

TEXAS STATE TECHNICAL COLLEGE
STATEWIDE OPERATING STANDARD

No. GA.1.64	Page 1 of 7	Effective Date: 03/19/15
DIVISION:	General Administration	
SUBJECT:	Indoor Air Quality	
AUTHORITY:	Indoor Air Quality Program, MC 1987 Texas Department of State Health Services	
PROPOSED BY:	<i>Original Signed by Tom Hooker</i>	
TITLE:	Director, Governance, Risk, and Compliance	Date: 03/19/15
RECOMMENDED BY:	<i>Original Signed by Jonathan Hoekstra</i>	
TITLE:	Vice Chancellor/Chief Financial Officer	Date: 03/19/15
APPROVED BY:	<i>Original Signed by Mike Reeser</i>	
TITLE:	Chancellor	Date: 03/19/15

STATUS: Approved by EMC 03/19/15

HISTORICAL STATUS: Proposed 02/2015

POLICY

Compliance

PERTINENT INFORMATION

In accordance with the Texas Department of State Health Services, Indoor Air Quality Program (IAQ), Texas State Technical College (TSTC) to provide its students, employees, and visitors an indoor environment free of contaminants and airborne disease agents.

Concerns with Indoor Air Quality (IAQ) have increased since energy conservation measures were instituted in office buildings during the 1970s, minimizing the infiltration of outside air and contributing to the buildup of contaminants in the indoor air. Complaints about IAQ range from simple complaints from 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, Texas

State Technical College (TSTC) is committed to providing its students, employees, and visitors an indoor environment free of contaminants and airborne disease agents.

RESPONSIBILITIES

Each TSTC Campus will have a designated IAQ Coordinator who is responsible for managing the Indoor Air Quality Management Program for their respective campus. IAQ Coordinator responsibilities include:

- Training employees in the recognition, prevention, and resolution of IAQ problems.
- Communicating with building occupants concerning IAQ issues or problems.
- Developing a procedure for documenting and responding to IAQ complaints and problems.
- Maintaining IAQ records, to include any IAQ complaints and resolutions, walkthrough inspections, and any maintenance, repair, or remodeling activity that could adversely impact indoor air quality.
- Conducting, at a minimum, an annual documented inspection of the entire premises.

PROCEDURES

A. Conducting periodic walkthroughs to assess the current IAQ situation

The IAQ coordinator, or designate, conducts periodic walkthrough inspections to include 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, 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

- Inadequate exhaust air flow
- 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 with corresponding work orders prepared.
- Actual control settings and operating schedules for each air-handling unit have been recorded, filed, and checked against the design intent.
- Areas with significant sources of contaminants (e.g., copy rooms, food service areas, printing/photographic areas) are provided with adequate exhaust. Other sources are moved as close to exhaust as possible.

B. Existing and Potential IAQ Problems

The IAQ Coordinator conducts an ongoing assessment of TSTC 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.

C. Plan for Facility Operations and Maintenance

1. **HVAC Operations:** Operating schedules for HVAC equipment have been written and are updated as needed for each campus.
2. **Preventive Maintenance:** A preventive maintenance plan has been written for each campus, is followed on a regular schedule and updated as needed (i.e. when equipment is added, removed, or replaced).

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

- Outside air intakes are to be inspected for nearby sources of contaminants
- Air distribution dampers are to be maintained clear of obstructions and operating properly
- Air filters are to have the pressure drops monitored, and replacement or cleaning are to be performed regularly
- Drain pans are to be 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 warranted

- Fan motor and belts are inspected and replaced as warranted
 - Air humidification and controls are inspected and regularly cleaned
 - Cooling towers are inspected, cleaned, and water treated according to schedule
 - Air distribution pathways and VAV boxes are inspected and cleaned as needed.
- 3. Unscheduled Maintenance:** Procedures for unscheduled maintenance events (e.g., equipment failure) have been written for each campus, and include:
- Notification that a maintenance event has occurred
 - Notification of occupants if IAQ is compromised or requires the building/facility to be vacated pending repair
 - Notification of occupants that corrective actions have been completed.
- 4. Housekeeping:** Procedures for housekeeping and janitorial duties have been written for each campus, and include:
- Proper cleaning methods
 - Cleaning schedules
 - Proper materials storage and use
 - Proper trash disposal

The products used at TSTC that may produce strong odors, potential irritation, or may have other IAQ impacts should constantly be considered for replacement by products without such impacts as they become available.

D. Management of Processes with Potentially Significant Pollutant Sources

1. Purchasing Practices

When new products are purchased, information on potential indoor air contaminant emissions is requested from product suppliers' safety data sheets (SDS) [Note: Emission information may not be readily available for many products; however information that is available is collected.] When the services of architects, engineers, contractors, or other professionals are used, IAQ concerns, such as special exhaust needs, are to be discussed.

2. Remodeling and Renovation

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

The procedures used at TSTC are:

- The IAQ Coordinator and Facilities Director review designs and construction activities for all proposed remodeling and renovation activities prior to their initiation;
- Work is to be scheduled during periods of minimum occupancy;
- Ventilation is to be provided in order to isolate work areas;
- Lower-emitting work processes are to be used (e.g., wet-sanding dry wall);
- Specialized cleaning procedures are to be used (e.g., use of HEPA vacuums);
- Filters are to be changed more frequently, especially after work is completed;
- Emissions from new furnishings are to be minimized (e.g., buying lower-emitting, airing out furnishings before installation, increased amount and duration of after installation);
- Ventilation and distribution equipment are to be protected from contamination during construction.

3. Painting

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

4. Pest Control

Integrated pest management procedures are to be used to the extent possible:

- The pest control products being used in the building are to be communicated to the IAQ Coordinator.
- Written procedures and contract language are to be used to 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 to be used where possible.
- The safest available pest control products that meet the building's needs are to be used or reviewed with pest control contractor.

5. Shipping or Receiving Activities

Vehicle exhaust has been prevented from entering the buildings (including through air intakes and building openings) by installing barriers to airflow from loading dock areas (e.g., doors, curtains, etc.) and using pressurization to prevent mixing of vehicle exhaust with building air.

Buildings without these barriers must be identified so that an alternate plan can be developed and implemented.

6. Smoking

Smoking is prohibited in all TSTC buildings, subject to TSTC SOS HR 2.4.13.

COMMUNICATION AND REPORTING

1. Maintaining Cooperative Relations with Occupants

TSTC IAQ Coordinators will keep occupants routinely informed about building conditions and policies that may impact IAQ (e.g., practices that attract insects or smoking policy clarifications). Additionally, occupants are notified about planned major renovation, remodeling, maintenance or pest control activities.

2. 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 complainants.
- 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.
- Feedback is provided in a timely manner to the complainant.
- Remedial actions are taken.
- Remedial actions are followed-up to determine if the action has been effective.

EMPLOYEE EDUCATION AND TRAINING

TSTC employees and contract personnel whose functions could impact IAQ (e.g., housekeeping staff, maintenance contractors) must be identified and trained.

The IAQ Coordinators will provide annual IAQ training and information via online distance learning to these TSTC employees and contractors - especially regarding use of hazardous chemicals.

PERFORMANCE STANDARDS

1. Each TSTC Campus has a designated IAQ Coordinator who is responsible for managing the Indoor Air Quality Management policy for their respective campus.
2. TSTC implements an Indoor Air Quality program to provide its students, employees, and visitors an indoor environment free of contaminants and airborne disease agents.

3. The IAQ policy is reviewed and updated annually by the TSTC Risk Manager and IAQ Coordinators.