

Jeffrey S. Moquin, Director Risk Management Department managing risk with responsibility

Telephone: 754-321-3200 Facsimile: 754-321-3290

July 12, 2005

TO: Ms. Linda Chuckman, Principal Fox Trail Elementary School

- FROM: Aston A. Henry, Jr., Supervisor Risk Management Department
- SUBJECT: Indoor Air Quality (IAQ) Assessment Portable 438, 439, 691VE and 848VE

On July 7, 2005 the IAQ Assessment Team conducted an assessment of Portable 438, 439, 691VE and 848VE at **Fox Trail Elementary School**. The evaluation consisted of a walkthrough of the identified areas to assess the current condition of the location with regard to indoor air quality. This assessment included observations of the carpet, floor tile, ceiling tile, interior walls, false ceiling plenum, and accessible ventilation equipment.

Attached are the findings of this assessment along with recommendations for further assessment, remediation, or corrective actions, if needed.

Generally, the IAQ Assessment did not identify any existing conditions significantly impacting IAQ and thereby presenting immediate health and safety concerns 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.

Should any questions arise, or if the current concerns continue after the attached recommendations have been addressed, please feel free to contact me at 754-321-3200.

cc: Dr. Verda Farrow, Area Superintendent **Kevin Sawyer**, Area Director Jeffrey S. Moquin, Director, Risk Management Drew Lippman, Project Manager II, Facilities and Construction Management Ralph Eckhardt, Broward Teachers Union Mark Dorsett, Manager 1, Physical Plant Operations Division, Zone 1 Roy Norton, Manager Custodial/Grounds, Physical Plant Operations Division Robert Krickovich, Coordinator, LEA, Facilities and Construction Management

AH/tc

IAQ Assessment									
	Fox Trail E	lementary School		Evaluation Requested	July 6, 2005				
Time of Day 2	:15 pm			Evaluation Date	July 7, 2005				
Outdoor Conditions	5 Temperat	ure 97.6	Relative Humidity	52.5 Ambi	ent CO2 324				
Fish Temp	erature Range	Relative Humidity	Range	CO2 Ra	nge # Occupants				
P-438	77.4 72 - 78	59.1	30% - 60%	397 Max 700) > Ambient 2				
Noticeable Odor	No	Visible water damage / stainin	Visible micro g? growth?						
Ceiling Type	2 x 4 Lay In	No	No		None				
Wall Type	Tackable	Yes	No	South an	d Southeast Wall				
Flooring	Tile	No	No		None				
Ceiling	/ [or Dust Needs bebris Cleaning No No	9	Corrective Action R	equired				
Walls	No	Yes Yes	F	Repair/Replace as app	propriate				
Flooring	Yes	No							
HVAC Supply Grills	s Yes	No							
HVAC Return Grills	Yes	No							
Ceiling at Supply Grills				N/A					
Surfaces in Room	Yes	No							

Findings:

- High moisture level on South wall under stand alone A/C unit and on Southeast corner surrounding the exterior door

Recommendations:

Site Based Maintenance:

- Continue to monitor this location for any signs of microbial growth as well as dust and debris accumulation and clean as appropriate

Physical Plant Operations Division:

- Evaluate and repair/replace damage to South and Southeast wall

			IAQ Asse	essment				
	Fox	Trail Elementary	/ School		Evaluat	ion Requested	July 6	6, 2005
Time of Day	1:50 pm				E	Evaluation Date	July 7	7 , 2005
Outdoor Condit	tions Terr	perature 9	7.6 R	Relative Humidi	y 52.5	Ambie	nt CO2	324
Fish T	[emperature	Range Relat	ive Humidity	Range	CO2	Ran	ge #	Occupants
P-439	76.3 7	2 - 78	60.4	30% - 60%	393	Max 700	> Ambient	2
Noticeable Od	or No		isible water age / staining?	Visible mic growth		Amount of mat affected	erial	
Ceiling Type	2 x 4 Lay	In	Yes	No]	One	ceiling tile	
Wall Type	Wall Type Tackable		Yes]	North wall		
Flooring	Tile		No	No]		None	
	Clean	Minor Dust / Debris	Needs Cleaning		Correc	ctive Action Re	quired	
Ceiling	No	Νο	No		C	One stained tile		
Walls	No	No	No		Repair/R	eplace as appr	opriate	
Flooring	Yes	No	No					
HVAC Supply (Grills Yes	Νο	No					
HVAC Return C	Grills					N/A		
Ceiling at Supp Grills	oly					N/A		
Surfaces in Ro	om Yes	No	No					

