

In today's market, employers and landlords are taking a pro-active stance on indoor air quality (IAQ) issues.

The effect of poor IAQ on employee moral and productivity can be detrimental to the employee-employer relationship, as well as the tenant-landlord relationships. In today's competitive real estate and job market, providing a pleasant and safe working environment can mean the difference between profit and loss.



PENTA's IAQ team has surveyed over 20 million square feet of commercial space, as well as single and multi-family residential structures. Our team includes Indoor Environmental Professionals (IEP's), Professional Engineers, and Biologists. Our team is experienced in various building uses from institutional to health care to general office space. PENTA's objective is to understand the subject facility's condition, evaluate the potential concerns, and develop a strategy to mitigate the concerns that will produce a cost-effective solution to fit our client's needs.

Our IAQ consulting services include:

**Construction Plan Reviews** – PENTA can review construction plans and specifications to identify potential IAQ concerns before they become a problem. Our review would evaluate potential contaminant sources, routes of contaminant migration, potential microbial amplification reservoirs, selected building materials and furnishings, and construction procedures for partially occupied buildings where construction activities may impact occupied areas.

**Proactive Baseline Surveys** – PENTA can also identify existing conditions within a subject facility that could potentially contribute to IAQ complaints. Our typical baseline survey methods include:

- Observations of the existing facility including furnishings, occupant activities, janitorial practices, and other potential contaminant sources from inside or outside the facility.
- Review of heating, ventilating, and air-conditioning (HVAC) system design, operation, and maintenance procedures including limited airflow measurements and observations.
- Direct reading IAQ measurements for carbon dioxide, carbon monoxide, temperature, and relative humidity.

**Complaint Response Surveys** – PENTA can evaluate complaints of occupant irritation, discomfort, or health concerns and identify conditions in or adjacent to the survey building or the HVAC system that may be contributing to the reported complaints. In addition to the services outlined above, we can also:

- Characterize the nature and distribution of the reported IAQ complaints.
- Perform complaint specific air and bulk sampling for contaminants, including, but not limited to, volatile organic compounds (VOCs), bacteria, fungus, and components of environmental tobacco smoke (ETS).

### **Policy and Procedure Program**

**Development/Training** – PENTA can develop procedures to control potential IAQ concerns. Procedures can include construction renovation procedures to control contaminant migration from the construction areas or contaminant and odor migration during HVAC maintenance and janitorial procedures.

**Litigation Support** – PENTA can provide support services to develop or evaluate existing data and provide expert opinion related to potential or on-going litigation related to IAQ.

