Self-inspection notes

Walking the line on indoor air quality problems

A complaint from an employee at your healthcare facility is one way to identify problems with indoor air quality (IAQ), but a regular schedule of walk-through inspections can preempt air contamination hazards and time-consuming investigations.

OSHA states that IAQ problems can be caused by hazardous substances, deficient ventilation systems, employee overcrowding, microbiological contamination, pollution from outside air, and off-gassing from materials in the office furnishings, floor coverings, and mechanical equipment.

You don't have to be an industrial hygienist or an environmental engineer to conduct a facility IAQ walk-through inspection, which is a key component in maintaining a healthy and comfortable IAQ.

Walk-through inspections help you acquire a good overview of worker activities and facility functions that may affect IAQ, according to the NIOSH publication, *Building Air Quality Action Plan.* Even if you think you are familiar with your workplace, the walk-through allows you to view your building specifically with IAQ in mind. If possible, do a walk-through with other staff members familiar with workplace areas. Another perspective may help you notice problems you may otherwise miss. Try to at least talk to other staff members to identify potential or existing problems.

As you walk through your facility, pay attention to obvious and seemingly inconsequential indicators of possible IAQ problems. Discolored walls could indicate mold growth, whereas fans at workstations could indicate inadequate ventilation or cooling, according to the NIOSH publication.

Use the checklist below, adapted from *Building Air Quality Action Plan*, to conduct your next IAQ walk-through. ■

Quick self-inspection checklist: Indoor air quality (IAQ) walk-through activities

- ❑ You conduct a facility walk-through inspection at least once per year for:
  - ❑ All occupied areas
  - ❑ All mechanical and storage rooms
- ❑ You promptly conduct a walk-through inspection in specific areas in response to employee or patient complaints
- ❑ During the walk-through, you reference or create a pollutant/source inventory
- ❑ You identify existing and potential IAQ problem indicators, including:
  - ❑ Odors
  - ❑ Dirty or unsanitary conditions
  - ❑ Visible fungal growth
  - ❑ Mold or mildew
  - ❑ Moisture in inappropriate locations
  - ❑ Staining or discoloration of building materials
  - ❑ Smoke damage
  - ❑ Presence of toxic substances
  - ❑ Poorly maintained filters
  - ❑ Soil-gas entry locations
  - ❑ Unusual noises from equipment
  - ❑ Evidence of leaks or spills
  - ❑ Uneven temperatures
  - ❑ Uneven airflow
  - ❑ Overcrowding
  - ❑ Personal air cleaning devices (ion generators, ozone generators, or portable filtration units)
  - ❑ Personal fans
  - ❑ Blocked or redirected vents/diffusers
- ❑ You take notes on the floor plan during the walk-through, identifying potential or existing problems indicating a need for either close monitoring or corrective action
- ❑ If needed, you have access to HVAC systems and operations information, including a:
  - ❑ List of components needing repair, adjustment, cleaning, replacement, or regular maintenance
  - ❑ Record of control settings and operating schedules for air-handling units
- ❑ You check if significant sources of contamination are directly exhausted to the outside or can be moved close to an exhaust fan

Source: Building Air Quality Action Plan, *NIOSH, Publication No. 91–114. Adapted with permission.*