No	Amount of material affected 4 CT @ A/C; light fixture	; +1 CT
Floor 12" x 12" Vinyl	Νο	No		
Ceiling CleanNoWalls CleanYesFlooring CleanYesRoom SurfacesYes	HVAC Supply Grills Clean Inside of Supply Duct Clean Ceiling at Supply	Yes	HVAC Return Grills Clean Inside of Return Duct Clean	Yes
Clean	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 N/A N/A	Unapproved Chemicals / Cleaners in Room Air Fresheners in Room	No No
Mechanical Equipment Location	HVAC system is recessed in a	drop ceilng	Mechanical Room Clean	N/A
Filters Installed Properly Yes Condensate Pan Clean Yes		Yes	Inside of HVAC Unit Clean	N/A
Fresh Air Intake Location Pollutant Sources Near Air Intake	Not readily accessible Not Accessible	▼	Fresh Air Intake Free of Obstruction	N/A
Observations				
Computer Lab. Computer tower A/C has leaks (J780681, J782717 Light fixture lense is stained. Vi	, J816484). Ceiling tiles stained	-	ound/under AC unit in ceili	ng

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Thoroughly clean ALL surfaces (computer towers)	▼
Clean or replace vinyl ceiling tile & light lens	▼
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Evaluate and repair cause of stained ceiling tile	▼
Remove and replace stained ceiling tiles	▼
Install new ceiling tile upon repair, cuts needed	▼
Evaluate and repair HVAC system as needed	▼
Repair HVAC to Reduce Humidity Levels	▼
	▼
	▼
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	IAQ Assess	nent		
Gulfstream Academy of Hallan	dale Beach Evaluation Date	e August 16, 2017	Time of Day	045
Outdoor Conditions Tempera	ture 92.0 Relative	Humidity 73.1	Ambient CO2 4	82
		Range CO ² % - 60% 1097		cupants 0
Noticeable Odor No Ceiling 2' X 4' Lay in	Visible water damage / staining? No	Visible microbial growth?	Amount of material affected	
Walls Plaster Floor Carpet	No	No		
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
Room Surfaces Yes Clean	Ceiling at Supply Grills Clean	Yes	Duci cican	
Trash RemovedYesSigns of PestsNo	Exhaust Fans Working Drain Traps Wet	N/A N/A	Unapproved Chemicals / Cleaners in Room	No
Room Cluttered Yes	Food if Stored in Room is in Sealed Containers	N/A	Air Fresheners in Room	No
Mechanical Equipment Location	Window unit		Mechanical Room Clean	N/A
Filters Installed Properly Yes Condensate Pan Clean Yes		Yes	Inside of HVAC Unit Clean	N/A
Fresh Air Intake Location Pollutant Sources Near Air Intake	Thru exterior wall Not AccessibleNo	▼	Fresh Air Intake Free of Obstruction	Yes
Observations	ulate to freeh als to reduce 000			
Moved lever on A/C from re-circu Spill inside mini fridge needs to items on top of credenza and bo	be cleaned. Medium dust layer		tal surfaces around perso	nal

Clean inside of mini-fridge	▼
Thoroughly clean horizontal surfaces	▼
Encourage occupant to reduce clutter	▼
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	IAQ Assess	ment		
Gulfstream Academy of Hallan	dale Beach Evaluation Dat	te August 16, 2017	Time of Day 1045	
Outdoor Conditions Tempera	ture 92.0 Relative	e Humidity 73.1	Ambient CO2 482	
		Range CO ² % - 60% 474		nts
Noticeable Odor No	Visible water damage / staining?	Visible microbial growth?	Amount of material affected	
Ceiling2' X 4' Lay inWallsDrywallFloor12" x 12" Vinyl	No No	No No		
Ceiling Clean Yes Walls Clean Yes	HVAC Supply Grills Clean	Yes	HVAC Return Grills Clean	
Flooring Clean Yes	Inside of Supply Duct Clean	Yes	Inside of Return Duct Clean No	
Room Surfaces Yes Clean	Ceiling at Supply Grills Clean	Yes		
Trash Removed Yes	Exhaust Fans Working	N/A	Unapproved Chemicals / Cleaners in Room	,
Signs of Pests No Room Cluttered No	Drain Traps Wet Food if Stored in Room is in Sealed Containers	N/A	Air Fresheners No in Room	<u>_</u> _
Mechanical Equipment Location	FISH 851		Mechanical Room Clean N/A	
Filters Installed Properly N/A	Filters Clean	N/A	Inside of HVAC Unit Clean N/A	<u>.</u>
Condensate Pan Clean N/A	Cooling Coil Clean	N/A		
Fresh Air Intake Location	Not readily accessible	▼	Fresh Air Intake Free N/A	
Pollutant Sources Near Air Intake	Not Accessible	▼		
Observations				

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Corrective Actions to be Completed by PPO

