Effective Communication

his section discusses establishing and maintaining a communication system that can help prevent indoor air quality problems and resolve problems cooperatively if they do arise. If you are currently responding to an indoor air quality complaint, you may want to skip ahead to the discussion of Communicating to Resolve IAQ Problems on page 15.

COMMUNICATING TO PREVENT IAQ PROBLEMS

Effective communication can encourage building occupants to improve their work environment through positive contributions. The following objectives should be kept in mind while reviewing and revising your current approach to communicating with occupants:

- n provide accurate information about factors that affect indoor air quality
- n clarify the responsibilities of each party (e.g., building management, staff, tenants, contractors)
- n establish an effective system for logging and responding to complaints should they occur

Provide Accurate Information

Many indoor air quality problems can be prevented if staff and building occupants understand how their activities affect IAQ. You may already have a health and safety committee functioning to promote good working conditions. If so, it is easy to add indoor air quality to their list of concerns. If you do not have a health and safety committee, consider establishing one or setting up a joint management-tenant IAQ task force. Whatever its official designation, such a group can help to disseminate information about indoor air quality, bring

potential problems to the attention of building staff and management, and foster a sense of shared responsibility for maintaining a safe and comfortable indoor environment.

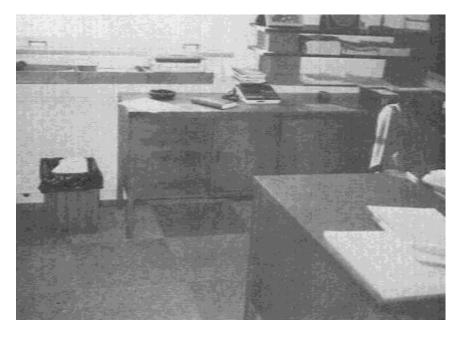
The group will be most successful if it represents the diverse interests in the building, including:

- n building owner
- n building manager
- n facility personnel
- n health and safety officials
- n tenants and/or other occupants who are not facility staff
- n union representatives (or other worker representatives)

Clarify Responsibilities

It is important to define the responsibilities of building management, staff, and occupants in relation to indoor air quality. These responsibilities can be formalized by incorporating them into documents such as employee manuals or lease agreements.

The occupant in this room covered the supply air vents with papers. Whether this was done to reduce uncomfortable drafts or to provide more shelf space, the result can disrupt the air flow, not only through this room but elsewhere in the building. By tampering with the air handling system, occupants can unintentionally cause complaints in other areas.



Use of Space: Educate occupants about the permitted uses and maximum occupancy of different areas within the building and make sure that appropriate ventilation is provided for the activities that are permitted. Indoor air quality complaints often arise in mixed-use buildings. For example, kitchen staff expect food odors as part of their work, but nearby office workers may find cooking odors distracting and unpleasant. Problems can also arise when old tenants leave and new arrivals introduce new uses of the building.

Occupancy Rate: Inform occupants about the importance of keeping the building management informed about significant changes in the number of people regularly using particular areas of the building. The ventilation systems in buildings are designed and operated to supply air to

MANAGEMENT AND OCCUPANT COOPERATION ON INDOOR AIR QUALITY

The State of Wisconsin's "Quality Building Management" system has helped to unite the diverse interests involved in operating and using State office buildings. Tenants and facility personnel volunteers to serve on teams, working cooperatively to improve the quality of the indoor environment.

Each team was assigned a specific area for which it drafted "Ideal Building Standards." Air quality was one such area; others included elevators, rest rooms, and work spaces. The IAQ teams were trained in conducting research; toured mechanical rooms to achieve a better understanding of building operations; read articles; and listened to presentations on IAQ, ventilation, and related topics.

The proposed "Ideal Building Standards" were reviewed with other tenants and then used as a basis for Quality Improvement Plans. Some elements of the Quality Improvement Plans identify responsibilities of the tenants, such as adopting good housekeeping practices to improve the work environment and facilitate cleaning. Responsibilities identified as belonging to building management are reflected in work plans and budget decisions.

