THE SCHOOL BOARD OF BROWARD COUNTY, FLORIDA ENVIRONMENTAL HEALTH & SAFETY DEPARTMENT

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| December 14 | , 2017 | Signature on File | For Custodial Supervisor Use Only |
|-------------|--|--|--|
| TO: | Erik Anderson, Principal Tropical Elementary | | Custodial Issues Addressed Custodial Issues Not Addressed |
| FROM: | Alison Witoshynsk Environmental Hea | y, Project Manager ılth & Safety Department | |
| SUBJECT: | Indoor Air Quality | (IAQ) Assessment | |

On December 13, 2017, I conducted an assessment at **Tropical Elementary School.** 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

| | Tropical Elem. | School Evaluation | | Time of Day 1205 |
|--|------------------|---|---|--|
| Outdoor Conditions | Temperature | 66.4 Rela | tive Humidity 32.8 | Ambient CO2 392 |
| Temperature Range | in the Rooms Ass | 177, 178 (specials classressed was Between was Between was between | And | Acceptable 72 - 78 Range 70 - 78 Acceptable 80% - 60% Acceptable MAX 700 > Ambient |
| Walls Drywall/ | | | Visible microbial growth? No No No No | Amount of material affected |
| Ceiling Clean Walls Clean Flooring Clean Room Surfaces Clean | Yes Yes No | HVAC Supply Grills Clean Inside of Supply Duct Clean Ceiling at Suppl Grills Clean | N/A | HVAC Return Grills Clean Inside of Return Duct Clean No |
| Trash Removed | Yes | Exhaust Fans Workin | · | Unapproved Chemicals / Cleaners in Room |
| Signs of Pests Room Cluttered | No Yes | Drain Traps W Food if Stored in Room in Sealed Containers | | Air Fresheners No in Room |
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| Multiple Room IAQ Assessment | | | | | | | |
|---|--|--|--|--|--|--|--|
| Tropical Elem. School Evaluation Date December 13, 2017 Time of Day 1205 | | | | | | | |
| Outdoor Conditions Temperature 66.4 Relative Humidity 32.8 Ambient CO2 392 | | | | | | | |
| HVAC System | | | | | | | |
| Mechanical Equipment Location FISH 121A (penthouse #2 & #5) & 172 Mechanical Room Clean Yes | | | | | | | |
| Filters Installed Properly Yes Filters Clean No Inside of HVAC Unit Clean No | | | | | | | |
| Condensate Pan Clean Yes Cooling Coil Clean No N/A in this section = Not Accessible | | | | | | | |
| Fresh Air Intake Location Roof top Fresh Air Intake Free of Obstruction Yes | | | | | | | |
| Pollutant Sources Near Air Intake No ▼ | | | | | | | |
| AHU#5 (FISH 121A) - coil very dusty, interior of HVAC dusty. HVAC return grill in FISH 158 alcove near FISH 120 reportedly gets a lot of dust/debris/dirt from continual in and out of doors (PE, access to other buildings). FISH 156 at end of HVAC supply line. | | | | | | | |
| Observations FISH 143 (homeroom classroom): Very cluttered on counters, upper cabinets, inside cabinets, and closet. Floor has | | | | | | | |
| lots of paper debris. | | | | | | | |
| FISH 156 (science): Somewhat cluttered. Science projects, used and unused aquariums and other supplies on counters, tables, and bookshelves. Occupant reports, no window, but will open door sometimes to vent science projects. | | | | | | | |
| FISH 178 (art): Lots of supplies, but organized, and very low dust observed. | | | | | | | |
| FISH 115 (music): Teacher mainly utilizes the front portion of the room and the closet at the back for instrument storage. Lots of surface area/desks at rear of room. Light dust layer, needs more frequent dusting. Closet is | | | | | | | |
| cluttered and has light dust layer. | | | | | | | |
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Corrective Actions to be Completed by Site Based Staff

| Corrective Actions to 20 Completion by Cite Bucca C | | | |
|---|--------------|--|--|
| Remove and replace stained ceiling tile | | | |
| If stains return, contact COMPASS for work order | | | |
| Thoroughly clean elevated & horizontal surfaces | | | |
| Room too cluttered to clean properly (143/156) | | | |
| Encourage occupant to reduce clutter (143) | ightharpoons | | |
| Remove cardboard boxes | | | |
| Store items in plastic containers with lids | | | |
| Clean Supply Grills with Wexcide | | | |
| Ensure Doors And Windows Remain Closed | | | |
| Remove And Replace A/c Filters | | | |
| Tape And Date Hvac Filters | | | |
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Corrective Actions to be Completed by PPO

| Clean HVAC coil (#5 FISH 121A) | ▼ |
|--|---|
| Clean all HVAC return grills and drops | ▼ |
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