

INDOOR ENVIRONMENTAL QUALITY (ALL OFFICES)

OBJECTIVES

- Staff will understand IEQ exposures
- Staff will learn IEQ preventative measures
- Upon completion, staff will inspect their work areas for IEQ hazards

During the last 20 years, concerns associated with Indoor Environmental Quality (IEQ) have escalated in the American workplace. Virtually every company has experienced some form of IEQ problem or complaint. These problems or complaints stemmed from water damage, contaminants, toxic fumes or vapors, and micro-biologicals, such as mold and fungus. The National Institute for Occupational Safety and Health (NIOSH) investigates many IEQ complaints and found that the problems were caused by ventilation system deficiencies, office overcrowding, off gassing from materials in the office and mechanical equipment, smoke, microbiological contamination, and outside air pollutants. If contaminant concentrations are excessive, IEQ problems can arise, even if the HVAC system is properly designed and well-maintained.

"Indoor Environmental Quality," as the name implies, refers to the quality of the environment in an office or building. You are probably more familiar with the terms "Indoor Air Quality" and "Sick Building Syndrome". "Indoor Air Quality," as the name implies, simply refers to the quality of the air in an office environment. "Sick Building Syndrome" is a term many people use to convey a wide range of symptoms they believe can be attributed to the building itself.

During the 1970's, building ventilation requirements were changed to conserve fossil fuels, and virtually air-tight buildings emerged. At this same time, computers and other new work technologies introduced additional contaminants and toxins into the office. Coupled with the conservation measures and changing technology was a dramatic increase in the number of workers in the office. All these factors can contribute to IEQ problems.

PREVENTATIVE MEASURES

Maintaining a healthy and comfortable indoor environment in any building requires integrating many components of a complex system. Most IEQ problems can be prevented by following a few practical, common-sense solutions:

- Maintain a clean work area; do not allow storage to accumulate.

- Report all equipment damage, and water leaks or moisture stains in the roof, plumbing, ceiling finish, and carpeting to Building Maintenance, as these deficiencies can cause mold and fungus growth.
- Provide entry mats at building entrances to trap soil and other contaminants.
- Assure that all floors are cleaned and vacuumed at least weekly.
- Develop a preventive maintenance schedule for all HVAC equipment.
- Ensure the HVAC system is maintained and that all operating equipment and controls are in proper working condition. The HVAC system should be inspected and serviced as recommended by the manufacturer, but no longer than every 6 months (Winter and Summer transitions). Ensure that all exhaust fans operating independently of the HVAC system are functioning properly.
- Replace HVAC filters as recommended by the manufacturer. Most roof-mounted units should be replaced monthly.
- Do not modify office areas by covering supply air vents with furnishings, cardboard, etc.
- Ensure pesticides used in facilities do not create additional environmental or IEQ hazards. Review cleaning and pesticide schedules, ensuring cleaning/pesticide agents introducing strong odors or contaminants are done during unoccupied or minimal staffing periods.
- Identify aspects of projects that could affect IEQ and manage these projects to ensure that good IEQ practices are maintained. Projects would include renovations, remodeling, relocating of personnel and functions within the building, and new construction. These projects or activities can create IEQ problems by producing dust, odors, toxic chemicals, off gassing materials, and micro-biologicals.
- Review all hazardous material product material safety data sheets (MSDS) in the facility to determine their impact on IEQ and appropriateness for the facility. Whenever possible, eliminate hazardous products for less hazardous products.

POLICY

Discuss all policies related to indoor environmental quality, housekeeping, and facility maintenance.

CLOSING

- *Encourage discussion about IEQ issues and preventative measures that should be taken to prevent IEQ problems.*
- *Upon completion of this presentation, staff should inspect their work area for IEQ hazards.*