Since implementation of this management system, interactions between building management and tenants have improved. Tenants actively seek out management staff to discuss concerns. However, they are also more willing to review their own actions when looking for potential causes of IAQ problems.

projected ranges of occupants. If the occupancy rate becomes a problem, it may be helpful to refer to a standard reference such as ASHRAE Standard 62-1989 to show occupants that keeping occupancy within the ventilation capacity serves the goal of providing a quality work environment and is not an arbitrary decision by building management.

Modifications: Review plans that may involve increases in the number of occupants, relocation of walls or partitions, installation of new equipment, or changes in the use of space. Building owners, facility managers, and occupants share responsibility for monitoring new equipment installation and changes in the use of space. The review process allows potential indoor air quality problems to be identified so that the HVAC system can be modified as needed. Only authorized maintenance personnel should adjust air supply or exhaust vents; however, if occupants are expected to follow such a "hands-off" policy, facility management must respond promptly to IAQ complaints.

Notification of planned activities:

Establish a procedure for informing tenants before the start of activities that produce odors or contaminants (e.g., maintenance, pest control, repair, remodeling, redecorating).

Establish a System for Responding to Complaints

Many organizations have established procedures for responding to occupant complaints that can be modified to include indoor air quality concerns. To avoid frustrating delays, building occupants need to know how to express their complaints about IAQ. More importantly, they need to know how to locate responsible staff and where to obtain complaint forms. This information can be posted on bulletin boards, circulated in memos or newsletters, or publicized by some other means.

Complaints should be handled promptly, with every incident given serious attention. It is advisable to establish a recordkeeping system that cross-references documentation on complaints with records of equipment operation and maintenance. The recordkeeping system can help to resolve complaints by collecting information in a form that highlights patterns of problems (for example, complaints that occur at a regular time of day or in the same area of the building). The IAQ Complaint Form and Incident Log shown here and on the following page (and also reproduced in Tab V) can be used to track complaints related to the indoor environment.

COMMUNICATING TO RESOLVE IAQ PROBLEMS

In many cases, building managers may be alerted to potential indoor air quality problems by complaints from occupants. The complaints can be vague, to the effect that one or more people feel "sick" or "uncomfortable" or that someone has noticed an unusual odor. They may be specific, blaming a particular material as the cause of discomfort or health problems. People are usually reacting to a real problem, so their complaints should be taken seriously. However, they may attribute their symptoms to the wrong cause, so their theories about the problem should be heard respectfully but weighed cautiously.

Indoor air quality problems can sometimes be identified and resolved quickly. On other occasions, complaints originate from the interaction of several variables, and detailed investigation may be necessary in order to resolve the problem.

The Importance of Responding to IAQ Complaints

Listening and responding to building occupants is critical to achieving a

Sample Form **Indoor Air Quality Complaint Form**

This form should be used if your complaint may be related to indoor air quality. Indoor air quality problems include concerns with temperature control, ventilation, and air pollutants. Your observations can help to resolve the problem as quickly as possible. Please use the space below to describe the nature of the complaint and any potential causes.

We may need to contact you to discuss your complaint. What is the best time to reach you?

So that we can respond promptly, please return this form to:

IAQ Manager or Contact Person

successful resolution of indoor air quality complaints. IAQ complaints may be grounded in poor indoor air quality, thermal conditions, noise, glare, or even job stresses. However, it is in the building manager's best interest to respond to all complaints about the indoor environment promptly and seriously and to establish credibility through open communication with building occupants. The biggest mistake that building managers can make in the face of an IAQ complaint is to underestimate the problems that can result if building occupants believe that no action is being taken or that important information is being withheld. Without open communication, any IAQ problem can become complicated by anxiety, frustration, and distrust, delaying its resolution.

Paying attention to communication, as well as problem-solving, helps to ensure

SEE COMPLETE **FORM PAGE 181**

Sample Form Incident Log

			Investigation Record (check the forms that were used)										
File Number	Date	Problem Location	Complaint Form	Occupant Interview	Occupant Diary	Log of Activities	Zone/Room Record	HVAC Checklist	Pollutant Pathway	Source Inventory	Hypothesis Form	Outcome / Comments	Log Entry By (initials)

SEE COMPLETE FORM PAGE 183

The messages to convey are that management believes it is important to provide a healthy and safe building, that good indoor air quality is an essential component of a healthful indoor environment, and that complaints about indoor air quality are taken seriously.

the support and cooperation of building occupants as the complaint is investigated and resolved. The messages to convey are that management believes it is important to provide a healthy and safe building, that good indoor air quality is an essential component of a healthful indoor environment, and that complaints about indoor air quality are taken seriously.

