



HALEY WARD

ENGINEERING | ENVIRONMENTAL | SURVEYING

## Indoor Air Quality

**Indoor Air Quality (IAQ) affects all aspects of our professional and personal lives.** “Good” air quality in the workplace supports healthy, positive and productive employees, while “poor” air quality can result in an increase in absenteeism and loss of productivity. In our homes, “poor” air quality can affect our comfort, health and overall well-being. Haley Ward understands that good indoor air quality is an essential component of a healthy and productive personal and professional lifestyle.

Whether it is investigating a residence for the presence of mold, evaluating a building for water infiltration, or assessing Heating, Ventilation and Air Conditioning (HVAC) systems, Haley Ward’s Industrial Hygienists, Mechanical/Structural Professional Engineers, and Environmental Scientists have the knowledge and experience to effectively and efficiently investigate your building and provide solutions to address the identified concerns. Our experienced team has worked with clients across a broad spectrum of markets providing evaluations and solving problems in a variety of buildings ranging from multi-family apartments, commercial office space, institutional buildings, and industrial complexes. Our typical approach (which may vary based on the type of facility) is to work as a team with property owners, facility managers and occupants, to listen to the concerns, understand the facility and how it operates, complete a general and focused evaluation of the effected portions of the facility, review our findings with the client, and develop a practical solution or explain the need for additional investigations. Our professionals agree that an understanding of the problem, the building and the concerns of the occupants are the critical first steps in diagnosing and solving a problem. While we have the ability to, and do complete a variety of environmental testing and monitoring for many of our projects, we do not believe testing is the first step (or a necessary step in many cases) in identifying and addressing IAQ problems. Our experience has taught us that, while in some cases, the problem or concern can be as simple as fixing a leaking roof and addressing associated water infiltration damage. In many cases, the underlying problem can be the result of a combination of conditions and require thorough review and evaluation.

**For Industrial Hygiene / Environmental Management:**  
Dennis Kingman, Jr., CHMM  
Vice President / Senior Project Mgr.  
[dkingman@haleyward.com](mailto:dkingman@haleyward.com)

**For Mechanical Engineering:**  
Curt Bartram, PE  
Senior Project Engineer  
[cbartram@haleyward.com](mailto:cbartram@haleyward.com)

### COMMON SOURCES OF INDOOR AIR POLLUTION

- Microbiological Pollutants
- Carbon Dioxide (CO<sub>2</sub>)
- Carbon Monoxide (CO)
- Formaldehyde/Pressed Wood Products
- Nitrogen Dioxide (NO<sub>2</sub>)
- Pesticides
- Radon
- Volatile Organic Compounds (VOCs)
- Fuel Burning Combustion Appliances
- Particulates
- Central Heating & Cooling Systems & Humidification Devices
- Moisture & Humidity
- Inadequate Ventilation



Our Professional Engineers and Industrial Hygienists understand and routinely follow industry standards and guidance (e.g., the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) Standards and Guidelines and American Industrial Hygiene Association (AIHA)) in diagnosing and solving problems. Through our experience and understanding of industry standards and guidelines and regulatory requirements, Haley Ward's team of professional engineers and scientists provides a level of reassurance to building occupants that their IAQ concerns are understood and addressed. Our analysis of a facility draws upon decades of experience completing assessments to provide building owners the information that they need to make an informed decision. Our team of Professional Engineers and Environmental Scientists work together to offer solutions specific to the identified concern regardless of whether it is a complex design or a practical change. Clients value Haley Ward's abilities and sound reasoning when it comes to solutions for their buildings.