



Bioaccumulation/Bioconcentration Studies

Capabilities

On-Site Monitoring of Bioaccumulative Pollutants

Development of Site Specific BAFs

BAF Methods and Modeling Evaluations

BAF Standards Development

Fish Biouptake Studies



Clients

U.S. Fish and Wildlife

U.S. EPA

U.S. Army

Wastewater Utilities

Power Generation Industry

Industrial Dischargers

Bioaccumulation and Bioconcentration studies are often integral to the evaluation of hazards to human and aquatic life and compliance with NPDES or other regulatory requirements. GLEC has the resources to conduct laboratory and on-site field bioaccumulation/bioconcentration studies that measure the effects of pollutants on the survival, growth, and behavior of aquatic species. Our mobile laboratory is used to expose fish and/or shellfish to site waters. Bioconcentration studies of fish, shellfish, and other invertebrates for specific chemicals are typically conducted in our Columbus and Traverse City toxicology laboratories.



The mobile laboratory is equipped to monitor bioaccumulative chemicals by directly exposing fish in a flow-through system to effluents and site waters obtained at client locations. The mobile laboratory also facilitates development of site-specific bioaccumulation factors (BAFs) utilizing GLEC's special expertise in the water quality and trophic level considerations affecting BAF values. GLEC's environmental chemistry capabilities often complement bioaccumulation/bioconcentration studies, including biouptake studies of fish tissue from site waters.

Along with our extensive field and laboratory capabilities, GLEC plays a key role in the development, evaluation, and validation of national BAF methods, models, and standards. Our broad expertise and involvement assures that clients in both the regulated and regulatory communities benefit from the highest quality deliverables. All GLEC field and lab operations followed prescribed EPA, ASTM, or other specified methods/ protocols and comply with proven GLEC quality plans and procedures.



www.glec.com
614-487-1040

Contact: Dennis McIntyre, Research Scientist
dmcintyre@glec.com