

BACKGROUND

Indoor Air Quality (IAQ) concerns in a school can be subtle and do not always produce easily recognized impacts on the health, well-being of the occupants, or the physical building. Indoor Air Quality is a concern to all building occupants, and many things contribute to poor Indoor Air Quality.

Most Indoor Air Quality complaints are due to:

- ❖ **Deferred maintenance of the building.** Leaking windows, doors and roofs allow water intrusion into the building and contribute to mold growth.
- ❖ **Improperly operated or maintained Heating Ventilating & Air Conditioning (HVAC) equipment.** Rooms that are cooled below 72 degrees can cause condensation and humidity problems which contribute to mold growth.
- ❖ **Improper or inadequate cleaning of the room or school.** Inadequate ventilation and excessive dust can cause itchy eyes, runny nose, and headaches.
- ❖ **Building occupants and their daily activities.** Leaving doors and windows open allows unfiltered untreated air into the building which contributes to mold growth. Using non-school board approved chemicals, air fresheners, candles, having live plants.
- ❖ **Microbial Growth** (*mold growth*).

Previous assessments conducted in our schools have shown many IAQ concerns raised by occupants can be easily resolved by site based staff without Environmental Health & Safety, Physical Plant Operations or Facilities & Construction involvement.

Each staff member has an important role to play in making sure that their space remains habitable by all occupants. Please follow the recommended Roles & Responsibilities identified below. If an unusual condition is observed, **please report this to Administration/Head Facilities Serviceperson.**

Onsite Roles & Responsibilities

Facilities Service Persons	Teachers & Administrative Staff	School Principals
<ul style="list-style-type: none"> Remove any excess build-up of dust on a regular basis. Clean all surfaces, including flooring. Clean and properly install HVAC filters. Sanitize HVAC supply and return vents. Replace stained ceiling tiles. Ensure response protocol checklist for onsite resolution of IAQ issues has been completed prior to request for IAQ assessment by EH&S. Initiate work orders. 	<ul style="list-style-type: none"> Remove unauthorized chemicals, room deodorizers and air fresheners. Keep exterior windows and door closed. Ensure adjustments are made by qualified HVAC technicians. Remove all live plants, animals, food waste, clutter and trash regularly. 	<ul style="list-style-type: none"> Initiate response to IAQ requests with IAQ program response protocol. Ensure Program Response Protocol Checklist for onsite resolution of IAQ issues has been completed prior to request for IAQ assessment by EH&S. Ensure recommendations for onsite staff responsibilities are completed. Ensure recommendations for PPO's work orders are completed. Notify requester and EH&S when IAQ recommendations are completed.

RESPONSE PROCEDURE (to be completed by Onsite Facility Servicepersons)

The following steps should be taken when someone at your facility has a complaint about Indoor Air Quality. Most IAQ complaints can be satisfied simply by completing these simple response procedures as outlined below.

1. Check the complaint area for visible water damage or staining.
 - a. Replace stained ceiling tiles AND initiate a work order to correct the source of the water intrusion.
 - b. Initiate a work order to correct cause of visibly water damaged walls, ceilings, or other surfaces (i.e. stains or blistered / peeling paint), AND to replace water damaged or stained material.
2. Check the complaint area for visible dust / dirt / debris on surfaces. Make sure flooring in complaint areas are thoroughly cleaned and free of dust and debris. Remove any build-up of dust within a complaint area, clean and sanitize all environmental surfaces utilizing the district's approved germicidal cleaner (e.g. Wexcide*).
3. Check the HVAC System servicing the complaint area. Make sure HVAC filters are clean and installed properly. Clean and sanitize HVAC supply and return grills within complaint areas utilizing the district's approved germicidal cleaner (e.g. Wexcide*). If the complaint is due to temperature or humidity, initiate a work order for HVAC repairs.
4. Check the complaint area for other items or furnishings that may contribute to poor IAQ. Remove any live plants or animals from complaint areas. Remove all chemicals and room deodorizers/air fresheners from complaint areas. Remove all stuffed animals, cardboard boxes, excess papers, books, and stored items from the complaint area.
5. Check the complaint area for visible microbial growth. Any hard (non- porous) surfaces with visible microbial growth should be cleaned and sanitized utilizing the district's approved germicidal cleaner (e.g. Wexcide*), **providing microbial growth does not cover more than 10 sq. feet of surface area.**

** When utilizing any district approved chemical it is important to ensure the product is utilized in accordance to manufacturer's labeled directions and appropriate personal protection is worn.*

Head Facility Serviceperson OR Administration is responsible to ensure Physical Plant Operations completes all work orders in the complaint area and all areas are returned to clean un-damaged condition.

Wait up to 30 days after completing the RESPONSE PROTOCOL. If Administration/Facility Serviceperson receive an additional IAQ complaint for the same area after the 30 days has expired, the visible microbial growth returns after cleaning/completing RESPONSE PROTOCOL, or if the area of growth is greater than 10 square feet; then an IAQ ASSESSMENT should be requested from the Environmental Health & Safety Department. In an effort to efficiently allocate resources, locations should ensure the REPOSENSE PROTOCOL identified above have been completed **prior** to requesting an IAQ ASSESSMENT from Environmental Health & Safety.

IAQ ASSESSMENT REQUEST PROCEDURES

- In the event that the corrective measures identified in the above RESPONSE PROCEDURE have not satisfactorily resolved an occupant complaint, the facility Administrator shall be notified and the complaint shall be referred to Environmental Health & Safety by completing an IAQ ASSESSMENT REQUEST.
 - Environmental Health & Safety -Indoor Air Quality WEBPAGE
 - Adobe Acrobat .pdf document submitted via email to EHS-help@browardschools.com.
- An IAQ Assessment Team member from the Environmental Health & Safety Department may contact you after receiving the request, to gather additional information and prioritize the complaint.
- An IAQ Assessment Team member will conduct the IAQ assessment of the complaint area in a timely manner.
- The IAQ Assessment Team is responsible for reviewing the nature of a complaint, identifying sources triggering a complaint and developing a recommended course of action to remedy issues.
- The written course of action (report) will identify all issues posing an immediate health hazard, identify and ensure appropriate measures are taken to protect the health and safety of all building occupants, specify measures to be taken and individuals responsible for these actions.

- All parties responsible for corrective actions will be identified based on the nature and scope of work to be completed. This includes Site-based facility service persons, Physical Plant Operations, or Facilities & Construction. *The Facilities & Construction Management department is responsible for determining the most expedient manner to complete a scope of work requiring services of Facilities & Construction.*
- Microbial damaged materials will be remediated utilizing the Environmental Protection Agency's "Mold Remediation in Schools and Commercial Buildings" guidelines. These remediation specifications outline various levels of contamination and appropriate procedures to remediate such contaminated materials.
- All IAQ Reports are available for review on the Environmental Health & Safety Department Website.