

# **Environmental Health Engineering Portfolio**

## Mission

The mission of the Environmental Health Engineering Portfolio is to assess, maintain and improve Soldier and Army community environments to advance readiness, health and sustainability. Experts in this portfolio work to protect Soldiers and Army communities, worldwide and including deployments, from environmental conditions that could adversely affect human health — including those associated with air, water, soil, waste, noise and insects. Their efforts also help promote environmental health awareness throughout the Army and DOD.

#### Background

The Environmental Health Engineering Portfolio has been present in some form at all predecessor organizations of the U.S. Army Public Health Command. Staff elements have existed for nearly 70 years, since the establishment of the U.S. Army Industrial Hygiene Laboratory at the beginning of World War II.

## Clients

The Environmental Health Engineering Portfolio's clients are Army and DOD commands, leaders and personnel; garrison staff; medical treatment facilities; and deployed units.

## Structure and Organization

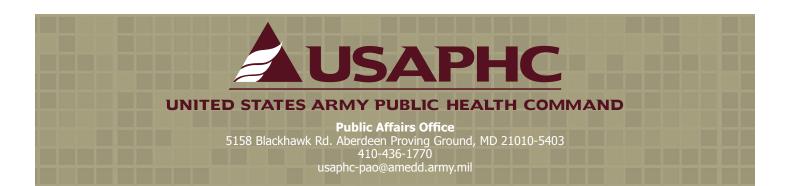
The Environmental Health Engineering Portfolio is one of nine portfolios at the Army Institute of Public Health, a subordinate unit of the USAPHC. The portfolio executes its mission through seven AIPH technical programs, and also through portfolio-aligned collaboration with environmental health engineering divisions at each of the five USAPHC regions. The portfolio's AIPH technical programs include the following:

\* Entomological Sciences Program — Prevents exposure to vector-borne diseases, hazardous plants and animals, and pesticides by providing expert diagnostic, investigative and educational services to Army communities. Technical services include management of the DOD human tick surveillance program and vector-borne disease testing to support deployed and garrison units, deployment entomological risk assessments, and the archiving of deployed unit pesticide usage data. Program personnel also maintain the DOD Pesticide Hotline.

\* Water Supply Management Program — Supports military water and food supply communities to ensure high-quality drinking water and safe food service in field and garrison environments. Program staff help ensure the water supplied to military personnel is free of contaminants through water assistance visits, vulnerability assessments and client consultations. The program also develops water conservation plans for Army hospitals. Qualified experts also assist with inspections of military dining facilities, commissaries and other venues to ensure that food preparation and sanitation meets or exceeds Army standards.

\* Surface Water and Wastewater Program — Preserves water quality and protects garrison and field populations from the adverse health impacts of water pollution. Staff experts focus on collection, treatment, and disposal of wastewater; management of storm water through best management practices; prevention and control of oil and hazardous material spills and the associated contingency planning; surface water maintenance (physical, chemical, and biological quality); and the sustainability, conservation and reuse of water.

\* Hazardous and Medical Waste Program — Protects Army units and garrison populations from the health threats posed by hazardous and medical materials and waste and minimizes the adverse effects of improper waste management awareness. Staff experts conduct site assessments and compliance reviews, author disposal instructions and provide required waste disposal training. For Army medical treatment facilities, the program ensures the safe and proper transport and disposal of medical waste; for military industrial operations, it ensures that solvents and other waste streams from military industrial operations are managed in a way to protect health and the environment.



\* Groundwater and Solid Waste Program — Minimizes environmental health threats through surveys and studies of subsurface soil and groundwater contamination and by evaluating solid waste management and pollution prevention practices. Groundwater monitoring serves to protect the quality of known and potential potable water sources. Integrated solid waste management and pollution prevention practices conserve resources and create a healthier, more sustainable environment at military facilities. In addition, experts in this program conduct Environmental Condition of Property assessments (required prior to real estate transfers) to minimize health risks to future occupants of Army property.

\* Air Quality Surveillance Program — Evaluates and controls airborne environmental health threats through air quality surveillance of military communities. Staff professionals provide training and assistance to deployed units, and on-site interviews and consultations at Army and DOD installations. Specially trained experts sample and monitor ambient air, and test boiler and industrial operation exhaust emissions to ensure compliance with federal, state and local environmental health laws and regulations. This surveillance and monitoring helps maintain the best possible air quality in Army communities.

\* Operational Noise Program — Ensures that the noise from Army operations is at a comfortable level, and does not adversely affect Soldiers and retirees, their families, Army civilians, and the surrounding community. The program develops installation plans for operational noise, noise and vibration mitigation, and acceptable land use. Additionally, staff experts assess noise impacts for all proposed range construction and troop alignments, with the ultimate goal of ensuring the long-term sustainability of ranges and training.

#### **Environmental Health Engineering's People**

The portfolio fields matrixed, multidisciplinary teams to provide a full spectrum of environmental health and response services. It fields these teams from the nearly 120 military and civilian engineers, scientists and support staff who compose its AIPH technical programs. These professionals include environmental engineers and scientists, geologists, biologists, chemists, meteorologists, entomologists, and environmental science and engineering officers. In addition to their professional training and experience, many employees hold advanced degrees and professional certifications.

The Environmental Health Engineering Portfolio leverages its expertise by collaborating with other USAPHC public health experts and coordinating with other federal organizations and state regulatory agencies.

#### Benefits for the Army

- \* Matrixed responses to emerging public health threats.
- \* Multidisciplinary teams Scientists, engineers, technicians – with full-spectrum, in-house technical support
- \* Globalized multi-media intellectual capital with technical reach-back capability
- \* Positive influence on DOD environmental health programs through onsite and public health oversight activities
- \* Cost-effective professional services with a wide variety of funding mechanisms