U.S. Army Engineer
Research and Development Center

Analytical Chemistry, Research, and Methods Development

Background

Analytical chemistry is essential for environmental chemistry research, site investigations, site remediation, dredging operations, water quality investigations, and other environmental activities. The Environmental Chemistry Branch (ECB) performs environmental chemistry research, completes method development, and provides a wide range of analytical chemistry capabilities.

Description of Technology

The Environmental Chemistry Branch maintains state-of-the-art chemistry laboratory facilities in two locations: Vicksburg, Mississippi, and Omaha, Nebraska. In addition to in-house research projects, ECB provides sample analysis for Department of Defense research studies and all major environmental analytical programs of the Environmental Protection Agency (EPA). The ECB routinely develops new analytical methods in addition to the use of methods from EPA's Test Methods for Evaluating Solid Waste (SW-846), Standard Methods for the Examination of Water and Wastewater, U.S. Geological Survey Methods, etc. ECB completes analysis of water, soil, sediment, and tissue samples for explosives, volatile and semi-volatile organics, metals, aroclors and PCB congeners, pesticides, herbicides, nutrients, and numerous other environmental contaminants. ECB is a fully equipped and staffed analytical laboratory completing research, analytical support, water quality analysis, quality assurance support, and many other activities associated with analytical chemistry.

Benefits

ECB is the primary source for all aspects of analytical chemistry in the Corps of Engineers. The extensive experience of personnel, combined with the state-of-the-art facilities and analytical equipment, provide a unique analytical chemistry resource for engineers and scientists. As project team members, ECB personnel supply the analytical chemistry perspective and capability to bring success to environmental projects. ECB analysts and technicians provide key analytical chemistry support for research, HTRW site investigations, site remediation, and a variety of other ERDC and Corps District activities.

Points of Contact

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