



## **INDOOR AIR QUALITY**

**1. Purpose** - These administrative procedures are provided to implement School Board Policy 7.195 (Indoor Air Quality).

**2. Applicability** - These procedures shall apply to all existing and new District schools, ancillary facilities and vehicles.

### **3. Building Construction and Components**

- a. Carpeting often acts as a chemical and biological sink, capturing dirt, soils, grime, fungi, allergens and bacteria as well as chemicals that build up and create an exposure pathway for occupants. The District will not use carpeting in schools, other than the Principal's office.
- b. It is known that many building materials and cleaning products release volatile organic compounds into the air. It is recognized that these products negatively impact many people.
- c. Facilities Management shall replace all remaining chalkboards by August 15, 2010.
- d. The District will specify low volatile organic compound (VOC) products in construction, maintenance and custodial activities.
- e. Facilities Management shall ensure that the District's building design standards including the District Design Guidelines, District Master Specifications and Educational Specifications require good indoor air quality (IAQ) techniques and materials. Examples include the use of moisture resistant drywall, vinyl coated ceiling tiles, low VOC furnishings, vapor barriers and insulation appropriate for the South Florida climate.
- f. Facilities Management shall conduct annual training to ensure District design, construction and maintenance staff as well as architects, contractors and other vendors are aware of the measures that must be taken in order to ensure good IAQ in District facilities.

### **4. Building Maintenance**

- a. It is known that efficient air conditioning can provide for improved IAQ. The District will perform Preventive Maintenance on all air handlers annually.
- b. Preventive maintenance of air conditioning systems will include replacing air filters regularly, cleaning the interior components of the air conditioning units, cleaning the drain pan(s) and ensuring that the system is properly functioning to provide clean air at proper temperature

and humidity for the comfort and health of occupants. Extended life expectancy of equipment is an additional benefit.

- c. Leaks and spills can create a negative impact on IAQ while further harming building components. Procedures for leak and spill reporting, as well as cleanup are to be followed.
- d. Leaks and spills are to be reported by building occupants to building management so that the repairs and cleanup can be made.
- e. Custodians are trained in proper cleanup of indoor spills annually during summer training sessions.
- f. Cleaning chemicals can negatively impact IAQ and cause harm to building occupants. All custodial chemicals are approved by Maintenance & Plant Operations.
- g. The District will implement a "Green" Cleaning Program which will minimize, if not eliminate, the use of chemicals with known toxins and utilize cleaning materials and techniques which will lead to improved IAQ.
- h. The District will reduce the use of toxics in pesticides through the Integrated Pest Management program which the District has followed since 1993. This program will be updated at least once every 3 years.
- i. Painting, roofing, installing VCT floor tile and other maintenance work which is typically associated with strong odors are to be done when facilities are unoccupied or minimally occupied.
- j. Radon testing will be conducted by the ECO, as required by law.
- k. Facilities Management will implement measures to be proactive with regards to IAQ. This shall include, but not be limited to, checking the condition of ductwork, CO<sup>2</sup> levels and chemical storage.

## **5. Temperature and Humidity Control**

- a. American Society of Heating, Refrigeration & Air Conditioning Engineers (ASHRAE) Standards have been developed to provide building occupants with comfort during heating or cooling of structures. These standards are aimed at keeping 80% of the occupants comfortable.
- b. Setting cooling temperatures below 75 degrees F may allow condensation, leading to mold growth inside facilities causing damaged furnishings, building materials, text books and other educational materials. Therefore, the District will maintain its facilities between 75 – 78 degrees F for cooling purposes and not lower than 68 degrees F for heating purposes, during occupied times. Relative humidity will be maintained below 60% during occupied times and below 65% during unoccupied times.
- c. Thermostats are set by Facilities Management for all District owned and controlled facilities. Requests to adjust the temperature are to be submitted to Facilities Management. Any unauthorized tampering of

thermostats or other air conditioning system components may result in disciplinary action.

