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Risk Management Department

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October 19, 2012

Signature on File

TO: Debra Friedman, Principal
Oakridge Elementary School

FROM: Robert Krickovich, Coordinator I, LEA
Facilities Design and Construction

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

On October 16, 2012, I conducted an assessment at **Oakridge 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 754-321-1907.

cc: Directors, School Performance & Accountability
Shelley Meloni, Executive Director, Facilities Design and Construction
Mark Dorsett, Manager, Zone 1, Physical Plant Operations Division
Roy Norton, Manager, Custodial/Grounds, Physical Plant Operations Division
Aston Henry, Supervisor, Risk Management
Sonja Coley, Senior Project Manager, Facilities Design and Construction
Broward Teachers Union
Federation of Public Employees

RR/tc
Enc.

IAQ Assessment

Oakridge Elementary

Evaluation Date October 16, 2012

Time of Day 9:00

Outdoor Conditions Temperature 81.3

Relative Humidity 86.9

Ambient CO2 489

Fish	Temperature	Range	Relative Humidity	Range	CO ²	Range	# Occupants
201	73.7	72 - 78	56.8	30% - 60%	520	MAX 700 > Ambient	1
Noticeable Odor		Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
No		No		No		<input style="width: 100%; height: 20px;" type="text"/>	
Ceiling	12" x 12" Z-Spline		No	No	<input style="width: 100%; height: 20px;" type="text"/>		
Walls	Wood / Homasote		No	No	<input style="width: 100%; height: 20px;" type="text"/>		
Floor	Terrazo		No	No	<input style="width: 100%; height: 20px;" type="text"/>		
Ceiling Clean	Yes	HVAC Supply Grills Clean	Yes	HVAC Return Grills Clean	N/a		
Walls Clean	Yes	Inside of Supply Duct Clean	N/A	Inside of Return Duct Clean	N/A		
Flooring Clean	Yes	Ceiling at Supply Grills Clean	N/a				
Room Surfaces 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 in Room	No		
Room Cluttered	No	Food if Stored in Room is in Sealed Containers	N/A				
Mechanical Equipment Location	Ceiling Mounted			Mechanical Room Clean	N/A		
Filters Installed Properly	Yes	Filters Clean	No	Inside of HVAC Unit Clean	N/A		
Condensate Pan Clean	N/A	Cooling Coil Clean	N/A				
Fresh Air Intake Location	N/A ▼			Fresh Air Intake Free of Obstruction	<input style="width: 100%; height: 20px;" type="text"/>		
Pollutant Sources Near Air Intake	<input style="width: 100%; height: 20px;" type="text"/> ▼						

Observations

Only a 1" filter on each of the two units - filter dirty (HFSP states have to change filters every two weeks) - PPO to see if racks can be changed to increase filter size to 2" pleated - Exhaust fan over Ice machine (203) extremely dirty - needs cleaning and service - water stains on wall under exhaust fan - PPO repair cause of water stains.

Corrective Actions to be Completed by Site Based Staff

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Corrective Actions to be Completed by PPO

Evaluate filters on HVAC units	▼
Repair / replace exhaust fan in 203 over ice mach.	▼
Repair cause of water intrusion under exhaust fan over Ice machine 203	▼
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See observations for additional info	▼
	▼

IAQ Assessment

Oakridge Elementary

Evaluation Date October 16, 2012

Time of Day 9:00

Outdoor Conditions Temperature 81.3 Relative Humidity 86.9 Ambient CO2 489

Fish	Temperature	Range	Relative Humidity	Range	CO ²	Range	# Occupants
209	74.6	72 - 78	45.7	30% - 60%	999	MAX 700 > Ambient	20
Noticeable Odor		Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
Ceiling		Walls		Floor			
No		No		No			
2' X 4' Lay in		Tack Board		12" x 12" Vinyl			
No		No		No			
Ceiling Clean	Yes	HVAC Supply Grills Clean	Yes	HVAC Return Grills Clean	Yes		
Walls Clean	Yes	Inside of Supply Duct Clean	Yes	Inside of Return Duct Clean	No		
Flooring Clean	Yes	Ceiling at Supply Grills Clean	No				
Room Surfaces Clean	Yes						
Trash Removed	Yes	Exhaust Fans Working	N/A	Unapproved Chemicals / Cleaners in Room	No		
Signs of Pests	No	Drain Traps Wet	Yes	Air Fresheners in Room	No		
Room Cluttered	No	Food if Stored in Room is in Sealed Containers	Yes				
Mechanical Equipment Location	FISH 216				Mechanical Room Clean	Yes	
Filters Installed Properly	Yes	Filters Clean	Yes	Inside of HVAC Unit Clean	Yes		
Condensate Pan Clean	No	Cooling Coil Clean	No				
Fresh Air Intake Location	Roof top ▼				Fresh Air Intake Free of Obstruction	Yes	
Pollutant Sources Near Air Intake	None ▼						

