

managing risk with responsibility

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Jeffrey S. Moquin, Director Risk Management Department

July 28, 2006

Signature on File

TO: Ms. Dorothy Cain, Principal

Palm Cove Elementary School

FROM: Kenneth I. Partee, Project Manager Occupational Health and Environmental Control

Risk Management Department

SUBJECT: Indoor Air Quality (IAQ) Assessment

Portable 542C

On June 20, 2006 I conducted an assessment of Portable 542C at Palm Cove Elementary School. This evaluation included observations of the flooring system, ceiling tiles, false ceiling plenum, environmental surfaces, interior and exterior walls, and the accessible ventilation equipment. Additionally, environmental parameter measurements were taken to include temperature, relative humidity, and carbon dioxide. The detailed findings, along with the recommended corrective action can be found on the attached IAQ Assessment Worksheets.

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.

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: Sam Gregg, Area Superintendent
Pat Dixon, Area Director
Jeffrey S. Moquin, Director, Risk Management
Bertram Lewars, Project Manager, Facilities and Construction Management
Steve Feldman, 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

KP/tc Enc.

11:55 am				ı	Evaluation Date	June 20, 20	006
ions Ten	nperature	92.1	Relative Hun	nidity 56.2	? Ambie	nt CO2 530	
emperature	Range Rela	tive Humidity	Range	CO2	Ran	ge # Occ	upants
73.3 7	72 - 78	57	30% - 60%	529	Max 700	> Ambient	1
Noticeable Odor Yes		Visible water Visible microbial damage / staining? growth?			Amount of material affected		
2 x 4 Lay In		No		No		None	
ype Tackboard		Yes No		No	East and North Walls		
Tile		No No		No		None	
Clean	Minor Dust / Debris	Needs Cleaning	l	Corre	ctive Action Re	equired	
Yes	No	No					
No	Yes	Yes		Repair/replace as appropriate			
Yes	No	No					
Grills No	Yes	Yes		Clean wit	h Wexcide dis	nfectant	
Grills No	Yes	Yes		Clean wit	h Wexcide dis	nfectant	
oly No	Yes	Yes		Repair gap above North unit			
om No	Yes	Yes		Clean as appropriate			
	ions Ten femperature 73.3 or Yes 2 x 4 Lay Tackboa Tile Clean Yes No Yes Grills No Oly No	ions Temperature Semperature Range Related 73.3 72 - 78 Cor Yes dan 2 x 4 Lay In Tackboard Tile Clean Minor Dust / Debris Yes No Yes No Yes No Grills No Yes Oly No Yes Oly No Yes	ions Temperature 92.1 femperature Range Relative Humidity 73.3 72 - 78 57 Or Yes Visible water damage / staining 2 x 4 Lay In No Tackboard Yes Tile No Clean Minor Dust Needs Cleaning Yes No No No No Yes Yes Yes No No No Frills No Yes Yes Grills No Yes Yes Or Yes Yes	Temperature 92.1 Relative Humidity Range 73.3 72 - 78 57 30% - 60% Visible water damage / staining? 97.0	ions Temperature 92.1 Relative Humidity 56.2 remperature Range Relative Humidity Range CO2 73.3 72 - 78 57 30% - 60% 529 Visible water damage / staining? Visible microbial growth? 2 x 4 Lay In No No Tackboard Yes No No Clean Minor Dust Needs Cleaning Yes No No No No No Yes Yes Repair/n Yes No No Grills No Yes Yes Clean with sorted to the state of the state	Temperature 92.1 Relative Humidity 56.2 Ambie emperature Range Relative Humidity Range CO2 Range 73.3 72 - 78 57 30% - 60% 529 Max 700 Fee Manage / staining? Visible microbial growth? Amount of manage / staining? Range CO2 Range / Staining? Visible microbial growth? Amount of manage / staining? Range Coze Range / Staining? Visible microbial growth? Amount of manage / staining? Range Coze Range / Staining? Visible microbial growth? Amount of manage / Staining? Range Coze Range / Staining? Visible microbial growth? Amount of manage / Staining? Range Coze Range / Staining? Visible microbial growth? Amount of manage / Staining? Range Coze Range / Staining? Visible microbial growth? Amount of manage / Staining? Range Coze Range / Staining? Visible microbial growth? Amount of manage / Staining? Range Coze Range / Staining? Range Coze Range / Staining? Visible microbial growth? Amount of manage / Staining? Range Coze Range / Staining? Visible microbial growth? Amount of manage / Staining? Range Coze Range / Staining? Coze Range / Staining? Range Coze Range / Staining / Staining? Visible microbial growth? Amount of manage / Staining? Range Coze Range / Staining? Range Coze Range / Staining? Range Coze Range / Staining / S	Temperature 92.1 Relative Humidity 56.2 Ambient CO2 530 Temperature Range Relative Humidity Range CO2 Range # Occ 73.3 72 - 78 57 30% - 60% 529 Max 700 > Ambient CO2 500 Tyes Visible water damage / staining? Visible microbial growth? Amount of material affected affected

IAQ Assessment

Palm Cove Flementary School

3311

June 20, 2006

Location Number

Evaluation Requested

Observations

Findings:

- One stained ceiling tile
- Visible microbial growth and water damage on West wall under A/C unit. Elevated moisture content entire East wall (25-60+) and under white board on North wall (30+). Damaged baseboard on East wall. Damaged tackable wall section Southeast corner by cabinet.
- Dust and debris on HVAC supply and return grills
- Dust and debris on A/C filters and filters were improper size
- Dust build up on environmental surfaces
- Heavy dust and debris on HVAC coils and inside units
- Window screens torn and algae on windows (exterior)
- Gap above North wall

Recommendations:

Site Based Maintenance:

- Replace stained ceiling tile
- Clean walls to remove dust and dirt build up
- Clean HVAC supply and return grills with Wexcide disinfectant solution
- Remove and replace A/C filters and ensure proper size
- Thoroughly clean environmental surfaces throughout the room
- Clean algae from windows (exterior)
- Ensure that both A/C units are on
- 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:

- Evaluate cause of water damage, microbial growth and elevated moisture on West wall under A/C unit, entire East wall and under white board on North wall. Evaluate roof for leaks. Replace wall material and baseboard as appropriate. Repair/replace damaged tackable wall section Southeast corner by cabinet.
- Clean HVAC coils and units and evaluate for extensive coil clogging
- Replace torn window screens and recaulk around windows as necessary
- Repair gap above North wall