



Indoor Air Quality Program

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Contents

I.	PROGRAM GOALS & OBJECTIVES	3
II.	DEFINITIONS.....	3
III.	RESPONSIBILITIES	3
IV.	REPORTING PROCEDURES	4
V.	INVESTIGATION PROCEDURES.....	4
VI.	MEDICAL EVALUATIONS.....	5
VII.	RECORDKEEPING.....	5
VIII.	CONTACT INFORMATION	5
IX.	REFERENCES	5
X.	APPENDICES	6
	Appendix A: Indoor Air Quality Guidelines.....	6
	Appendix B: Indoor Air Quality Survey.....	7

I. PROGRAM GOALS & OBJECTIVES

The purpose of this document is to provide guidance and procedures for the management of Indoor Air Quality (IAQ) concerns at Georgia State University (GSU). It is the goal of GSU to eliminate potential hazards in the workplace and to operate buildings in a manner that meets established performance standards regarding ventilation, temperature, relative humidity, air quality, odor, noise, and lighting.

This program applies to all GSU personnel and all owned and leased indoor environments.

II. DEFINITIONS

Indoor Air Quality (IAQ): Describes how indoor air can affect a person's health, comfort, and ability to work. IAQ can include temperature, humidity, lack of outside air (poor ventilation), airborne particulates, mold from water damage, or exposure to other chemicals.

Acceptable Indoor Air Quality: Some IAQ contaminants such as dust, chemicals, and mold are inherently present and cannot be completely removed from the work environment. As such, indoor air quality is considered acceptable when air contaminants are below established regulatory limits or best practice guidelines.

III. RESPONSIBILITIES

Insurance & Risk Management

- A. Administrative oversight of the Indoor Air Quality Program, including developing the written Indoor Air Quality Program and revising as necessary;
- B. Conduct indoor air quality investigations in response to reported personnel health concerns and/or symptoms related to work environment;
- C. Conduct monitoring for indoor air quality components as necessary, and maintain monitoring equipment;
- D. Maintain records of exposure measurements;
- E. Provide exposure monitoring results to all employees monitored for exposure;
- F. Collaborate with Facilities Management Services and/or outside contractors as needed to remediate IAQ concerns.

Supervisors/Departments

- A. Contact Insurance & Risk Management regarding health concerns or symptoms related to the work environment;
- B. Provide funding for laboratory analysis or other outside services necessary to complete IAQ investigations;
- C. Implement remedial recommendations;
- D. Provide accommodations as necessary;
- E. Provide appropriate PPE for employees as needed.

Employees

- A. Follow the procedures and requirements outlined in this program;
- B. Report indoor air quality concerns to your supervisor, Facilities Management, and/or Safety & Risk Management, as necessary;
- C. Cooperate with IAQ investigations and remediation, as necessary.

Facilities Management Services

- A. Respond to indoor air quality concerns, taking necessary remedial actions;
- B. Report health-related indoor air quality concerns to Safety & Risk Management;
- C. Ensure acceptable indoor air quality levels are maintained.

IV. REPORTING PROCEDURES

Indoor air quality concerns should be reported according to the following procedures:

A. Immediate Issues

Any IAQ concern that poses an immediate threat to personal health or safety should be reported to Georgia State University Police at 404-413-3333.

B. Physical Comfort

Contact Facilities Management Services (See Section VIII for contact info) for concerns related to physical discomfort. Such concerns include the following:

- i. Temperature or humidity issues;
- ii. Air movement/drafts from diffusers;
- iii. Stale air;
- iv. Particulates or dirt coming from the air handling system diffusers;
- v. Mold odor or visible mold;
- vi. Other unusual or unidentified odors.

C. Health Concerns and Symptoms

Personnel with health-related symptoms believed to be related to the work environment should complete the IAQ Survey (Appendix II) and return it to Safety & Risk Management (See Section VIII for contact info). Health-related concerns can include any of the following: headaches, nausea, dizziness, upper respiratory irritation, chest-tightness, dry/sore throat, fatigue, itching/irritated eyes, runny-nose, congestion, or shortness of breath. Upon receipt of the IAQ survey, Safety & Risk Management will contact the GSU personnel who submitted the complaint to schedule an investigation of the work area (See Section V: Investigation Procedures).