Observations

Inside of return grill in room has heavy dust - Cooling coil in 216 has minor dust - Condensate pan holding water

Corrective Actions to be Completed by Site Based Staff

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Corrective Actions to be Completed by PPO

Clean HVAC return drops	▼
Clean coils in 216	▼
Clean condensate pan	▼
Remove wet insulation at condensate pan	▼
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IAQ Assessment

Oakridge Elementary

Evaluation Date October 16, 2012

Time of Day 9:00

Outdoor Conditions Temperature 81.3 Relative Humidity 86.9 Ambient CO2 489

Fish	Temperature	Range	Relative Humidity	Range	CO ²	Range	# Occupants
212	77.1	72 - 78	39.0	30% - 60%	997	MAX 700 > Ambient	18
Noticeable Odor		Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
Ceiling		Walls		Floor			
2' X 4' Lay in		Drywall		12" x 12" Vinyl			
No		No		No			

Ceiling Clean	Yes	HVAC Supply Grills Clean	Yes	HVAC Return Grills Clean	Yes
Walls Clean	Yes	Inside of Supply Duct Clean	Yes	Inside of Return Duct Clean	No
Flooring Clean	Yes	Ceiling at Supply Grills Clean	No		
Room Surfaces Clean	Yes				

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

Mechanical Equipment Location	FISH 216	Mechanical Room Clean	Yes
Filters Installed Properly	Yes	Filters Clean	Yes
Condensate Pan Clean	No	Cooling Coil Clean	No
		Inside of HVAC Unit Clean	Yes

Fresh Air Intake Location	Roof top	Fresh Air Intake Free of Obstruction	Yes
Pollutant Sources Near Air Intake	None		

Observations

Ceiling tiles at supply grills dusty - Inside of return grill in room has heavy dust

Corrective Actions to be Completed by Site Based Staff

Clean ceilings around HVAC supply grills	▼
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Corrective Actions to be Completed by PPO

Clean HVAC return drops	▼
Clean coils in 216	▼
Clean condensate pan	▼
Remove wet insulation at condensate pan	▼
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IAQ Assessment

Oakridge Elementary

Evaluation Date October 16, 2012

Time of Day 9:00

Outdoor Conditions Temperature 81.3

Relative Humidity 86.9

Ambient CO2 489

Fish	Temperature	Range	Relative Humidity	Range	CO ²	Range	# Occupants
213	73.7	72 - 78	43.1	30% - 60%	1043	MAX 700 > Ambient	20
Noticeable Odor		Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
Ceiling		Walls		Floor			
No		2' X 4' Lay in		Drywall		12" x 12" Vinyl	
No		No		No		No	
No		Yes		No		2 sq ft by exit door	
No		No		No		No	

Ceiling Clean	<input checked="" type="checkbox"/>	HVAC Supply Grills Clean	<input checked="" type="checkbox"/>	HVAC Return Grills Clean	<input checked="" type="checkbox"/>
Walls Clean	<input checked="" type="checkbox"/>	Inside of Supply Duct Clean	<input checked="" type="checkbox"/>	Inside of Return Duct Clean	<input checked="" type="checkbox"/>
Flooring Clean	<input checked="" type="checkbox"/>	Ceiling at Supply Grills Clean	<input type="checkbox"/>		
Room Surfaces Clean	<input checked="" type="checkbox"/>				

Trash Removed	<input checked="" type="checkbox"/>	Exhaust Fans Working	<input type="checkbox"/>	Unapproved Chemicals / Cleaners in Room	<input type="checkbox"/>
Signs of Pests	<input type="checkbox"/>	Drain Traps Wet	<input checked="" type="checkbox"/>	Air Fresheners in Room	<input type="checkbox"/>
Room Cluttered	<input type="checkbox"/>	Food if Stored in Room is in Sealed Containers	<input type="checkbox"/>		

