INDOOR AIR QUALITY PROGRAM

Program Element R2-10-207(11)(i)

The overall Industrial Hygiene Program shall include a Building Air Quality element when applicable.

Indoor Air Quality (IAQ) is "a constantly changing interaction of complex factors that affect the types, levels, and importance of irritants in indoor environments" (EPA).

Development of established IAQ policies and procedures will help reduce IAQ issues before they become a concern in the work environment. It is the responsibility of each agency to ensure employees are provided a safe and healthy work environment. Coordination with the landlord, custodians, supervisors, maintenance personnel, contractors, facility managers, loss prevention coordinators (LPCs), and building occupants is necessary to accomplish this. Each entity must understand what is expected of them and how they can impact IAQ issues within the agency. Timely response to IAQ concerns is necessary to minimize exposures and to better assure safe and healthy work environments.

Definition:	An Indoor Air Quality Program will establish policies and procedures to prevent building occupants from developing symptoms related to poor indoor air quality. These symptoms may include, headaches, dizziness, nausea, respiratory irritation, itching eyes, coughing, sneezing, congestion, fatigue, difficulty concentrating, and discomforts or reactions to various odors.
Why do I need this program?	It is important to respond quickly and effectively to IAQ issues to prevent adverse health problems. Health effects from IAQ issues may surface immediately or years later. (OSHA, 2011) An agency IAQ Program will establish protocol for preventing, identifying, and resolving IAQ issues.
How do I know if this program applies to my agency and my specific job hazards?	IAQ Programs are necessary to prevent, control and minimize employee and occupant IAQ issues. Potential IAQ problems should be assessed through evaluation of emission sources, ventilation system efficiency, building condition, and maintenance schedules. Evaluation forms are available from the EPA I-BEAM and OSHA Indoor Air Quality in Commercial and Institutional Buildings.

What are the minimum required elements and/ or best practices for an Indoor Air Quality Program?

The components of an IAQ Program are essential to an overall safety and health program approach including:

- Management commitment
- Training
- Employee involvement
- Hazard identification and control and
- Program audit

Starting a new IAQ Program seems overwhelming, however, a systematic approach is needed to begin and maintain a program. The EPA Building Air Quality Action Plan recommends the following eight steps:

- 1. Designate an IAQ manager
- 2. Develop an IAQ profile of your building
 - Identify and review existing records
 - Conduct a walkthrough to assess the current IAQ situation
- 3. Existing and potential IAQ problems
- 4. Educate building personnel about IAQ
- 5. Develop and implement a plan for facility operations including:
 - HVAC operations
 - Housekeeping
 - Preventative maintenance
- 6. Manage processes with potentially significant pollutant sources including:
 - Remodeling and renovation
 - Painting
 - Pest Control
 - Shipping and receiving
 - Smoking
- 7. Communicate with tenants and occupants about their role in maintaining good IAQ
- 8. Establish procedures for responding to IAQ complaints

Are there any mandatory training requirements or best practices that must be developed by the agency?

IAQ training should be conducted with building staff and contractors.

The following training topics should be considered:

- Indoor air pollution sources and their health effects
- How buildings operate
- Guidelines available to identify indoor air quality hazard levels
- Recommended approaches to prevention, diagnosis and mitigation

Building occupants should be provided with information about the sources and effects of pollutants under their control, and proper operation of the ventilation system.

Are there specific requirements for documenting the program, training, etc...?

All training should be documented either in paper format, electronic means or via HRIS/YES Portal.

Program documents, training materials, and attendance rosters should be maintained in accordance with AZ Library, Archives and Public Records general retention schedules, <u>LAPR</u> - Retention Schedules.

Are there any resources available that can assist me in putting together an Indoor Air Quality Program?

Yes. Loss Prevention Consultants are available who can assist managers and supervisors in identifying potential hazards, and guide agencies on the establishment of program elements.

Other Resources:

- EPA http://www.epa.gov/iag/moreinfo.html
- EPA (2012) I-BEAM Forms. Retrieved from http://www.epa.gov/iaq/largebldgs/i-beam/forms.html
- The Indoor Air Quality Association (IAQA) http://www.iaqa.org/
- AIHA Practitioner's Approach to IAQ Investigations (1989)
- ASHRAE 61.1 2010 Ventilation for Acceptable Indoor Air Quality

- ACGIH Bioaerosols: Assessment and Control (2000)
- AIHA Field Guide for Determination of Biological Contaminants..., 2nd Ed. (2005)
- Jeff Burton The IAQ and HVAC Workbook
- OSHA (2011) Indoor Air Quality in Commercial and Institutional Buildings, 3430-04. Retrieved from

https://www.osha.gov/Publications/3430indoorair-quality-sm.pdf