## **6. Building Occupants**

- a. It is known that animals release dander and bacteria that negatively impact IAQ. Many animals also carry disease vectors. The District will adhere to Policy 6Gx50-7.24, Animals on District Property.
- b. Department as well as school based staff will receive information on the reduction of asthma triggers, allergens and chemical exposure. Information provided is aimed at correcting occupant operational habits that negatively impact IAQ. This information is provided in *Indoor Air Quality Tips for Teachers* available on the Public Affairs web-site.
- c. District staff are not permitted to bring unapproved chemicals including, but not limited to, household cleaning chemicals, poisons and pesticides onto District property. If cleaning chemicals are needed, they are to be requested from the building custodial staff. If there is a pest control problem, a work order is to be submitted to Maintenance & Plant Operations to address the problem.
- d. All curriculum used chemicals are approved through Curriculum and the Environmental Control Office.
- e. Occupants are encouraged to use materials that do not give off strong odors such as low-VOC dry erase markers and paints whenever possible.
- f. Ozone is highly reactive and negatively impacts IAQ. All ozone producing "Air cleaners" are banned from District facilities. No other air cleaning machines will be permitted unless approved by the ECO.
- g. Improper chair protectors (ex. tennis balls) that negatively impact IAQ are not to be used in District facilities. Only District approved furniture slides are to be used.
- h. Materials shall not be stored in mechanical rooms, as it is a violation of Building Code and can negatively impact IAQ by contaminating the air stream. Materials shall also be kept away from all air intake vents.
- i. Food and beverages can attract pests which can cause IAQ problems. All food waste shall be placed in kitchens or cafeterias only. Any food wrappers or containers must be removed from all classrooms, offices, and conference rooms by the end of the day. All food shall be stored in tightly sealed containers and any crumbs or spills must be cleaned immediately.
- j. Schools and departments shall clean out all closets and storage areas at least once per year.
- k. Doors and windows connecting air conditioned and non-air conditioned spaces or the outdoors shall not be held or blocked open because this

allows excessive moisture into the air conditioned space which could result in poor IAQ.

- i. Some people are very sensitive to perfumes and colognes. Perfumes and colognes shall not be sprayed in District facilities or vehicles. If a person complains about perfumes or colognes, the building administrator will attempt to work out a mutually acceptable arrangement between the parties, however, if one can not be reached, the person(s) wearing the perfume or cologne will be asked to cease from using them.
- m. It is known that deodorizers and candles release chemicals and soot that negatively impact IAQ. District staff will adhere to Bulletin #P-11383-FO/EBRM which states:

“The use of deodorizers and scented candles continue to be an issue within District schools and facilities. Several different studies have been conducted that conclude that these items may cause adverse health effects such as, asthma, respiratory infections, allergic reactions, or irritant reactions. These adverse health effects may cause increased absenteeism and poor performance. In addition, State Requirements for Education Facilities (SREF) prohibits open flames and toxic materials in District facilities.

Effective June 5, 2004, all scented candles and room deodorizers must be removed from District facilities. After June 5, 2004, any room deodorizers or scented candles found on District property will be immediately removed by the Custodial, Facilities, Risk Management, or Environmental Control Office staff.”

- n. During the summer, school administrators are to check each classroom and school building at least once every fourteen (14) calendar days to check for conditions which can negatively impact IAQ. This includes leaks, visible mold, improperly operating HVAC units, condensation on walls or furnishings, vermin, odors, and refrigerators that are operating and have not been emptied and cleaned.
- o. Each school shall designate an employee who is responsible for IAQ issues. This person shall receive supplemental training on management of IAQ issues and communicate relevant information to the school staff. The ECO will provide training to school designees.
- p. There shall be no smoking in District facilities or vehicles in accordance with School Board Policy 7.19 (Tobacco Products).
- q. Schools are encouraged to collaborate with Facilities Management, Supplemental Educational Services, health care professionals and other appropriate parties as necessary to implement appropriate aspects of the American Lung Association’s Asthma-Friendly Schools Initiative and/or the U.S. Environmental Protection Agency’s Indoor Air Quality Tools for Schools.

## **7. Response to Indoor Air Quality Concerns**

- a. IAQ concerns shall be reported to the ECO, who will investigate the concerns within four (4) business days and take the necessary steps to follow up with appropriate parties to ensure any necessary corrections are made as expeditiously as possible.
- b. IAQ investigations and corrections, when necessary, shall be done in accordance with U.S. Environmental Protection Agency guidelines.
- c. The ECO shall maintain IAQ records.
- d. Water damaged materials such as carpeting, ceiling tiles, books and furnishings must be completely dried out within twenty-four (24) hours to prevent mold growth, therefore if these situations exist the building's occupants need to take immediate action to address these items and call in an emergency work order to Maintenance & Plant Operations for assistance.