Mechanical Equipment Location	FISH 216	Mechanical Room Clean	<input checked="" type="checkbox"/>
Filters Installed Properly	<input checked="" type="checkbox"/>	Filters Clean	<input checked="" type="checkbox"/>
Condensate Pan Clean	<input type="checkbox"/>	Cooling Coil Clean	<input type="checkbox"/>
		Inside of HVAC Unit Clean	<input checked="" type="checkbox"/>

Fresh Air Intake Location	Roof top	Fresh Air Intake Free of Obstruction	<input checked="" type="checkbox"/>
Pollutant Sources Near Air Intake	None		

Observations

Ceiling tiles at supply grills dusty - 2 square feet of water damaged wall material at bottom of exit door

Corrective Actions to be Completed by Site Based Staff

Clean ceilings around HVAC supply grills	▼
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Corrective Actions to be Completed by PPO

Repair cause of water intrusion at exit door	▼
Remove and replace wall material as necessary	▼
Clean coils in 216	▼
Clean condensate pan	▼
Remove wet insulation at condensate pan	▼
	▼
	▼
	▼

IAQ Assessment

Oakridge Elementary

Evaluation Date October 16, 2012

Time of Day 9:00

Outdoor Conditions Temperature 81.3 Relative Humidity 86.9 Ambient CO2 489

Fish	Temperature	Range	Relative Humidity	Range	CO ²	Range	# Occupants
215	73.9	72 - 78	39.5	30% - 60%	1033	MAX 700 > Ambient	2
Noticeable Odor		Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
Ceiling		Walls		Floor			
2' X 4' Lay in		Drywall		12" x 12" Vinyl			
No		No		No			

Ceiling Clean	Yes	HVAC Supply Grills Clean	Yes	HVAC Return Grills Clean	Yes
Walls Clean	Yes	Inside of Supply Duct Clean	Yes	Inside of Return Duct Clean	No
Flooring Clean	Yes	Ceiling at Supply Grills Clean	No		
Room Surfaces 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 in Room	No
Room Cluttered	No	Food if Stored in Room is in Sealed Containers	N/A		

Mechanical Equipment Location	FISH 216	Mechanical Room Clean	Yes
Filters Installed Properly	Yes	Filters Clean	Yes
Condensate Pan Clean	No	Cooling Coil Clean	No
		Inside of HVAC Unit Clean	Yes

Fresh Air Intake Location	Roof top ▼	Fresh Air Intake Free of Obstruction	Yes
Pollutant Sources Near Air Intake	None ▼		

Observations

Ceiling tiles at supply grills dusty - Inside of return grill in room has heavy dust

Corrective Actions to be Completed by Site Based Staff

Clean ceilings around HVAC supply grills	▼
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Corrective Actions to be Completed by PPO

Clean HVAC return drops	▼
Clean coils in 216	▼
Clean condensate pan	▼
Remove wet insulation at condensate pan	▼
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IAQ Assessment

Oakridge Elementary

Evaluation Date October 16, 2012

Time of Day 9:00

Outdoor Conditions Temperature 81.3

Relative Humidity 86.9

Ambient CO2 489

Fish	Temperature	Range	Relative Humidity	Range	CO ²	Range	# Occupants
224	75.0	72 - 78	40.9	30% - 60%	1250	MAX 700 > Ambient	19
Noticeable Odor		Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
Ceiling		Walls		Floor			
No		Yes		No		4" circle front of glass block	
2' X 4' Lay in		No		No			
Tack Board		No		No			
12" x 12" Vinyl		No		No			

Ceiling Clean	<input checked="" type="checkbox"/>	HVAC Supply Grills Clean	<input checked="" type="checkbox"/>	HVAC Return Grills Clean	<input checked="" type="checkbox"/>
Walls Clean	<input checked="" type="checkbox"/>	Inside of Supply Duct Clean	<input checked="" type="checkbox"/>	Inside of Return Duct Clean	<input checked="" type="checkbox"/>
Flooring Clean	<input checked="" type="checkbox"/>	Ceiling at Supply Grills Clean	<input type="checkbox"/>		
Room Surfaces Clean	<input checked="" type="checkbox"/>				

