

**IPEP: The U.S. Department of Energy's Integrated Performance Evaluation Program;
A Tool in a Total Quality System**

James R. Dahlgran
U.S. Department of Energy
Radiological and Environmental Sciences Laboratory
850 Energy Dr.
Idaho Falls, ID 83401

P.C. Lindahl, W.E. Streets
Analytical Chemistry Laboratory
Chemical Technology Division
Argonne National Laboratory

W.R. Newberry
U.S. Department of Energy
Office of Environmental Management
Washington, DC 20585

In support of DOE's environmental restoration and waste management efforts, EM has been charged with developing and implementing a program to continuously assess the performance of participating laboratories. The Radiological and Environmental Sciences Laboratory (RESL) in collaboration with Argonne National Laboratory (ANL) has developed and implemented a comprehensive Integrated Performance Evaluation Program (IPEP) for DOE-wide implementation. IPEP was developed in response to the Inspector General's request for consistent oversight of analytical laboratories providing analytical services to EM.

The IPEP uses results from existing inorganic, organic, and radiological PE programs when they are available and appropriate for the analytes and matrices being determined for DOE's EM activities. Existing programs include the U. S. Environmental Protection Agency's (EPA's) Water Supply (WS) and Water Pollution (WP) PE studies for inorganic and organic analytes, the DOE's Mixed Analyte Performance Evaluation Program (MAPEP), and DOE's Quality Assessment Program (QAP) for radiological analytes. These PE programs provide a spectrum of matrices and analytes covering the various inorganic, organic, and radiological categories found in routine environmental and waste samples. These PE programs already provide some assessment of laboratory performance; IPEP will expand these assessments by evaluating historical laboratory performance, as well as results from multiple PE programs, thereby providing an enhanced usage of the PE program information.

The use of information from multiple PE programs allows a truly global assessment of an individual laboratory's performance, and will provide a means of fairly comparing performance by different laboratories in a given analytical area. Areas where corrective action might be needed are identified. Assessment reports are being designed to facilitate consistent and fair laboratory oversight. The IPEP will interact with other programs within EM to provide an integrated system for assessment and improvement of data quality from participating analytical laboratories. IPEP laboratory assessment reports are available to sample management organizations, DOE management, and participating laboratories contracted throughout the complex.