

# RISK MANAGEMENT...

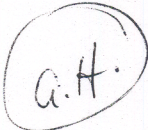
*managing risk with responsibility*

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February 23, 2004

**TO:** Michaele Valbrun-Pope, Principal  
North Side Elementary School

**FROM:** Aston A. Henry, Jr., Supervisor   
Risk Management Department

**SUBJECT:** **Indoor Environmental Quality Assessment**  
**North Side Elementary School**  
**FISH 210,203, 130, 141, 142, 143, 144, 150, 151**

Attached please find a copy of the Indoor Environmental Quality Assessment report completed by Mr. Robert Krickovich of the Facilities and Construction Management Department. A copy of this report will be forwarded to the Maintenance Department.

Mr. Krickovich made several recommendations in hopes of enhancing and optimizing indoor environmental quality within the assessed locations. The Maintenance Department will initiate work orders to address those recommendations.

Should any questions or concerns arise, please feel free to contact me at (954) 765-8864.

AAH/tpo  
Attachment

c: Dr. Verda Farrow, South Central Area Superintendent  
Roberta Insel, South Central Area Director School Improvement  
Mark Dorsett, Manager, Maintenance Department  
Dave Archer, Project Manager, Facilities and Construction Management  
Dwight Hamilton, Broward Teachers Union



I met with Ms. Pope on February 2, 2004 to look into staff complaints in building 1 rooms 203 and 210 & Building 3. Both buildings have individual fan coil units for air conditioning in each classroom. Each fan coil unit has 2 air filters 1 for the fresh air and one for the re-circulated air in the classrooms.

Outdoor temperature 79 degrees and 64% relative humidity

Building 1 has fresh air intakes through the wall above each classroom door.

Room 210 was 76 degrees and had a relative humidity of 55%, with the unit in operation. There were no sign of water damage in the room.

The air filter in the fan coil unit was so dirty that the air could no longer pass through it and it had been pulled out of the frame of the unit. All air was bypassing the filter. Also the filter for the fresh air was extremely dirty to the point of being plugged solid.

The classroom has some surface dust but not extremely heavy.

Room 203 was 76 degrees and had a relative humidity of 60%, with the unit not in operation at the time of our site visit.

There were no sign of water damage in the room.

The air filters in the fan coil unit were extremely dirty.

The classroom has some surface dust but not extremely heavy.

A quick check of the other rooms on the second floor of building 1 revealed that none of the air filters have been changed in quite a while, all were covered solid with dust.

Building 3 has fresh air intakes shared between two rooms and up through the roof.

Room 130 was 74 degrees and had a relative humidity of 67% with the unit off at the time of our site visit. There are several stained ceiling tiles caused by roof leaks. The room has two fan coil units, the classroom filter in the large unit was recently changed, however the fresh air filter was extremely dirty and had visible mold on the surface of the filter. I removed the filter during the site visit. The small unit is for re-circulation only and has no fresh air connected to it however this unit has no filter installed at all and the unit is very dirty on the inside.

Surfaces in the room were dusty.

Room 141 was 75 degrees and had a relative humidity of 66% with the unit off at the time of our site visit. The sink cabinet in the room is visibly water damaged with no visible mold growth. The chilled water lines are leaking onto a hanging wall cabinet with visible water damage. The wall cabinet is installed on top of a tack board wall surface which is also water damaged. The classroom filter in the fan coil unit was recently changed, however the fresh air filter was missing. The inside of the unit is dusty/dirty, and the surfaces in the room have heavy dust accumulation.



Room 142 was 74 degrees and had a relative humidity of 66% with the unit off at the time of our site visit. There are several stained ceiling tiles caused by roof leaks. The classroom filter in the fan coil unit was recently changed, however the fresh air filter was extremely dirty and had visible mold on the surface of the filter. I removed the filter during the site visit. The chilled water lines and roof are leaking onto a hanging wall cabinet with visible water damage. The wall cabinet is installed on top of a tack board wall surface which is also water damaged. Surfaces in the room were dusty.

Room 143 was 75 degrees and had a relative humidity of 69% with the unit off at the time of our site visit. The sink cabinet in the room is visibly water damaged with visible mold growth. The classroom filter in the fan coil unit was recently changed, however the fresh air filter was extremely dirty and had visible mold on the surface of the filter. I removed the filter during the site visit. Surfaces in the room were dusty.

Room 144 was 71 degrees and had a relative humidity of 66% with the unit off at the time of our site visit. The sink cabinet in the room is visibly water damaged with no visible mold growth. The classroom filter in the fan coil unit was recently changed, however the fresh air filter was missing. The inside of the unit is dusty/dirty. There are several stained ceiling tiles caused by roof leaks. One tile at the A/C unit has visible mold. The chilled water lines and roof are leaking onto a hanging wall cabinet with a visible water puddle and water damage. The wall cabinet is installed on top of a tack board wall surface which is also water damaged. Surfaces in the room have heavy dust accumulation.

Room 150 was 74 degrees and had a relative humidity of 70% with the unit off at the time of our site visit. The sink cabinet in the room is visibly water damaged with no visible mold growth. The chilled water lines are leaking onto a hanging wall cabinet with visible water damage. The wall cabinet is installed on top of a tack board wall surface which is also water damaged. The classroom filter in the fan coil unit was recently changed, however the fresh air filter was missing. The inside of the unit is dusty/dirty, and the surfaces in the room have heavy dust accumulation.

Room 151 was 73 degrees and had a relative humidity of 66 % with the unit off at the time of our site visit. The sink cabinet in the room is visibly water damaged with no visible mold growth. There are several stained ceiling tiles caused by roof leaks. One tile at the A/C unit has visible mold. The roof is leaking onto a hanging wall cabinet with visible water damage. The wall cabinet is installed on top of a tack board wall surface, which is also water damaged and wet. The classroom filter in the fan coil unit was recently changed, however the fresh air filter was missing. The inside of the unit is dusty/dirty, and the surfaces in the room have heavy dust accumulation.

The heavy dust accumulation in the rooms is most likely a result of not having the filters installed on the fresh air supply for the rooms. The rooms with filters missing had the heaviest dust accumulation and heavy dust inside of the fan coil units.



Ms. Pope directed the custodial staff to replace all of the air filters and install the missing filters, and to wipe down all surface of the rooms to remove the dust accumulation. I instructed the custodian to remove the ceiling tiles with visible mold and to wipe down the visible mold on the sink cabinets with Wexcide.

The roof of building 3 needs repairs. The wall cabinets in building 3 need to be removed and repaired as necessary and the tack board wall surfaces behind the cabinets needs to be removed. Several sink cabinets will need to be replaced and the cause of the water damage repaired. All of the fan coil units need to be cleaned, and the chilled water pipe insulation repaired. Building 3 has 12" x 12" spline ceilings in the classrooms with missing, stained, and damaged tiles that need to be replaced. All surfaces in the rooms need to be cleaned and all air filters installed properly. There are several empty 5 gallon buckets and other debris on the roof that needs to be removed. Also the roof is ponding water heavily, over 75% of the roof area.

Building 1 needs to have the air filters replaced and the grills on the fan coil units cleaned, as well as the fresh air intake grills.