**Policy**

It shall be the policy of the University of Tennessee to provide a work environment that is safe and reasonably comfortable. Complaints involving indoor air quality shall be investigated to determine the cause and evaluate the risk (if any) to occupants.

**Scope**

This procedure shall guide the University of Tennessee management of indoor air quality complaints. A complaint may be made by anyone, but should ultimately be directed to Environmental Health (EHS) or Facilities Services.

**Background Information**

Indoor air quality problems can come from a variety of sources either inside or outside the building. The agent responsible for the complaint may be transient, intermittent or chronic and it may be chemical, biological or physical in nature.

Individual response to an airborne substance can vary greatly as can an individual's perception of comfort. Other factors can also influence an individual's perception of comfort and should be considered. Allergies (diagnosed or undiagnosed) can be affected by trace amounts of airborne matter. Airborne particulate and biological organisms can represent a serious hazard for individuals who are immune-compromised.

Air monitoring can be expensive, is often inconclusive and must be carefully evaluated when conducted.

**Procedure**

1. The person or persons who are affected by the indoor air quality or their supervisor should notify Environment, Health and Safety or Facilities Services.

   Notification may be by telephone, e-mail, verbal, written letter or other means. No employee shall be retaliated against for initiating a complaint. However, the person submitting the complaint may remain anonymous if so desired. Individuals wishing to remain anonymous should make this wish known at the initial communiqué. See safety plan GS 100, Reporting Safety Hazards for additional details.
2. The complaint shall be investigated and a corrective action recommended. The complaint may be investigated and resolved by a single department (e.g. EHS). However, it is generally best to take a team approach and involve other departments. When an indoor air quality complaint is complex or the agent(s) is/are unknown, a team approach is certainly warranted. The investigation shall be made in a timely manner based on the perceived degree of hazard.

3. Results of the investigation shall be communicated to the person(s) who initiated the complaint. This shall also apply to cases where the source(s) of the complaint cannot be determined. EHS shall also inform the complainant of the degree of risk (risk communication).

4. Facilities Services shall be responsible for evaluating the building’s mechanical systems relative to the indoor air quality complaint.

Tools and Techniques Used to Characterize and Evaluate Indoor Air Quality Problems

In some cases the cause(s) of an indoor air quality complaint are obvious and an exhaustive review of the building is unnecessary. However, often the cause is unknown and a more rigorous approach must be taken to identify the agent(s). Appendix A (Indoor Air Quality Checklist) and Appendix B (Occupant Diary) may be used to identify potential problems. Note that other data collection tools may also be used at the discretion of the investigator.

Air monitoring for mold may be conducted, however, it is generally the responsibility of the department requesting the sampling to pay for this service. EHS can obtain mold sampling equipment, collect samples using recognized protocol and interpret the results.

Training

EHS staff shall be adequately trained to recognize, evaluate and suggest controls for indoor air quality problems.

Recordkeeping

EHS shall document all indoor air quality complaints that they investigate. Records shall be maintained for at least three years.

Standards

None
Forms

Indoor Air Quality Checklist (Appendix A)
Occupant Diary (Appendix B)
Appendix A
Indoor Air Quality Checklist
HVAC System

The following items on AC units feeding the area of complaint should be checked.

a. Air flow into the area of complaint.

b. Check grilles and registers for buildup of dust, and general cleanliness of the area.

c. Check intake dampers and assure that the proper outdoor air quantity is being taken into the system.

e. Check area where outdoor air is being obtained for any unusual conditions, pooling of water, biological growth or exhaust fans and roof vents less than 25 feet away.

f. Check filters for any biological growth or unusual material captured in the filters.

g. Check filters PM records to insure proper changing.

h. Check AC unit housing for cleanliness, pooling of water, wet insulation and any biological growth.

i. Check coil, drain pan for any biological growth and any unusual pooling of water or leaks into the housing.

j. Check condensate drain and trap for operation.

k. Check for any dry floor drains that may allow sewer gas into the AC system.

Factors Inside the Building

a. Floors
   - New carpet
   - Soiled or stained carpets
   - Signs of water leakage
   - Frequency of cleaning

b. Walls
   - New paint or sealant
- Signs of water damage
- Visible growth of mold
- New decorations

c. Ceilings
- New paint or sealant
- New ceiling tiles
- Visible signs of water leakage or stain
- Noted condition above drop ceiling
- Missing ceiling tiles

d. General Room Considerations
- Pesticide use
- Plants
- New furnishings
- Use of aerosol chemicals
- Recent maintenance activities
- Construction/demolition activities occurring nearby
- Dust on horizontal surfaces
- Frequency of room cleaning
- Use of chemicals in room, adjacent, above or below
- Windows
- Below grade
- Copy machine
- Chemical spills
- Previous use of room or space
- Is room under positive or negative pressure?
- Length of time space has had its current occupants
- Waste disposal
- Prevalence of diagnosed allergies among workers
- Equipment
- Other

Factors Outside the Building

a. Roofing work
b. Vehicles idling
c. Maintenance or construction activities
d. Pollen
e. Repaving projects
f. Smoking
g. Loading dock
h. Other
Symptoms

a. Date of first onset
b. Number of individuals affected
c. Location of affected individuals
d. Condition
   - Transient
   - Continual
e. Trends
   - Daily
   - Weekly
   - Monthly
   - Seasonal
f. Symptoms
   - weakness
   - numbness
   - swelling
   - dry throat
   - fever
   - sleepiness
   - coughing
   - sneezing
   - congestion
   - hot
   - rash
   - joint paint
   - eye irritation
   - dry eyes
   - headaches
   - dizziness
   - blurred vision
   - head colds
   - feeling cold or chilled
   - damp
Appendix B
Occupant Diary

Occupant Name: ____________________  Title: ______________  Phone: ______
Location: __________________________

On the form below, please record each occasion when you experience a symptom of ill-health or discomfort that you think may be linked to an environmental condition in this building.

It is important that you record the time and date and your location within the building as accurately as possible because that will help to identify conditions (e.g. equipment operation) that may be associated with your problem. Also, please try to describe the severity of your symptoms (e.g., mild, severe) and their duration (the length of time that they persist). Any other observations that you think may help in identifying the cause of the problem should be noted in the "Comments" column. Feel free to attach additional pages or use more than one line for each event if you need more room to record your observations.

<table>
<thead>
<tr>
<th>Time/ Date</th>
<th>Location</th>
<th>Symptom</th>
<th>Severity/ Duration</th>
<th>Comments</th>
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