Building/Facility Manager: Indoor Air Quality

The Harvard University Indoor Air Quality (IAQ) Program establishes guidelines and best practices to assist building managers in maintaining good indoor environmental quality. The goal is to operate buildings in a manner that meets established performance standards regarding ventilation, temperature, relative humidity, air quality, odor, noise and lighting.

Proper design, construction, commissioning and ongoing maintenance of building systems are necessary to provide a healthy and productive workplace. IAQ issues have gained increasing attention and should be a high priority for building managers.

We have a mix of facilities ranging from state-of-the-art computer-controlled building systems through many generations of older equipment. Building managers should work to maintain the best IAQ parameters possible for each building in a manner that moderates energy usage and attempts to maximize occupant comfort.

EHS provides technical assistance and training to building managers and staff on IAQ related topics and will aid building managers in responding to IAQ concerns.

Recommendations

☐ Conduct a facility-wide IAQ survey noting odors, unsanitary conditions, visible mold growth, staining, and presence of moisture in inappropriate places, hazardous chemicals, potential soil gas entry, poorly maintained filters, overcrowding, personal air cleaners, uneven temperatures and blocked vents.

☐ Determine operating schedule and design parameters for HVAC system and ensure adequate fresh air is provided for contaminant control. Maintain complete, accurate, up-to-date ventilation system records.

☐ Ensure that appropriate preventive maintenance is performed on HVAC system including outside air intakes, distribution dampers, air filters, drain pans, heating and cooling coils, inside of air handling unit, fan motor and belts, air distribution ducts and VAV boxes, air humidification, controls and cooling towers.

☐ Manage processes with potentially significant pollution sources such as: renovation and remodeling, painting, shipping and receiving, pest control and smoking. Review IAQ impacts of all renovation and construction projects to ensure adequate controls are instituted.

☐ When mold growth is present, seek assistance to remediate. Follow-up with changes to materials and repair or adjust building infrastructure and mechanical systems as needed.

☐ Control moisture inside buildings to prevent mold growth, particularly in basements. Dehumidify when necessary and respond promptly to floods, leaks and spills. Care must be taken to restrict the use of porous materials, such as carpeting in basements.

☐ Educate cleaning staff regarding proper methods and products, cleaning schedules, materials storage and use, and trash disposal.

☐ Communicate with occupants about their role in maintaining acceptable indoor environmental quality.