

RISK MANAGEMENT...

managing risk with responsibility

Jeffrey S. Moquin, Director
Risk Management Department

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

August 22, 2007

Signature on File

TO: Ms. Pamela Govoni, Principal
Lloyd Estates Elementary School

FROM: Edward See, Project Manager
Risk Management Department

SUBJECT: Indoor Air Quality (IAQ) Assessment
Portable R-14S and R14N

For Custodial Supervisor Use Only	
<input type="checkbox"/>	Custodial Issues Addressed
<input type="checkbox"/>	Custodial Issues Not Addressed

On August 17, 2007 I conducted an assessment of Portable R-14S and R-14N at **Lloyd Estates 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.

Please ensure that your Head Facilities Serviceperson receives a copy of this correspondence so that the recommendations requiring their attention can be addressed. Within two weeks a representative from the Custodial/Grounds Department will conduct a follow-up visit to ensure that all 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 me at 754-321-3200.

cc: Dr. Leontine Butler, Area Superintendent
Toni Weissberg, Area Director
Jeffrey S. Moquin, Director, Risk Management
Robert Goode, Project Manager, Facilities and Construction Management
Dane Ramson, Broward Teachers Union
Roy Jarrett, Federation of Public Employees
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

ES/tc
Enc.

IAQ Assessment

Location Number 1091
 Evaluation Requested August 17, 2007
 Evaluation Date August 17, 2007

Lloyd Estates Elementary School

Time of Day

Outdoor Conditions Temperature 91.1 Relative Humidity 50.1 Ambient CO2 511

Fish	Temperature	Range	Relative Humidity	Range	CO2	Range	# Occupants
R-14N	75.6	72 - 78	59.8	30% - 60%	593	Max 700 > Ambient	3
Noticeable Odor		Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
No		Yes		No		4 ceiling tiles	
Ceiling Type	2 x 4 Lay In		Yes	No		4 ceiling tiles	
Wall Type	Tackable		Yes	No		3 walls	
Flooring	Vinyl		No	No		None	

	Clean	Minor Dust / Debris	Needs Cleaning	Corrective Action Required
Ceiling	No	Yes	Yes	Remove and replace ceiling tiles
Walls	No	Yes	Yes	Repair/replace wall material
Flooring	Yes	No	No	
HVAC Supply Grills	No	Yes	Yes	Clean with Wexcide disinfectant
HVAC Return Grills	No	Yes	Yes	Clean with Wexcide disinfectant
Ceiling at Supply Grills	Yes	No	No	
Surfaces in Room	Yes	No	No	

Observations

Findings:

- Elevated moisture content in 3 interior/exterior walls (50-90% WME)
- Dust and debris on HVAC supply and return grills
- 4 stained ceiling tiles
- Dust and debris on A/C filters

-Recommendations:

Site Based Maintenance:

- Clean HVAC supply and return grills with Wexcide disinfectant solution
- Replace stained ceiling tiles
- Remove and replace A/C filters
- 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 elevated moisture content in walls and repair as appropriate. Repair/replace wall material as necessary.

IAQ Assessment

Location Number 1091
 Evaluation Requested August 17, 2007
 Evaluation Date August 17, 2007

Lloyd Estates Elementary School

Time of Day

Outdoor Conditions Temperature 91.1 Relative Humidity 50.1 Ambient CO2 511

Fish	Temperature	Range	Relative Humidity	Range	CO2	Range	# Occupants
R-14S	72	72 - 78	67	30% - 60%	566	Max 700 > Ambient	3
Noticeable Odor		Visible water damage / staining?		Visible microbial growth?		Amount of material affected	
No		Yes		No		Light Grids	
Ceiling Type	2 x 4 Lay In		Yes	No		3 walls	
Wall Type	Tackable		Yes	No		None	
Flooring	Vinyl		No	No			

	Clean	Minor Dust / Debris	Needs Cleaning	Corrective Action Required
Ceiling	No	Yes	Yes	Repair/replace light grids
Walls	No	Yes	Yes	Repair/replace wall material
Flooring	Yes	No	No	
HVAC Supply Grills	No	Yes	Yes	Clean with Wexcide disinfectant
HVAC Return Grills	No	Yes	Yes	Clean with Wexcide disinfectant
Ceiling at Supply Grills	Yes	No	No	
Surfaces in Room	Yes	No	No	

Observations

Findings:

- Elevated moisture content in 3 interior/exterior walls (40-90% WME)
- Dust and debris on HVAC supply and return grills
- Visible rust and staining on light grids
- Visible growth/algae on front door
- Water stain on support beam in restroom

-Recommendations:

Site Based Maintenance:

- Clean HVAC supply and return grills with Wexcide disinfectant solution
- Wipe down front door with Wexcide disinfectant solution
- 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 elevated moisture content in walls and repair as appropriate. Repair/replace wall material as necessary.
- Evaluate cause of rust and staining on light grids and water staining on support beam in restroom and repair as appropriate. Repair/replace light grids as necessary.