

Industrial Hygiene/Health and Safety



Areas of Expertise

- Third-Party OH&S Compliance Auditing
- Industrial Hygiene Exposure Monitoring
- Process Safety Management Compliance/Risk Management
- OH&S Program Development
- OH&S Management Systems
- OH&S Management "In-Sourcing"
- Industrial Ventilation Design, Assessment, and Troubleshooting
- Laboratory Health & Safety
- Indoor Air Quality
- Asbestos and Lead-Based Paint Assessment and Management
- Ergonomics
- Occupational Health Risk Assessment
- Infection Prevention

Key AECOM Attributes

- **Industry Expertise.** Our experts anticipate regulatory trends and deliver more effective and current management practices.
- **Senior Practitioners.** Most of AECOM's IH/OH&S consultants have 15+ years of experience.
- **In-House Experience.** Many AECOM staff previously worked directly in industry for which they now consult.

More Information

askenvironmental@aecom.com

You will be promptly directed to our closest expert who can address your needs.

Overview

Increasingly, public and private organizations have more occupational health & safety responsibilities and often must manage them with reduced resources and staff. Occupational health & safety (OH&S) regulatory agencies, such as the U.S. Occupational Safety and Health Administration (OSHA), continue to implement and enforce additional requirements and collect larger fines for noncompliance. More global customers are demanding a management systems approach to ensure compliance and sustainability.

New U.S. health and safety requirements include OSHA's proposed illness and injury prevention program (I2P2) standard. Worldwide, hazard communication is migrating from performance-based standards to prescriptive international standards, such as the United Nations Globally Harmonized System for classifying and labeling chemicals, and REACH chemical exposure risk assessment and management is becoming a core part of the Environmental, Health and Safety (EHS) function. In addition, new occupational hazards are emerging in the fields of biotechnology and engineered nanoparticles.

As a result, traditional industrial hygiene & safety programs now require a more systematic approach to conserve and focus limited resources, assess/manage risk, and ensure regulatory compliance.

Our Approach

AECOM's industrial hygiene/health & safety experts collaborate with clients to achieve compliance and create the basis for reduction of occupational illnesses and injuries and environmental impacts. Through AECOM's collaborative global technical practice networks, our experts combine in-depth knowledge of the latest management systems, using the most cost-effective, industry best practices.

Our management systems approach can be tailored to specific client and program needs, but it generally involves the following elements:

- Understanding the process flow and critical points where OH&S risks need to be controlled
- Developing a qualitative risk assessment for chemical usage
- Job Hazard Analysis to identify and rank exposures to health and safety hazards
- Industrial hygiene exposure monitoring for chemical, biological, and physical agents
- Troubleshooting administrative and engineering controls
- Root cause determination for past incidents and near misses
- Corrective action recommendations and assistance with implementation
- Management of change to anticipate the risks of process and chemistry changes

AECOM's approach benefits clients of all sizes, ensuring efficient use of client and consultant resources with the goal of effectively managing exposures to health and safety risks and regulatory enforcement.

Areas of Expertise

Our certified health and safety professionals (CIHs, CSPs, and CHMMs) support clients in many sectors, such as oil & gas, pulp & paper, pharmaceutical, power generation, transportation, biotechnology, chemical, manufacturing, government and medical device companies. Our Industrial Hygiene and Health & Safety Practice includes experts with experience working directly for industry and regulatory agencies, as well as those with advanced degrees in environmental & occupational health, safety, and biotechnology.

Third-Party OH&S Compliance Auditing. AECOM auditors have a depth of knowledge of OSHA and state/provincial regulations as they apply to many industries, including manufacturing, aerospace, chemical, pharmaceutical, pulp & paper, energy, and many others. We have certified professional EHS auditors (CPEAs) with decades of OSHA auditing experience.

Industrial Hygiene Exposure Monitoring. AECOM industrial hygienists have conducted exposure monitoring for numerous chemicals, biological agents, and physical agents (such as noise and ionizing and non-ionizing radiation). We have also assisted in developing comprehensive industrial hygiene monitoring plans, using numerical risk ranking to prioritize monitoring to conserve EHS resources.

Process Safety Management Compliance/Risk Management. We assist industrial clients with Process Safety Management and Risk Management Planning compliance assistance and auditing. Our process experience includes anhydrous ammonia (including refrigeration systems), flammable and toxic liquids, and gases.

Occupational Health & Safety (OH&S) Program

Development. AECOM has developed many programs, including: Process Safety Management, Respiratory Protection, Hearing Conservation, Hazard Communication, Chemical Hygiene, Chemical Specific Compliance Programs (e.g., cadmium, chromium, and lead), Lockout/Tagout, Fall Protection, Confined Space, and I2P2 programs.

OH&S Management Systems. AECOM has OHSAS 18001 lead auditors and has provided gap analysis and implementation support for the ANSI/AIHA Z-10 OH&S management system. To help our clients accomplish more with their internal staff, AECOM offers a chemical risk ranking database that helps drive labeling and guides periodic workplace exposure assessments.

EHS Management "In-Sourcing." We have staff on site at one of the world's largest airlines and major specialty chemical companies, for part and full-time support.

Industrial Ventilation Design, Assessment and

Troubleshooting. AECOM routinely evaluates ventilation systems to help clients improve their work environments, such as firing ranges and laboratories.

Laboratory Health & Safety. Our consultants are well versed in the OSHA requirements and consensus guidelines for laboratory operations. We have audited and/or developed numerous chemical hygiene plans.

Indoor Air Quality. Indoor air quality problems can be caused by deferred preventive maintenance, renovation and expansion projects, improper filter efficiency and fit, moisture carry-over from coils, humidifiers and condensation build-up, dirty outside air, and aging systems. We have staff certified in indoor environmental quality that can assess and oversee remediation of IAQ impacts of moisture intrusion/condensation. Our structural/mechanical engineers can assist in more challenging building and HVAC assessments.

Asbestos and Lead-Based Paint Assessment and

Management. AECOM manages turn-key asbestos and lead-based paint assessments and compliance management programs for client facilities.

Ergonomics. AECOM has provided consultation for industrial and office processes to help clients' reduce the risk of costly musculoskeletal disorders and improve workflow.

Occupational Health Risk Assessment. AECOM's PhD-credentialed toxicologists and industrial hygienists are experienced in ranking chemical risks as part of our clients' new chemical review processes. We also can provide human health risk assessment support for new processes. AECOM is equipped to develop recommended occupational exposure limits for substances without TLVs or PELs.

Infection Prevention. AECOM's Certified Infection Control (CIC) Epidemiologists design policies and programs to prevent the introduction of biological pathogens into facilities during construction and renovation projects. We also design and implement water management programs to prevent the introduction and spread of Legionella within facilities.