V. INVESTIGATION PROCEDURES

Safety & Risk Management will perform IAQ investigations according to the following:

- A. Review the IAQ survey, if available;
- B. Interview personnel with concerns and other building occupants in the immediate area of concern;
- C. Conduct a walk-through inspection of the building area of concern;
- D. Conduct air monitoring for indoor air quality parameters as necessary. IAQ parameters may include the following: temperature, relative humidity, carbon dioxide, volatile organic compounds (VOCs), and particulates;
- E. Contact outside contractor to perform additional environmental testing, if necessary;
- F. Compare measurements to established indoor air quality standards or guidelines (see Section IX: References, Appendix I: IAQ Guidelines);
- G. Report results to appropriate personnel and provide recommendations if necessary.

VI. MEDICAL EVALUATIONS

Georgia State University employees experiencing health concerns and symptoms related to indoor air quality in their work environment should report concerns to their supervisor and contact Risk Management (Section IX: Contact Information). Safety & Risk Management can help obtain medical evaluations at one of our occupational health partners.

VII. RECORDKEEPING

Risk Management will retain all indoor air quality and exposure monitoring reports. These reports will be retained for 30 years and made available to personnel upon request.

VIII. CONTACT INFORMATION

For questions and for health-related concerns/symptoms contact GSU's **Insurance & Risk Management**, Crystal White at cwhite112@gsu.edu or 404-413-9547.

Facilities Management Services: 404-413-0700

GSU Police Department:

Emergency: 404-413-3333

Non-Emergency: 404-413-2100

IX. REFERENCES

- United States Environmental Protection Agency (EPA) [An Office Building Occupants Guide to Indoor Air Quality](#)
- Occupational Safety and Health Administration (OSHA) [Indoor Air Quality](#)

X. APPENDICES

Appendix A: Indoor Air Quality Guidelines

PARAMETER	ASHRAE*	OSHA PEL**	ACGIH TLV***
Humidity	30% - 60%****	N/A	N/A
Temperature	68° - 75° (winter)	N/A	N/A
	73° - 79° (summer)		
Carbon Dioxide	1,000 ppm	5,000 ppm	5,000 ppm
Carbon Monoxide	9 ppm	50 ppm	25 ppm
Hydrogen Sulfide	N/A	20 ppm	10 ppm
Ozone	N/A	0.1 ppm	0.05 ppm
Particulates	N/A	15 mg/m ³ (total)	10 mg/m ³ (total)
		5 mg/m ³ (respirable)	3 mg/m ³ (respirable)
Formaldehyde	N/A	0.75 ppm	0.3 ppm
Nitrogen Dioxide	N/A	5 ppm	3 ppm
Radon	N/A	100 pCi/L	4 WLM/yr (working level months/year)

* American Society of Heating, Refrigerating and Air-Conditioning Engineers recommendations

** Occupational Safety and Health Administration Permissible Exposure Limit — this level is a time-weighted average and is an enforceable standard that must not be exceeded during any eight-hour work shift of a 40-hour work week.

*** American Conference of Governmental Industrial Hygienists Threshold Limit Value — this level is a recommended time-weighted average upper limit exposure concentration for a normal eight to 10-hour workday and a 40-hour work week.

**** Centers for Disease Control (CDC) recommends humidity below 50% to inhibit mold growth

N/A-Not Applicable or Not Established

Appendix B

Indoor Air Quality Survey – Employees

Name: _____ Date: _____

Department: _____ Job Title: _____

Email: _____ Phone number: _____

Area of Concern: Office Classroom Other _____

Area of Concern Address (Campus Building & Room #): _____

1. How long have you been working in the Area of Concern? _____

2. How long have you been working in your current office? _____

3. Are you concerned about any of the following in the Area of Concern? (check all that apply)

- | | | |
|---|--|---|
| <input type="checkbox"/> Temperature too hot | <input type="checkbox"/> Smoky air | <input type="checkbox"/> Peculiar odors |
| <input type="checkbox"/> Temperature too cold | <input type="checkbox"/> Stale air | <input type="checkbox"/> Chemicals, fumes/mists |
| <input type="checkbox"/> Stuffy air | <input type="checkbox"/> Soot by air vents | <input type="checkbox"/> Drafts |