Trash Removed	<input checked="" type="checkbox"/>	Exhaust Fans Working	<input type="checkbox"/>	Unapproved Chemicals / Cleaners in Room	<input type="checkbox"/>
Signs of Pests	<input type="checkbox"/>	Drain Traps Wet	<input checked="" type="checkbox"/>	Air Fresheners in Room	<input type="checkbox"/>
Room Cluttered	<input type="checkbox"/>	Food if Stored in Room is in Sealed Containers	<input type="checkbox"/>		

Mechanical Equipment Location	FISH 231	Mechanical Room Clean	<input checked="" type="checkbox"/>
Filters Installed Properly	<input checked="" type="checkbox"/>	Filters Clean	<input checked="" type="checkbox"/>
Condensate Pan Clean	<input checked="" type="checkbox"/>	Cooling Coil Clean	<input checked="" type="checkbox"/>
		Inside of HVAC Unit Clean	<input checked="" type="checkbox"/>

Fresh Air Intake Location	Roof top	Fresh Air Intake Free of Obstruction	<input checked="" type="checkbox"/>
Pollutant Sources Near Air Intake	None		

Observations

Ceiling tiles at supply grills dusty - one small 4" round stain on second ceiling tile in front of glass block

Corrective Actions to be Completed by Site Based Staff

Clean ceilings around HVAC supply grills	▼
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Corrective Actions to be Completed by PPO

Evaluate and repair cause of stained ceiling tiles	▼
Remove and replace ceiling tiles	▼
Repair HVAC to reduce CO2 levels	▼
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IAQ Assessment

Oakridge Elementary

Evaluation Date October 16, 2012

Time of Day 9:00

Outdoor Conditions Temperature 81.3

Relative Humidity 86.9

Ambient CO2 489

Fish	Temperature	Range	Relative Humidity	Range	CO ²	Range	# Occupants
228	70.5	72 - 78	45.1	30% - 60%	1249	MAX 700 > Ambient	3
Noticeable Odor		Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
Ceiling		Walls		Floor			
No		2' X 4' Lay in		No		No	
No		Drywall/Tackboard		No		2 sq ft @ left window	
No		12" x 12" Vinyl		No		No	
Ceiling Clean		Walls Clean		Flooring Clean		Room Surfaces Clean	
Yes		Yes		Yes		Yes	
HVAC Supply Grills Clean		Inside of Supply Duct Clean		Ceiling at Supply Grills Clean		HVAC Return Grills Clean	
Yes		Yes		No		Yes	
Trash Removed		Signs of Pests		Room Cluttered		Exhaust Fans Working	
Yes		No		No		N/A	
Drain Traps Wet		Food if Stored in Room is in Sealed Containers		Unapproved Chemicals / Cleaners in Room		Air Fresheners in Room	
Yes		N/A		No		No	
Mechanical Equipment Location		Filters Installed Properly		Condensate Pan Clean		Mechanical Room Clean	
FISH 231		Yes		Yes		Yes	
Filters Clean		Cooling Coil Clean		Inside of HVAC Unit Clean		Fresh Air Intake Free of Obstruction	
Yes		Yes		Yes		Yes	
Fresh Air Intake Location		Pollutant Sources Near Air Intake					
Roof top		None					

Observations

Ceiling tile around supply grills dusty - 2 sq foot area of water damaged wall left side of left window - dry at time of assessment

Corrective Actions to be Completed by Site Based Staff

Clean ceilings around HVAC supply grills	▼
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Corrective Actions to be Completed by PPO

Evaluate and repair cause of water damage	▼
around windows	▼
Remove and replace wall material as necessary	▼
Repair HVAC to reduce CO2 levels	▼
	▼
	▼
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IAQ Assessment

