

Indoor Air Quality Management Plan



Environmental Health, Safety, and Risk Management Department

**Box 6113, SFA Station
Nacogdoches, Texas 75962-6113**

Established: May, 26, 2010

Revised: January 2011

Revised: February 2019

Latest Revision: June 2022

Introduction

Stephen F. Austin State University is committed to providing its students, employees, and visitors an indoor environment free of contaminants and nuisance odors which may contribute to adverse health effects. Indoor Air Quality (IAQ) can be influenced by many factors such as ambient air temperature, humidity, filter change frequency, presence of UV lights on fresh air intake, and amount of fresh air introduced into the building. Complaints about IAQ range from simple complaints of comfort issues (too hot/cold/drafty, etc.) and odd smells, to more complex problems, where the air quality may be suspected of causing illness and lost work time.

It may not be easy to identify a single reason for IAQ complaints because of the number and variety of possible sources, causes, and varying individual sensitivities. Nevertheless, SFA takes indoor air quality concerns very seriously and will ensure campus work and learning environments are safe at all times. The following Indoor Air Quality Management Plan should be followed in an effort to ensure optimal indoor air quality on the SFA campus.

IAQ Coordinator

The IAQ Coordinator at Stephen F. Austin State University is Kenneth Hudson (468-3206) or designee in conjunction with the Environmental Health, Safety, and Risk Management Department (EHSRM).

The IAQ Coordinator is responsible for managing the Indoor Air Quality Management Program at Stephen F. Austin State University. IAQ Coordinator responsibilities include:

- Training employees in the recognition, prevention, and resolution of IAQ problems.
- Communicating with building occupants concerning IAQ issues or problems.
- Consulting with EHSRM when health and safety related to IAQ is a concern. Environmental testing and monitoring may be requested for oxygen concentration in air and chemical air pollutants, as well as identification of mold or asbestos.
- Developing a procedure for documenting and responding to IAQ complaints and problems.
- Maintaining IAQ records. IAQ records include: IAQ complaints and resolutions; and documentation of any maintenance, repair, or remodeling activity that could adversely impact indoor air quality.
- Conducting an annual, at the minimum, documented inspection of the premises.
- Conducting periodic walkthroughs to assess the current IAQ situation

The IAQ coordinator or designee conducts periodic walkthrough inspections which involves both occupied areas and mechanical rooms. During the walkthrough, IAQ problem indicators are checked and noted on a floor plan or comparable drawing, including:

- Odors
- Dirty or unsanitary conditions
- Visible fungal growth or moldy odors
- Evident moisture in inappropriate locations (e.g., moisture on walls, ceiling, floors, or carpets)
- Staining or discoloration of building material(s)

- Smoke damage
- Presence of hazardous substances
- Unusual odors from equipment
- Poorly-maintained filters
- Uneven temperatures
- Personal air cleaners (e.g., ozone generators, portable filtration units) or fans
- Inadequate ventilation
- Blocked vents
- Other conditions that could impact IAQ, especially risk factors that need regular inspection to prevent IAQ problems from occurring (e.g., drain pans that do not fully drain).

The condition and operations of the HVAC system are inspected, including:

Components that need to be repaired, adjusted, cleaned, or replaced have been, and work orders submitted.

Areas with significant sources of contaminants (e.g., laboratories, chemical storage rooms, welding/machine shops, copy rooms, food service areas, printing/photographic areas) are provided with adequate exhaust. Other sources are moved as close to exhaust as possible.

EHSRM, Safety Officer

The Environmental Health, Safety, and Risk Management Department (EHSRM) carries out routine environmental health and safety inspections in both on and off campus facilities. In doing so, IAQ problems or concerns identified in these inspections are further investigated with the assistance of appropriate maintenance personnel. The Safety Officer can be reached at (468-6034) or by email at safety@sfasu.edu

EHSRM responsibilities related to IAQ include:

- Respond to health and safety concerns related to indoor air quality.
- Test for potential air contaminants (asbestos, mold, chemical air pollutants).
- Monitor the indoor oxygen concentration.
- Test building materials for the presence of moisture and assess potential for mold growth.
- Communicate test results with building occupants and maintenance staff while recommending corrective actions.
- Train applicable laboratory and maintenance staff on proper use and storage of chemicals and hazardous waste
- Work with emergency personnel to evacuate a building when indoor air quality poses a risk to human health.
- Inspect and certify chemical fume hoods and hazardous work area exhaust ventilation systems at least annually.
- Submit work orders when problems affecting IAQ are identified.

Existing and Potential IAQ Problems

The IAQ Coordinator conducts an ongoing assessment of campus buildings for existing problems. Identified IAQ problems are corrected and steps are taken to control them, including both source-related IAQ problems and ventilation-related IAQ problems.

Training

The IAQ coordinator and/or the EHSRM Safety Officer can provide IAQ related training and information to SFA maintenance staff, laboratory faculty/staff, and contractors upon request.

Plan for Facility Operations and Maintenance

HVAC Operations

Operating schedules for HVAC equipment have been written and are updated as needed.

Preventive Maintenance

SFA preventive maintenance plans has been written and are followed on a regular schedule; this schedule is updated as needed.

