



Environmental Laboratory Services

Federal Occupational Health (FOH) operates three (3) fully equipped and accredited federal environmental laboratories. These state-of-the-art laboratories offer both sampling and analytical support services, and specialize in industrial hygiene, environmental, microbiological, asbestos, and fine particle analyses.

FOH is a non-appropriated agency that provides occupational health and wellness services exclusively to federal employees. FOH was created by Congress in 1946 by an amendment to the Public Health Service Act (42 U.S.C.), and is a service unit within the Department of Health and Human Services (HHS), Program Support Center. Our **mission** is to improve the health, safety, and productivity of the federal workforce.

FOH offers federal agencies a comprehensive package of environmental health services that will enable them to maintain a healthy and productive workplace environment, as well as assess, evaluate, and control a multitude of safety and health exposure concerns. Our environmental health professionals are available to provide expert consultation to help agencies comply with and stay abreast of ever-changing Occupational Safety and Health Administration (OSHA) and Environmental Protection Agency (EPA) regulatory compliance mandates.

Environmental Microbiological Laboratory

Microbial contaminants can include allergens, molds and mildews and are often the cause of employee complaints about musty or earthy odors, headaches, and allergy symptoms such as coughing, sneezing, sinus and upper respiratory problems. The FOH Environmental Microbiological Laboratory provides a wide variety of air and water-borne microbial contaminant analytical services and expert consultation services. With samples collected from air, water, wet building materials, and dust, and the environmental Microbiological Laboratory helps identify and evaluate potential building-related health hazards.

FOH's laboratory can conduct fungal (including *Stachybotrys*) and bacterial characterizations using bioaerosol, swab/wipe, contact plate, bulk, or dust samples. The lab can also analyze for indoor allergens including dust mites and cat, dog and cockroach allergens.

The Environmental Microbiological Laboratory also analyzes both potable and non-potable water for the presence and identification of water-borne microbial contaminants such as *Legionella*, heterotrophic, and *E. coli* bacteria.

Industrial Hygiene, and Environmental Laboratory

FOH's Industrial Hygiene and Environmental Laboratory provides Gas Chromatography/Mass Spectroscopy, Atomic Absorption, and Wet Chemistry analytical services and can analyze potentially contaminated sources for harmful chemical compounds including:

- Heavy metals such as lead, arsenic, cadmium, chromium, and selenium.
- Chemicals that have Permissible Exposure Limits and/or Short Term Exposure Limits established by OSHA to protect employees from potential inhalation hazards.

- Substances with Threshold Limit Values established by the American Conference of Governmental Industrial Hygienists and Recommended Exposure Limits published by the National Institute for Occupational Safety and Health.
- Chemicals that the EPA regulates in industrial effluents, air emissions, and solid waste under the National Permit Discharge Elimination Systems Program, the Clean Air Act, the Resource Conservation and Recovery Act, and the Comprehensive Environmental Response, Compensation and Liability Act.

Asbestos and Fine Particle Analysis Laboratory

The Asbestos and Fine Particle Analysis Laboratory can provide both Optical and Electron Microscopy analytical capabilities. Using state-of-the-art electron or optical microscopy, FOH is able to analyze for the presence, type and quantity of asbestos and other potentially harmful airborne particulate contaminants in federal buildings. FOH can also provide consultation regarding optimal sample collection, sample transport, sample preservation, and chain of custody techniques.

FOH uses one or more of the following protocols for asbestos and dust sampling:

Optical Microscopy

- Phase Contrast Microscopy (PCM)
- PCM-NIOSH 7400
- 160PLM/Point Count-EPA/600/M4-82-020
- Polarized Light Microscopy (PLM)
- PLM-NIOSH 9002 & EPA/600/93/116
- PLM/PCM-OSHA ID

Analytical Electron Microscopy

- TEM-AHERA Protocol (Yamate Level II)
- TEM-Chatfield Protocol
- TEM/SAED/EDXA-NERL SOP-101
- TEM-NIOSH 7402
- TEM/Water-EPA/600/4-84-043
- Unknown Fine Particle identification

Quality Assurance

FOH's commitment to providing customers with consistently high quality data is evidenced by its strong quality assurance programs. FOH reviews and establishes protocols for all facets of its laboratories' operations, from sampling strategies to the final review and issuance of reports.

Since 1996, the FOH Industrial Hygiene and Environmental Laboratory has maintained continuous accreditation by the American Industrial Hygiene Association (AIHA). This has included participation in the AIHA Proficiency Analytical Testing Program (PAT), the Industrial Hygiene Laboratory Accreditation Program for Metal and Organic compounds, and the Environmental Lead Laboratory Accreditation Program for paint, soil and dust.

FOH's Asbestos and Fine Particle Laboratory is accredited by the National Voluntary Laboratory Accreditation Program for Bulk Asbestos Fiber Analysis. This lab also participates in the AIHA PAT on a quarterly basis.

FOH, the Occupational Health Provider of Choice for the Federal Government

The mission of FOH is to improve the health, safety, and productivity of the federal workforce. Created by Congress in 1946, FOH is a non-appropriated service agency within the Department of Health and Human Services (HHS), Program Support Center.

Federal agencies throughout the U.S. and overseas can access FOH services. FOH provides worksite health services, Wellness/Fitness, Employee Assistance Programs (EAP), Work/Life, Environmental Health and Safety, Organizational and Professional Development, and Training and Education.

Make Federal Occupational Health your partner in building a healthier, more productive work force. For more information, please visit us at www.foh.dhhs.gov or call us today at **1-800-457-9808**.