Oakridge Elementary

Evaluation Date October 16, 2012

Time of Day 9:00

Outdoor Conditions Temperature 81.3 Relative Humidity 86.9 Ambient CO2 489

Fish	Temperature	Range	Relative Humidity	Range	CO ²	Range	# Occupants
305	71.0	72 - 78	48.3	30% - 60%	1059	MAX 700 > Ambient	45
Noticeable Odor		Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
Ceiling		Walls		Floor			
No		2' X 4' Lay in		No		No	
No		Drywall		Yes		No	
No		Carpet		No		No	
Ceiling Clean		Walls Clean		Flooring Clean		Room Surfaces Clean	
Yes		Yes		No		Yes	
HVAC Supply Grills Clean		Inside of Supply Duct Clean		Ceiling at Supply Grills Clean		HVAC Return Grills Clean	
Yes		Yes		No		No	
Unapproved Chemicals / Cleaners in Room		Air Fresheners in Room					
No		No					
Mechanical Equipment Location		Filters Installed Properly		Condensate Pan Clean		Mechanical Room Clean	
FISH 315		Yes		No		Yes	
Filters Clean		Cooling Coil Clean		Inside of HVAC Unit Clean			
Yes		No		No		No	
Fresh Air Intake Location		Pollutant Sources Near Air Intake		Fresh Air Intake Free of Obstruction			
Outside of Room		Palm Tree		Yes			

Observations

Media Center - carpet worn and stained (HFSP states can not be cleaned - terrible odor after cleaning) - Ceiling tiles at supply grills dusty - return grill dusty - inside of return box dusty - HVAC coils in 315 dirty - inside of unit dusty - condensate pan holding water.

Corrective Actions to be Completed by Site Based Staff

Clean ceilings around HVAC supply grills	▼
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Corrective Actions to be Completed by PPO

Evaluate carpet for replacement	▼
Clean HVAC return drops	▼
Clean inside of HVAC unit in 315	▼
Clean coils & pan	▼
Remove wet insulation around condensate pan	▼
	▼
	▼
	▼

IAQ Assessment

Oakridge Elementary

Evaluation Date October 16, 2012

Time of Day 9:00

Outdoor Conditions Temperature 81.3

Relative Humidity 86.9

Ambient CO2 489

Fish	Temperature	Range	Relative Humidity	Range	CO ²	Range	# Occupants
403	73.5	72 - 78	45.7	30% - 60%	922	MAX 700 > Ambient	2
Noticeable Odor		No	Visible water damage / staining?		Visible microbial growth?		Amount of material affected
Ceiling	2' X 4' Lay in		No		No		
Walls	Drywall/Tackboard		No		No		
Floor	12" x 12" Vinyl		No		No		
Ceiling Clean	Yes	HVAC Supply Grills Clean		Yes	HVAC Return Grills Clean		Yes
Walls Clean	Yes	Inside of Supply Duct Clean		Yes	Inside of Return Duct Clean		Yes
Flooring Clean	Yes	Ceiling at Supply Grills Clean		Yes			
Room Surfaces Clean	Yes						
Trash Removed	Yes	Exhaust Fans Working		Yes	Unapproved Chemicals / Cleaners in Room		No
Signs of Pests	No	Drain Traps Wet		Yes	Air Fresheners in Room		No
Room Cluttered	No	Food if Stored in Room is in Sealed Containers		Yes			
Mechanical Equipment Location	FISH 404					Mechanical Room Clean	Yes
Filters Installed Properly	Yes	Filters Clean		Yes	Inside of HVAC Unit Clean		No
Condensate Pan Clean	No	Cooling Coil Clean		No			
Fresh Air Intake Location	Over door to room ▼					Fresh Air Intake Free of Obstruction	Yes
Pollutant Sources Near Air Intake	None ▼						

Observations

Water damage in cabinet under sink (faucet leaking) - HVAC unit in 404 needs cleaning

Corrective Actions to be Completed by Site Based Staff

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Corrective Actions to be Completed by PPO

Repair leaking faucet	▼
Repair water damaged sink cabinet	▼
Clean HVAC unit in 404	▼
Clean coils	▼
Clean condensate pan	▼
	▼
	▼
	▼

IAQ Assessment

Oakridge Elementary

Evaluation Date October 16, 2012

Time of Day 9:00

Outdoor Conditions Temperature 81.3

Relative Humidity 86.9

Ambient CO2 489

Fish	Temperature	Range	Relative Humidity	Range	CO ²	Range	# Occupants
406	75.2	72 - 78	42.0	30% - 60%	1260	MAX 700 > Ambient	10
Noticeable Odor		No	Visible water damage / staining?		Visible microbial growth?		Amount of material affected
Ceiling	2' X 4' Lay in		No		No		
Walls	Drywall		No		No		
Floor	12" x 12" Vinyl		No		No		
Ceiling Clean	Yes	HVAC Supply Grills Clean		Yes	HVAC Return Grills Clean		Yes
Walls Clean	Yes	Inside of Supply Duct Clean		Yes	Inside of Return Duct Clean		Yes
Flooring Clean	Yes	Ceiling at Supply Grills Clean		Yes			
Room Surfaces 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 in Room		No
Room Cluttered	No	Food if Stored in Room is in Sealed Containers		N/A			
Mechanical Equipment Location	FISH 407					Mechanical Room Clean	Yes
Filters Installed Properly	Yes	Filters Clean		Yes	Inside of HVAC Unit Clean		No
Condensate Pan Clean	No	Cooling Coil Clean		No			
Fresh Air Intake Location	Over door to room ▼					Fresh Air Intake Free of Obstruction	Yes
Pollutant Sources Near Air Intake	None ▼						

