



## **Office of Corporate Safety Analysis Analytical Services Program**

The [Analytical Services Program](#) (ASP) is a corporate Headquarters' (HQ) program managed by the Office of Health, Safety and Security, Office of Corporate Safety Programs, HS-31. HQ provides oversight, guidance and direction for its three component elements: the Department of Energy's Consolidated Audit Program (DOECAP), the Mixed Analyte Performance Evaluation Program (MAPEP), and the development of software to support environmental field sampling planning and design.

Supporting the field and program line organizations by assuring quality data and accountability for waste disposal is the focus of the ASP. DOE managers, workers and the public can feel confident that data from commercial analytical laboratories, who maintain contractual agreements with various DOE sites, can be used for making defensible clean-up and site closure decisions. Additionally, the ASP helps to ensure that treatment, storage, and disposal facilities receiving DOE low-level and mixed radioactive waste are operating in compliance with established regulatory requirements.

The elimination of redundant audit reviews of analytical laboratories and commercial waste facilities that would otherwise be conducted independently by field elements; the standardization of audit methodologies, policies and procedures; and the sharing of lessons learned throughout the Complex are the primary objectives of the DOECAP. The program is implemented through a federal DOECAP manager at the Oak Ridge Operations Office. The annual consolidated audits allow laboratories and waste disposal facilities to improve upon overall performance levels while reducing the number of redundant audits, and assuring DOE field managers that the analytical data is of high quality. An annual cost savings of over \$2.4 million is realized in conducting forty (40) annual consolidated audits. This program is voluntary and consists of a cadre of auditors comprised of mostly contractors and some Feds from across the DOE Complex. Each DOECAP auditor has to be approved by a qualification review board which evaluates the candidates proficiency in a particular area of review. Before being qualified as a DOECAP auditor, our auditors have to complete required reading to understand the DOECAP auditing process, take on-line training and must successfully pass an on-line examination, and participate in an auditor-in-training role during a DOECAP audit.

The MAPEP also provides quality assurance of analytical data through conducting semi-annual proficiency testing of radiological, stable inorganic and organic analyses for over 120 analytical laboratories supporting the Department's missions and interests. DOE

field and program line organizations are informed of which laboratories are performing well, and which have not yielded adequate performance testing results for certain analyses. MAPEP is implemented through the Radiological and Environmental Sciences Laboratory at the Idaho National Laboratory.

Reducing data uncertainty goes beyond the analytical laboratory. The planning, design and collection of soil, water, vegetation and air samples is another component of the ASP. The field and its regulators provide inputs for software development needs and use the various software statistical calculations to reduce the number of field samples; yet maintain the same level of confidence in the data. The ASP is working with several DOE organizations in the application of software development which reduces field sampling costs, while improving upon the quality of data collection by utilizing the visual sample planning toolkit and by providing training opportunities for field employees.

The ASP approach is a success in that consolidated audits, performance evaluation and testing, and software development used to collect data is a corporate cost-effective way of doing business that provides overall confidence in our decision-making.