

MAPEP Mixed Analyte Performance Evaluation Program

MAPEP provides quality assurance oversight for environmental analytical services by performing semiannual proficiency testing and evaluation of laboratories managed by the U.S. Department of Energy (DOE), the U.S. Department of Defense, and other federal agencies; commercial analytical laboratories; and international analytical laboratories. During Fiscal Year 2015, 89 U.S. laboratories and 47 international laboratories participated in MAPEP.

As described in DOE Guide 414.1-2B, *Quality Assurance Program Guide*, successful participation in MAPEP supports the efforts of laboratories with DOE contracts to meet the requirements in DOE Order 414.1D, *Quality Assurance*.

MAPEP provides performance-based assessments of participating laboratories. The DOE Radiological and Environmental Sciences Laboratory (RESL) manages the program. RESL distributes MAPEP proficiency testing samples semiannually to national and international laboratories. For each MAPEP test series, the participating laboratories complete over 7,000 analyses, which include the following:

- ◆ Alpha, beta, and gamma emitters
- ◆ Priority pollutant inorganic compounds

RESL's Accreditations:

- ◆ ISO/IEC 17025:2005, *General Requirements for the Competence of Testing and Calibration Laboratories*
- ◆ ISO/IEC 17043:2010, *Proficiency Testing Provider Accreditation Program*
- ◆ ISO Guide 34:2009, *General Requirements for the Competence of Reference Material Producers*



MAPEP offers semiannual proficiency testing in:

- ◆ Water
- ◆ Soil
- ◆ Air Filters
- ◆ Vegetation

Containing NIST-traceable:

- ◆ Radionuclides
- ◆ Organics
- ◆ Inorganics

Planned MAPEP Series Test Sample Shipments in Fiscal Year 2016

RESL plans to ship:

- ◆ MAPEP Series 33 in Late February through Mid-March 2016
- ◆ MAPEP Series 34 in September 2016

Secure MAPEP Website:

- ◆ Report results over the web
- ◆ Individual laboratory performance reports
- ◆ MAPEP session summary reports
- ◆ Query for historical trending
- ◆ Laboratory performance trending
- ◆ <https://mapep.inl.gov>

MAPEP Website: <http://www.id.energy.gov/resl> (MAPEP tab)