Findings:

- High moisture level on North wall
- High moisture level underneath cabinet in front of sink
- Roof leak surrounding stove exhaust vent
- Water damaged ceiling tile
- Water damaged wood floor in front of exterior on West side
- Dust and debris on HVAC coils

Recommendations:

Site Based Maintenance:

- Continue to monitor this location for any signs of microbial growth as well as dust and debris accumulation and clean as appropriate

Physical Plant Operations Division:

- Evaluate and repair/replace damage to North wall and cabinet in front of sink
- Evaluate for roof leak (around stove exhaust vent) and repair as appropriate and replace ceiling tile
- Evaluate wood floor (exterior West side) and repair/replace as appropriate
- Evaluate and repair stand alone A/C unit and clean coils as appropriate

IAQ Assessment									
	Fox	Trail Elementar	y School		Evalua	tion Requested	July 6	6, 2005	
Time of Day	1:15 pm]				Evaluation Date	July 7	7, 2005	
Outdoor Conditio	ns Ten	nperature 9	7.6	Relative Humid	ity 52.	5 Ambie	nt CO2	324	
Fish Ten	nperature	Range Relat	ive Humidity	Range	CO2	Ran	ge #	Occupants	
P-691VE	76.6	/2 - 78	53.4	30% - 60%	384	Max 700	> Ambient	3	
Noticeable Odor	Yes	-	isible water age / staining?	Visible mi ? growt		Amount of mat affected	terial		
Ceiling Type	2 x 4 Lay	In	Yes	No		5 Ce	eiling Tiles		
Wall Type	Tackabl	e	Yes	No		A	ll Walls		
Flooring	Tile		No	No			None		
	Clean	Minor Dust / Debris	Needs Cleaning		Corre	ctive Action Re	quired		
Ceiling	Νο	Νο	No		Replace	5 damaged ceil	ling tiles		
Walls	No	No	No		Repair/F	Replace as appi	ropriate		
Flooring	No	Yes	Yes		C	ean and sanitiz	e		
HVAC Supply Gri	ills Yes	No	No						
HVAC Return Gri	lls					N/A			
Ceiling at Supply Grills						N/A			
Surfaces in Roon	n Yes	No	No						

Findings:

- High moisture level in wall surfaces throughout the entire portable
- Dust and debris on floor
- Roof leak on Southwest corner
- Damaged T-1-11 West side of portable

Recommendations:

Site Based Maintenance:

- Remove and replace damaged ceiling tiles

Clean and sanitize floor

- Continue to monitor this location for any signs of microbial growth as well as dust and debris accumulation and clean as appropriate

Physical Plant Operations Division:

- Evaluate and repair/replace damage to interior walls throughout the entire portable

- Evaluate and repair roof leak on Southwest corner as appropriate
- Evaluate and repair/replace T-1-11

IAQ Assessment									
	Fox	Trail Elementar	y School		Evaluation	Requested	July 6	6, 2005	
Time of Day	1:30 pm				Eva	luation Date	July 7	7, 2005	
Outdoor Conditio	ons Ten	perature 9	7.6	Relative Humidity	52.5	Ambie	nt CO2	324	
Fish Ter	mperature	Range Rela	tive Humidity	Range	CO2	Ran	ge #	Occupants	
P-848VE	71.7 7	2 - 78	53.9	30% - 60%	413	Max 700	> Ambient	3	
Noticeable Odor	Yes	-	'isible water age / staining	Visible micr ? growth?		mount of mat affected	erial		
Ceiling Type	2 x 4 Lay	In	No	No			None		
Wall Type	Tackable	e	Yes	No		Α	ll Walls		
Flooring	Tile		No	No			None		
	Clean	Minor Dust / Debris	Needs Cleaning		Correctiv	ve Action Re	quired		
Ceiling	Yes	No	No						
Walls	No	No	No		Repair/Rep	lace as appi	opriate		
Flooring	Yes	No	No						
HVAC Supply Gr	ills Yes	No	No						
HVAC Return Gri	ills					N/A			
Ceiling at Supply Grills	/					N/A			
Surfaces in Roor	n Yes	No	No						

Findings:

- High moisture level in wall surfaces throughout the entire portable
- No visible signs of microbial growth
- Damaged T-1-11 around exterior door and south wall

Recommendations:

Site Based Maintenance:

- Continue to monitor this location for any signs of microbial growth as well as dust and debris accumulation and clean as appropriate

Physical Plant Operations Division:

- Evaluate and repair/replace damage to interior walls throughout the entire portable
- Evaluate and repair/replace T-1-11