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Clean HVAC return grills and drops	▼
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	IAQ Assess	ment		
Gulfstream Academy of Hallan	dale Beach Evaluation Da	te August 16, 2017	Time of Day 1	045
Outdoor Conditions Tempera	ature 92.0 Relative	e Humidity 73.1	Ambient CO2 4	82
	nge Relative Humidity - 78 62.6 30	Range CO ² % - 60% 495		cupants
Noticeable Odor No	Visible water damage / staining?	Visible microbial growth?	Amount of material affected	
Ceiling2' X 4' Lay inWallsHomasoteFloor12" x 12" Vinyl	Yes No No	No No No	4 CT @ A/C	
Ceiling Clean Yes Walls Clean Yes Flooring Clean Yes Room Surfaces Yes	HVAC Supply Grills Clean Inside of Supply Duct Clean	Yes	HVAC Return Grills Clean Inside of Return Duct Clean	Yes
Room Surfaces Yes Clean	Ceiling at Supply Grills Clean	Yes		
Trash RemovedYesSigns of PestsNoRoom ClutteredYes	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	Mechanical Room Clean Inside of HVAC Unit Clean	N/A N/A
Condensate Pan Clean Yes Fresh Air Intake Location Pollutant Sources Near Air Intake	Cooling Coil Clean Behind Bard unit/Exterior wa Not Accessible	Yes II ▼	Fresh Air Intake Free of Obstruction	Yes
Observations New A/C unit present on portable Leaks at A/C resulting in stained		k to reduce humidity.		

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Evaluate and repair HVAC system as needed	▼
Set Temperature to 72 - 78 degrees	▼
Repair HVAC to Reduce Humidity Levels	▼
Remove and replace stained ceiling tiles	▼
Install new ceiling tile upon repair, cuts needed	▼
Clean and repaint supply registers	▼
	▼
	▼

	IAQ Assess	nent		
Gulfstream Academy of Hallar	ndale Beach Evaluation Dat	e August 16, 2017	Time of Day	045
Outdoor Conditions Tempera	ature 92.0 Relative	Humidity 73.1	Ambient CO2 4	82
		Range CO ² % - 60% 511	Range # Oo MAX 700 > Ambient	ccupants 0
Noticeable Odor Yes	Visible water damage / staining?	Visible microbial growth?	Amount of material affected	
Ceiling 2' X 4' Lay in	Νο	No	8 stained CT, 1 missing,	1 dam
Walls Homasote	 	No		
Floor 12" x 12" Vinyl	 No	No		
Ceiling Clean Yes Walls Clean Yes	HVAC Supply Grills Clean	Yes	HVAC Return Grills Clean	Yes
Flooring Clean Yes	Inside of Supply Duct 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	Drain Traps Wet	N/A	Air Fresheners	No
Room Cluttered No	Food if Stored in Room is in Sealed Containers	N/A	in Room	
Mechanical Equipment Location	Bard like HVAC system in clas	ssroom	Mechanical Room Clean	N/A
Filters Installed Properly Yes	Filters Clean	Yes	Inside of HVAC Unit Clean	N/A
Condensate Pan Clean Yes	Cooling Coil Clean	Yes		
Fresh Air Intake Location	Behind Bard unit/Exterior wal	I V	Fresh Air Intake Free of Obstruction	Yes
Pollutant Sources Near Air Intake	Not Accessible	▼		
Observations				
Odor present from homasote wa		4 miaaina 4 Jamaar		an 1/0
Ceiling tiles stained, light fixture ducts causing staining and leak				
CT grid and light covers.				

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Evaluate and repair cause of stained ceiling tile	▼
Re-insulate supply duct at A/C unit	▼
Remove and replace stained ceiling tiles	▼
Install new ceiling tile upon repair, cuts needed	▼
Repair wall materials above door	▼
Clean and repaint supply registers	▼
	▼
	▼

	IAQ Assess	ment		
Gulfstream Academy of Hallan	ndale Beach Evaluation Dat	te August 16, 2017	Time of Day 10	045
Outdoor Conditions Tempera	ature 92.0 Relative	e Humidity 73.1	Ambient CO2 48	2
		Range CO ² % - 60% 472	Range # Oc MAX 700 > Ambient	cupants 0
Noticeable Odor No	Visible water damage / staining?	Visible microbial growth?	Amount of material affected	
Ceiling2' X 4' Lay inWallsMetal/drywallFloor12" x 12" Vinyl	No No No	No No	7 CT, light lense	
Ceiling Clean No Walls Clean Yes Flooring Clean Yes	HVAC Supply Grills Clean Inside of Supply Duct Clean	No N/A	HVAC Return Grills Clean Inside of Return Duct Clean	Yes
Room Surfaces Yes Clean	Ceiling at Supply Grills Clean	Yes	Duct Clean	
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	-		Mechanical Room Clean Inside of HVAC Unit Clean	N/A N/A
Fresh Air Intake Location Pollutant Sources Near Air Intake	Behind Bard unit/Exterior wa	II ▼ ▼	Fresh Air Intake Free of Obstruction	Yes
Observations				

Corrective Actions to be Completed by Site Based Staff

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Clean and repaint supply registers	▼
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