Communications, whether they occur in conversations or in writing, should include the following information:

- n what types of complaints management has received
- management's policy in regard to providing a healthy and safe environment and responding to occupant complaints
- n what management has done to date (e.g., collecting data, responding to the problem)
- n what management plans to do in order to further investigate and correct the problem (including the fact that outside consultants have been called in, if they have been)
- n the names and telephone numbers of appropriate facility management,

medical, or health and safety staff to whom the occupants should turn if they have additional complaints or questions, or if they have information that may help in resolving the complaints

Maintaining the Lines of Communication

Make certain that occupants know how to contact the responsible personnel who can receive and respond to IAQ complaints. Tenants may also have an internal system for channeling complaints, for example through a health and safety representative, supervisor, or company doctor.

Indoor air quality complaints that can be resolved quickly and that involve small numbers of people (e.g., annoying but harmless odors from an easily-identified source) can be handled matter-of-factly like other minor problems without risking confusion and bad feeling among other building occupants. Communication becomes a more critical issue when there are delays in identifying and resolving the problem and when serious health concerns are involved.

If the problem seems to be widespread or potentially serious, it is advisable to work with your health and safety committee. If you do not have a health and safety committee, consider forming one, or establishing a joint management-tenant IAQ task force. (See the discussion on page 13.)

Productive relations will be enhanced if occupants are given basic information during the process of investigation and mitigation. Potential critics can become allies if they are invited to be part of the problem-solving process and become better educated about IAQ and building operations. Building managers may be understandably reluctant to share test results or consultants' reports with their tenants or employees, but secrecy in such matters can backfire if information leaks out at a later time.

Building management staff can be encouraged to talk directly with occupants both at the time a complaint occurs and later during a diagnostic investigation. Their observations about patterns of symptoms or building conditions may provide helpful information.

Confidentiality of records can be important to occupants, especially if they are concerned that IAO complaints will lead to negative reactions from their employers. There may be legal penalties for violating confidentiality of medical records. By reassuring occupants that privacy will be respected, investigators are more likely to obtain honest and complete information.

It is advisable to explain the nature of investigative activities, so that rumors and suspicions can be countered with factual information. Notices or memoranda can be delivered directly to selected occupants or posted in general use areas. Newsletter articles or other established communication channels can also be used to keep building occupants up-to-date.

Problems can arise from saying either too little or too much. Premature release of information when data-gathering is still incomplete can produce confusion, frustration, and mistrust at a later date. Similar problems can result from incorrect representation of risk — assuming the worst case (or the best). However, if progress reports are not given, people may think nothing (or something terrible) is happening. It is good practice to clear each piece of information with the facility manager, building owner, or legal counsel. Management should attempt to be factual and to the point when presenting information such as:

- n the definition of the complaint area based upon the location and distribution of complaints (this may be revised as the investigation progresses)
- n the progress of the investigation, including the types of information that are being gathered and ways that occupants can help
- n factors that have been evaluated and found not to be causing or contributing to the problem
- n how long the investigation might take
- n attempts that are being made to improve indoor air quality
- n work that remains to be done and the schedule for its completion

Vague discomfort, intermittent symptoms, and complex interactions of job stress with environmental factors, which make IAO problems difficult to investigate, can also obscure the effects of mitigation efforts. Even after the proper mitigation strategy is in place, it may take days or weeks for contaminants to dissipate and symptoms to disappear. If building occupants are informed that their symptoms may persist for some time after mitigation, the inability to bring instant relief is less likely to be seen as a failure.

If the problem seems to be widespread or potentially serious, it is advisable to work with your health and safety committee. If you do not have a health and safety committee, consider forming one, or establishing a joint management-tenant IAQ task force.