Observations

Corrective Actions to be Completed by Site Based Staff

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Corrective Actions to be Completed by PPO

Clean HVAC unit in 407	▼
Clean coils	▼
Clean condensate pan	▼
Repair HVAC to reduce CO2 levels	▼
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IAQ Assessment

Oakridge Elementary

Evaluation Date October 16, 2012

Time of Day 9:00

Outdoor Conditions Temperature 81.3 Relative Humidity 86.9 Ambient CO2 489

Fish	Temperature	Range	Relative Humidity	Range	CO ²	Range	# Occupants
408	73.5	72 - 78	40.9	30% - 60%	1286	MAX 700 > Ambient	13
Noticeable Odor		Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
Ceiling		Walls		Floor			
No		No		No			
2' X 4' Lay in		No		No			
Drywall/Tackboard		No		No			
12" x 12" Vinyl		No		No			
Ceiling Clean		Walls Clean		Flooring Clean		Room Surfaces Clean	
Yes		Yes		Yes		Yes	
		HVAC Supply Grills Clean		HVAC Return Grills Clean			
		Yes		Yes		Yes	
		Inside of Supply Duct Clean		Inside of Return Duct Clean			
		Yes		No		No	
		Ceiling at Supply Grills Clean					
		Yes					
Trash Removed		Signs of Pests		Room Cluttered		Exhaust Fans Working	
Yes		No		No		Yes	
						Drain Traps Wet	
						Yes	
						Food if Stored in Room is in Sealed Containers	
						N/A	
						Unapproved Chemicals / Cleaners in Room	
						No	
						Air Fresheners in Room	
						No	
Mechanical Equipment Location		Filters Installed Properly		Condensate Pan Clean		Mechanical Room Clean	
FISH 407		Yes		No		Yes	
		Filters Clean		Cooling Coil Clean		Inside of HVAC Unit Clean	
		Yes		No		No	
Fresh Air Intake Location		Pollutant Sources Near Air Intake				Fresh Air Intake Free of Obstruction	
Over door to room		None				Yes	

Observations

Inside of return air box dirty (PPO) - Water damage in cabinet under sink (faucet leaking) - HVAC unit in 407 needs cleaning - Wall water damaged in 407 (4 sq ft) due to condensate drain overflow.

Corrective Actions to be Completed by Site Based Staff

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Corrective Actions to be Completed by PPO

Repair leaking faucet	▼
Repair water damaged sink cabinet	▼
Repair water damaged wall in 407	▼
Clean HVAC unit in 407	▼
Clean coils	▼
Clean condensate pan	▼
Repair HVAC to reduce CO2 levels	▼
	▼

IAQ Assessment

Oakridge Elementary

Evaluation Date October 16, 2012

Time of Day 9:00

Outdoor Conditions Temperature 81.3

Relative Humidity 86.9

Ambient CO2 489

Fish	Temperature	Range	Relative Humidity	Range	CO ²	Range	# Occupants	
1198VE	74.6	72 - 78	44.2	30% - 60%	1537	MAX 700 > Ambient	21	
Noticeable Odor		No	Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
Ceiling	5' x 10' Panel		Yes		No		2" x 6" over clock	
Walls	Drywall		Yes		No		5 Sq Ft Both sides of back door	
Floor	12" x 12" Vinyl		No		No			
Ceiling Clean		Yes	HVAC Supply Grills Clean		Yes	HVAC Return Grills Clean		Yes
Walls Clean		Yes	Inside of Supply Duct Clean		Yes	Inside of Return Duct Clean		Yes
Flooring Clean		Yes	Ceiling at Supply Grills Clean		Yes			
Room Surfaces 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 in Room		No
Room Cluttered		No	Food if Stored in Room is in Sealed Containers		N/A			
Mechanical Equipment Location			Bard unit outside of Portable			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			Outside of Unit ▼			Fresh Air Intake Free of Obstruction		Yes
Pollutant Sources Near Air Intake			Tree / Road ▼					