The preventive maintenance plan or contract includes the following maintenance items:

- Outside air intakes are inspected for nearby sources of contaminants.
- Air distribution dampers are maintained clear of obstructions and operating properly.
- Air filters have the pressure drops monitored, and replacement or cleaning is performed regularly.
- Drain pans are inspected and cleaned to ensure proper drainage.
- Heating and cooling coils are inspected and cleaned.
- Interior of air handling units are inspected and cleaned, as needed.
- Fan motor and belts are inspected and replaced as needed.
- Cooling towers are inspected, cleaned, and water treated according to schedule.
- Air distribution pathways are inspected and cleaned as needed.
- The preventative maintenance plan and operation manuals are updated when equipment is added, removed, or replaced.

Unscheduled Maintenance

Procedures for unscheduled maintenance events (e.g., equipment failure) have been written and communicated to building staff. They include:

- Agency personnel immediately contact the IAQ Coordinator that a maintenance event has occurred.
- The IAQ Coordinator ensures that notification to occupants is provided in a timely manner, addressing how IAQ is being protected.
- Any necessary remedial action is then taken.
- The IAQ Coordinator then informs occupants that corrective actions have been completed.

Custodial Services

All custodial equipment and products used in the building are communicated to the IAQ Coordinator. Additionally, custodial supervisors maintain an inventory of all chemicals used, and keep the IAQ Coordinator updated on the inventory.

The products used at Stephen F. Austin State University that may produce strong odors, are potential irritants, or may have other IAQ impacts have been identified, and, where possible, have been replaced by safer products.

The SFA Custodial Supervisor has written procedures that detail proper use, storage, and purchase of cleaning materials; these are updated as needed.

The custodial staff or contractors are educated about the IAQ implications, appropriate use, and application of the following to improve IAQ:

- Proper cleaning methods
- Cleaning schedules
- Proper materials storage and use
- Proper waste disposal

Management of Processes with Potentially Significant Pollutant Sources

Purchasing Practices

When new products are purchased, information on potential indoor air contaminant emissions is requested from the product suppliers. This will primarily be in the form of a Safety Data Sheet (SDS). When the services of architects, engineers, contractors, or other professionals are used, IAQ concerns, such as special exhaust needs, are discussed during pre-construction/work meetings.

Remodeling and Renovation

Procedures to minimize the generation and migration of contaminants or odors to occupied areas of the building are used and required of contractors.

The procedures used at SFA are:

- The IAQ Coordinator and EHSRM Safety Officer review designs and construction activities for all proposed remodeling and renovation activities prior to their initiation.
- Work is scheduled during periods of minimum occupancy.
- Ventilation is provided in order to isolate work areas.
- Lower-emitting work processes are used when possible (e.g., wet-sanding dry wall).
- Specialized cleaning procedures are used (e.g., use of HEPA vacuums and air filtration).
- Building air filters are changed more frequently, especially after work is completed.
- Ventilation and distribution equipment are protected from contamination during construction.

Painting

Exposure to paint vapors is minimized by using low-emitting products, scheduling work during periods of minimum occupancy, and increasing ventilation.

Pest Control

Integrated Pest Management procedures are used to the extent possible:

- Pest control services at SFA are contracted out to a licensed pest management provider(s).
- The pest control products being used in the building are communicated to the IAQ Coordinator and the EHSRM Safety Officer.
- Written procedures and contract language ensure that all people who use pest control products read and follow all label directions for proper use, mixing, storage and disposal.
- Non-chemical pest control strategies are used where possible.
- The safest available pest control products that meet the building's needs are used or reviewed with the pest control contractor.

Shipping or Receiving Activities

Vehicle exhaust from loading and unloading activities has the potential to enter occupied spaces of the building. Vehicle exhaust will be handled on a case by case basis and all precautions will be made to keep fumes from entering a building.

Smoking

SFA is a tobacco/smoke free campus. Smoking is prohibited in all Stephen F. Austin State University buildings as well as campus grounds and off-campus facilities.

Maintaining Cooperative Relations with Occupants

The IAQ Coordinator keeps occupants routinely informed about building conditions and policies that may impact IAQ. Additionally, occupants are notified about planned major renovation, remodeling, maintenance or pest control activities. The IAQ Coordinator and/or EHSRM Safety Officer will follow-up on IAQ related complaints and communicate steps taken to resolve the issue.

Procedures for Responding to IAQ Complaints

Procedures for responding to IAQ complaints have been written and are followed, including:

- IAQ problems are logged into the existing work-order system.
- Information is collected from the person making the complaint.
- Information and records obtained from complainants are kept confidential.
- The capability of in-house staff to respond to complaints is assessed.
- Appropriate outside sources of assistance are identified (e.g., asbestos or mold abatement).

Feedback is provided in a timely manner to the complainant.

- Remedial actions have been taken.
- Follow-up to determine if the action has been effective.
- Building occupants have been informed of these procedures.

Note: The State Office of Risk Management and Stephen F. Austin State University thanks Clemson University Environmental Health and Safety for their assistance in the preparation of the Indoor Air Quality Management Plan.