How to Address Indoor Air Quality Complaints By Stephen E. Fauer November 5, 2013

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There are very few businesses, or even homeowners, who have not endured an indoor air quality (IAQ) situation at least once. Who hasn't detected an odor they could not quickly identify? How many people have developed an irritating cough that could not be explained? In my experience, the majority of complaints prove to be unassociated with indoor air quality. Notwithstanding this fact, owners or managers of businesses are obligated to investigate when an employee registers a complaint. After all, we live in a litigious society. Failure to take appropriate and sensible measures to investigate a complaint can strengthen a complainant's case.

Therefore, when faced with such a situation, you need to take appropriate action. Typically, an owner's first action is to interview the complainant; the sample questions above provide a starting point. The second step may be to undertake an investigation of your premises to look for items that could adversely affect IAQ. Again, some guidance is presented below because it may make sense to have your consultant initiate an independent inquiry and/or conduct an actual scientific investigation. I suggest that you should speak with your attorney because the specter of litigation calls for prudent behavior and action.

The guidelines and sample questions presented below are by no means intended to be exhaustive or to address every situation.

Questions To Ask the Complainant:

What is the nature of the complaint and associated symptoms? Where and when did the complaints begin? When do the symptoms occur: make sure to specify season, time, days, and frequency? Have you ever experienced these symptoms previously?

How long have you had these symptoms? Have you sought medical care? How long did the symptoms last? Have the symptoms been intermittent? When do the symptoms disappear? Do they normally clear up after leaving work; if so, how soon?

Are the complaints localized to a particular area of the building? Have the symptoms been triggered by a specific event?

Questions To Ask Yourself:

What are the worker's characteristics? For example, do the complainants smoke, have allergies, take any medication, or have a pre-existing illness or disability? What are the occupational activities of each complainant?

Building Information Your IAQ Consultant Needs to Know:

How big is the facility: how many square feet, how many floors, on how many acres?

How many areas appear to be affected? What is the square footage of areas affected?

How old is the building? How is it heated? Has any construction or remodeling been done? Is there new furniture, carpeting, or has there been any recent painting? Have the carpets been cleaned or have the drains been serviced? Where are the HVAC air intakes and exhausts located?

What activities occur in the building? Do trucks make frequent deliveries? Where do they idle?

What are the design and operational parameters of the HVAC system? For example, what is the source and amount of fresh air per occupant delivered to the floor; what kind of HVAC system do you use and what is its age; is there a humidifier and, if so, how is it controlled; are there any recent ventilation changes; and what is the volume served by each HVAC unit?

Is the HVAC system maintained, and does it meet manufacturer's recommendations?

- 1. Cleaning and oiling
- 2. Filter change
- 3. Use of biocides
- 4. Maintenance and repair records
- 5. Cleanup of water leaks
- 6. Operating fresh air intake damper
- 7. System balance checks

Has renovation or maintenance altered air flow patterns? For example, have you installed partitions or relocated air intakes or exhausts?

General Ouestions Your IAO Consultant Will Ask:

Is there a vapor intrusion issue associated with your property or a neighbor's property? (Note: vapor intrusion is on the front burner of every state and federal environmental agency. ESA will address vapor intrusion in a future e-newsletter.)

How many people have IAQ-related complaints? Are the symptoms between complainants similar? Where do people smoke? Are there designated smoking areas that have separate, non-recirculating exhaust systems?

What type of copying machines, signature machines, spirit duplicators, blueprint machines and other office machines are used near the complainants or in areas serviced by the ventilation system? How frequently are these machines used?

What do you manufacture? What chemicals are used? What chemicals do you store and in what quantities? Where do you store cleaning chemicals?

Upon reviewing answers to the above questions and guidelines, you can begin to determine if a real IAQ problem exists. In many instances, even when there does not appear to be an IAQ problem, companies will have ESA initiate an IAQ investigation. This serves two purposes. The first is to demonstrate that the company takes employee complaints seriously. The second benefit is to establish that there does not appear to be any scientific cause and effect for the complainant's symptoms. Finally when a cause and effect is discovered, the employees know that the company will take immediate steps to remedy the situation.

In short, nothing is more important than providing a safe work environment and demonstrating to your staff that you are serious about ensuring the ongoing maintenance of a clean and safe workplace.

If you have any questions about this e-newsletter or an IAQ situation, please call me any time at 732-469-8888 x201.

Thanks, Stephen