Observations

Metal skinned portable - small water stain (6" x 2") over clock - wall water damaged both sides of door at stair exit

Corrective Actions to be Completed by Site Based Staff

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Corrective Actions to be Completed by PPO

Repair cause of stained ceiling material	▼
Repair stained ceiling material	▼
Repair cause of water damage at door	▼
Replace water damaged material at door	▼
Repair HVAC to reduce CO2	▼
	▼
	▼
	▼

IAQ Assessment

Oakridge Elementary

Evaluation Date October 16, 2012

Time of Day 9:00

Outdoor Conditions Temperature 81.3

Relative Humidity 86.9

Ambient CO2 489

Fish	Temperature	Range	Relative Humidity	Range	CO ²	Range	# Occupants	
1268VE	75.7	72 - 78	62.5	30% - 60%	873	MAX 700 > Ambient	3	
Noticeable Odor		Yes	Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
Ceiling	5' x 10' Panel		No		No			
Walls	Wood Paneling		Yes		No		Under all windows	
Floor	12" x 12" Vinyl		No		No			
Ceiling Clean		Yes	HVAC Supply Grills Clean		Yes	HVAC Return Grills Clean		Yes
Walls Clean		Yes	Inside of Supply Duct Clean		Yes	Inside of Return Duct Clean		Yes
Flooring Clean		Yes	Ceiling at Supply Grills Clean		No			
Room Surfaces 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 in Room		No
Room Cluttered		No	Food if Stored in Room is in Sealed Containers		N/A			
Mechanical Equipment Location			Bard unit outside of Portable			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			Outside of Unit ▼			Fresh Air Intake Free of Obstruction		Yes
Pollutant Sources Near Air Intake			Trees / Road ▼					

Observations

Metal skinned portable - Musty odor in room - Walls wet under all windows

Corrective Actions to be Completed by Site Based Staff

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Corrective Actions to be Completed by PPO

Seal exterior of building around all windows	▼
Remove wall material around all window	▼
Replace all water damaged material	▼
Clean inside of HVAC unit	▼
Clean / replace ceiling material at supply grills	▼
Repair HVAC to reduce humidity level	▼
	▼
	▼

IAQ Assessment

Oakridge Elementary

Evaluation Date October 16, 2012

Time of Day 9:00

Outdoor Conditions Temperature 81.3 Relative Humidity 86.9 Ambient CO2 489

Fish	Temperature	Range	Relative Humidity	Range	CO ²	Range	# Occupants	
1270VE	71.6	72 - 78	49.9	30% - 60%	1120	MAX 700 > Ambient	17	
Noticeable Odor		Yes	Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
Ceiling	5' x 10' Panel		No		No			
Walls	Wood Paneling		Yes		No		Under all windows	
Floor	12" x 12" Vinyl		Yes		No		Entire Floor	
Ceiling Clean		No	HVAC Supply Grills Clean		Yes	HVAC Return Grills Clean		Yes
Walls Clean		Yes	Inside of Supply Duct Clean		Yes	Inside of Return Duct Clean		Yes
Flooring Clean		No	Ceiling at Supply Grills Clean		No			
Room Surfaces 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 in Room		No
Room Cluttered		No	Food if Stored in Room is in Sealed Containers		N/A			
Mechanical Equipment Location			Bard unit outside of Portable			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			
Fresh Air Intake Location			Outside of Room ▼			Fresh Air Intake Free of Obstruction		Yes
Pollutant Sources Near Air Intake			Trees / Road ▼					

Observations

Metal skinned portable - Musty odor in portable - Floor stained / dirty / wet water coming up between tiles - Walls wet under all windows - ceiling dirty at supply grills

Corrective Actions to be Completed by Site Based Staff

Clean ceilings around HVAC supply grills	▼
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	▼
	▼
	▼
	▼
	▼
	▼
	▼

Corrective Actions to be Completed by PPO

Seal exterior of building around all windows	▼
Remove wall material around all windows	▼
Replace all water damaged material	▼
Evaluate cause of water damage to floor	▼
replace entire floor	▼
	▼
	▼
	▼