

THE SCHOOL BOARD OF BROWARD COUNTY, FLORIDA

ENVIRONMENTAL HEALTH & SAFETY DEPARTMENT

TELEPHONE (754) 321-4200

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October 16, 2017

Signature on File

TO: Teresa Lipkins, Principal
Chapel Trail Elementary

FROM: Alison Witoshynsky, Project Manager
Environmental Health & Safety Department

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 |
| <hr/> | |
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On October 13, 2017, I conducted an assessment at **Chapel Trail Elementary**. 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 754-321-4200.

AW:smn

Enc.

cc: Sam Bays, Director, Maintenance Operations
Shelley Meloni, Director, Pre-Construction
Mark Dorsett, Manager, Zone 1, Physical Plant Operations Division
Greg Neiman, Area Supervisor, Zone 1
Kurt Wirz, Area Manager Trades
Gerald Devio, Supervisor II Custodial
Benjamin Osborne, Supervisor II Custodial
Mark Murray, Supervisor II Custodial
Broward Teachers Union
Federation of Public Employees

Multiple Room IAQ Assessment

Chapel Trail Elem. School

Evaluation Date October 13, 2017

Time of Day 1:04

Outdoor Conditions Temperature 89.4

Relative Humidity 71.5

Ambient CO2 468

Fish # of rooms assessed

FISH 221, 222, 223, 224, 225, 226, 230, 238, 336, 854

Approx. 25 students per room.

| | | | | | |
|---|--|-----|--|------------------|-------------------|
| Temperature Range in the Rooms Assessed was Between | 68.9 | And | 76.0 | Acceptable Range | 72 - 78 |
| Relative Humidity Range in the Rooms Assessed was Between | 59.5 | And | 69.7 | Acceptable Range | 30% - 60% |
| Co ² Range in the Rooms Assessed was between | 1550 | And | 1938 | Acceptable Range | MAX 700 > Ambient |

| Noticeable Odor | No | Visible water damage / staining? | Visible microbial growth? | Amount of material affected |
|-----------------|---|---|---|--|
| Ceiling | 2' X 4' Lay in | Yes | Yes | FISH 222, 223, 225 |
| Walls | Drywall/Tackboard | Yes | Yes | FISH 221, 225, 230 |
| Floor | 12" x 12" Vinyl | No | No | |

FISH 221: Wall wet (2' x 6"); water entering exterior door and pooling in hallway to under wall into classroom.
 FISH 222: 1 stained ceiling tile; FISH 223: 1 stained ceiling tile
 FISH 225: Wall wet (6' wide, floor to ceiling); roof leak. (includes 2 bookshelves & tackboard) (maybe J817955)
 6 stained ceiling tiles
 FISH 230: Wall wet @ 1' x 1' as a result of water intrusion from outside walkway
 FISH 854: 2 stained ceiling tiles

| | | | | | |
|---------------------|---|--|---|---|---|
| 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 | Yes | | |
| Room Surfaces Clean | No | | | | |
| 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 | N/A | | |

FISH 223: light dust on ceiling tile grid

Light dust on window sill throughout area. All exhaust fans are operating, but do not appear to be exhausting that much air from rooms.

FISH 854. Floor seam is breaking/stained.

Multiple Room IAQ Assessment

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HVAC System

Mechanical Equipment Location FISH 228

Mechanical Room Clean Yes

Filters Installed Properly Yes

Filters Clean Yes

Inside of HVAC Unit Clean Yes

Condensate Pan Clean Yes

Cooling Coil Clean Yes

N/A in this section = Not Accessible

Fresh Air Intake Location Roof top ▼

Fresh Air Intake Free of Obstruction N/A

Pollutant Sources Near Air Intake Not Readily Accessible ▼

Observations

Generally the rooms are clean. There are a few rooms with water damaged walls with identified causes that are being addressed. The backsides of the return air grills and likely the return air ducts are dusty and visibly blocked.

Multiple ceiling tiles are stained and need to be replaced in FISH 222, 223, & 225 as a result of roof leaks (H009809, J815514, J825407); HFSP awaiting ceiling tile delivery. Per HFSP an outside contractor has been onsite to evaluate the roof for repairs, but no work has commenced to date.

FISH 854: Repair AC as needed to decrease Relative Humidity and Carbon Dioxide (J812128)

Corrective Actions to be Completed by Site Based Staff

| | |
|---|---|
| Clean dust from ceilings | ▼ |
| Ensure ceiling tiles are installed properly | ▼ |
| Thoroughly clean elevated & horizontal surfaces | ▼ |
| Clean restroom exhaust fan grill | ▼ |
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Corrective Actions to be Completed by PPO

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|---|---|
| Set Temperature to 72 - 78 degrees | ▼ |
| Repair HVAC to Reduce Humidity Levels | ▼ |
| Repair HVAC to Reduce CO2 Levels | ▼ |
| Evaluate and repair cause of stained ceiling tile | ▼ |
| Install new ceiling tile upon repair, cuts needed | ▼ |
| Evaluate and repair cause of water damaged | ▼ |
| wall material | ▼ |
| Remove and replace wall material as needed | ▼ |
| Clean HVAC return grills and drops | ▼ |
| Repair Floor Seam (FISH 854) as needed | ▼ |
| Evaluate/Repair HVAC dampers & exhaust | ▼ |
| Interlocks | ▼ |
| Evaluate And Repair Exhaust Fans | ▼ |