4. Is there a particular time of day you notice the air quality issue in the Area of Concern? (check all that apply)

- | | | |
|---------------------------------------|--|---------------------------------|
| <input type="checkbox"/> Mornings | <input type="checkbox"/> Afternoons | <input type="checkbox"/> Nights |
| <input type="checkbox"/> All day long | <input type="checkbox"/> No noticeable pattern | |

5. Common indoor air quality issues are listed below. Please check all that apply to the Area of Concern:

- | | |
|--|--|
| <input type="checkbox"/> Lack of ventilation | <input type="checkbox"/> Odor(s) If so, please describe: _____ |
| <input type="checkbox"/> Dust in the air | <input type="checkbox"/> Visible mold |
| <input type="checkbox"/> Other, specify: _____ | |

6. Has there been a flood or any water damage recently in the Area of Concern? Yes No

If yes, please describe: _____

7. Number of persons (estimate) working in the same office if it is the Area of Concern: _____

8. Number of windows in the same office: _____ Do the windows open? Yes No

9. Does working in the Area of Concern result in your experiencing any of the following health conditions? (Check all that apply)

- | | |
|---|---|
| <input type="checkbox"/> Skin rash | <input type="checkbox"/> Nausea |
| <input type="checkbox"/> Chills or fever | <input type="checkbox"/> Skin irritation/itching |
| <input type="checkbox"/> Headache | <input type="checkbox"/> Sneezing or coughing |
| <input type="checkbox"/> Dizziness | <input type="checkbox"/> Chest tightness |
| <input type="checkbox"/> Hearing disturbances | <input type="checkbox"/> Eye or nose irritation |
| <input type="checkbox"/> Dry cough | <input type="checkbox"/> Sinus congestion or runny nose |
| <input type="checkbox"/> Heartburn | <input type="checkbox"/> Fatigue/drowsiness |
| <input type="checkbox"/> Dry skin | <input type="checkbox"/> Sore or dry throat |
| <input type="checkbox"/> Shortness of breath | <input type="checkbox"/> Nasal irritation or nosebleeds |

Other: _____

10. When do these symptoms occur in the Area of Concern? (check all that apply)

- | | | |
|---------------------------------------|--|---------------------------------|
| <input type="checkbox"/> Mornings | <input type="checkbox"/> Afternoons | <input type="checkbox"/> Nights |
| <input type="checkbox"/> All day long | <input type="checkbox"/> No noticeable pattern | |

11. Are these symptoms when in the Area of Concern worse on some days than others (e.g., Tuesdays are bad; Thursdays are not)? Please specify: _____

12. Where in the Area of Concern do these symptoms occur? (Check all that apply)

- | | |
|---------------------------------------|--|
| <input type="checkbox"/> At my desk | <input type="checkbox"/> In the lavatory |
| <input type="checkbox"/> In the lobby | <input type="checkbox"/> No particular place |
| <input type="checkbox"/> Other _____ | |

13. When did you first notice these symptoms? _____

14. Do you suffer from allergies? Yes No

If yes, please specify: _____

If yes, what time of year are you most affected? _____

15. When do you experience these symptoms?

- | | | |
|---------------------------------------|---|--|
| <input type="checkbox"/> Only at work | <input type="checkbox"/> Only at my residence | <input type="checkbox"/> At work and at home |
|---------------------------------------|---|--|

16. Has anything happened recently at your workplace or residence that could affect the air quality? (e.g., new carpeting, new furniture, new equipment, etc.) _____

17. What do you think is the cause of your symptoms or illness?

- | | |
|---|---|
| <input type="checkbox"/> Other people smoking | <input type="checkbox"/> Cleaning and maintenance |
| <input type="checkbox"/> Temperature/ventilation | <input type="checkbox"/> Renovations/construction |
| <input type="checkbox"/> Presence of toxic chemicals or gas | <input type="checkbox"/> None of the above |

18. Have you or someone brought furniture from elsewhere into your office?

- Yes No

19. Have any alarms, such as smoke or carbon monoxide, activated recently? Yes No

Other comments about the indoor air quality situation in the Area of Concern: _____
