Quality Assurance Technical Support (QATS)





Customers

Under the Quality Assurance Technical Support (QATS) contract, CB&I provides quality assurance (QA) support to the U.S. Environmental Protection Agency (EPA) Office of Superfund Remediation and Technology Innovation (OSRTI) Analytical Services Branch (ASB). This includes support to ASB in their management of the EPA Contract Laboratory Program (CLP) and support to the 10 EPA Regions in assessing laboratory performance.

Products/Services

The QATS Program products and services fall under five task areas:

1. Performance Evaluation Samples/Reference Materials (PES/RMs). Single- and double-blind performance evaluation samples (PESs) are developed for the CLP Quarterly Blind (QB) program, Pre-Contract Award (PA-PES) evaluations, the EPA Regions and site-specific projects. The PES inventory includes organic volatiles, semi-volatiles, pesticides, PCBs, inorganic metals, mercury and cyanide in different matrices. Special order or site-specific PESs include asbestos, perchlorate, volatile organics in air, 1,4-dioxane, chlorinated acid herbicides, organophosphorous pesticides, lead wipe, PFCs, and classical chemistry analytes. Inorganic reference materials (RMs) are developed and distributed for use as the primary check materials in EPA's CLP Program. The QATS inventory currently includes over 100,000 PES/ RM materials bottled and ready for distribution. In

- addition to PES/RM products, the QATS Program develops and maintains scoring applications for evaluating QB and PA-PES studies, and a web-based scoring application for use by the EPA Regions.
- 2. Data Audit. Data package/electronic audits of data materials from CLP and non-CLP laboratories are performed to determine adherence to contractual requirements, verify integrity through electronic data file reprocessing, and support special investigative audits to evaluate suspected discrepancies. Other evaluations include verification of inorganic method detection limits (MDLs), inter-element correction factors, linear range data and organic MDLs, along with compliance audits of laboratory procedures. QATS also routinely provides data validation support for special projects, including asbestos data validation for EPA Regional Superfund site projects and organic and inorganic data validation for EPA Regions and other progams. QATS performed asbestos data validation of over 49,000 samples in support of two World Trade Center indoor air studies.
- 3. On-site Audit. QATS provides support to ASB and the EPA Regions by performing on-site audits of laboratories / project sites to determine adherence to contractual requirements, laboratory procedures, capacities, capabilities and staffing. On-site audits include routine, non-routine, pre-award and special investigative for organic and inorganic, dioxin, chlorinated biphenyl congeners, asbestos and air parameters under protocols and standards including ISM02.3, SOM02.3, HRSM01.2, ASB01.0, TO-14 and ISO 17025.
- 4. Methods Development. The QATS Program routinely supports EPA method evaluations through the design, implementation and reporting of single- and multilaboratory studies. Recent multi-laboratory studies include studies in marine biota for two regional projects; three lead and arsenic bioavailability multi-laboratory studies to verify NIST solid reference materials; and the development of a method to determine mercury in compact fluorescent lamps. Other multi-laboratory studies supported by QATS have included 1,4-dioxane (purgeable vs extractable); deuterated monitoring compounds for SOM methods; pressurized fluid

extraction, Soxtherm and solid phase extraction methods for semi-volatiles and pesticides; stability of VOCs-insoil for temperature, containers, and preservatives; and Method 8261 (vacuum distillation). QATS also recently developed a draft analytical asbestos SOW and Asbestos National Functional Guidelines for EPA's asbestos national laboratory program.

5. Logistical and Administrative Support. This area includes the operation, maintenance, health and safety, training, and QA of the laboratory and facilities, preparation of monthly technical and financial reports, maintenance of the quality management system, and technical conference support. Since 2001, the QATS Program has prepared and presented over 58 papers and workshops at national EPA and quality conferences and published three journal articles on various technical, QA and ISO 9000 topics.

Customer Buy-In

EPA customers outside the CLP can "buy-in" to the QATS contract to obtain support in any of the above task areas. Recent examples include the Great Lakes National Program Office for data validation and QAPP evaluation support, the Office of Emergency Management for asbestos and chemical warfare support, Region 4 for Libby Asbestos data validation, Region 8 for Libby Asbestos QA support, Region 9 for Air Division technical systems audits, and Region 10 for two separate method validation multi-laboratory studies for arsenic speciation in marine biota and explosives in marine biota, as well as the development of a Puget Sound sediment reference material. Other buy-in customers have included Region 2 for World Trade Center data validation support, Region 1 for asbestos and metals data validation support, the EPA Office of Air Quality and Planning and Standards for data and on-site laboratory audit support, and EPA OSRTI for the management of three separate In-Vitro Bio-Accessibility Round Robin studies for the certification of a NIST and a USGS solid reference material for lead values.

Quality Management System

The QATS Quality Management System (QMS) is certified to the ISO 9001:2008 International Standard and has been certified to ISO 9000 since 2001. It was the first EPA contract organization with an ISO 9000 certified QMS. All QATS Program on-site auditors have professional training from the American Society of Quality (ASQ), and include 6 ASQ-Certified Quality Auditors, one Certified Manager of

Quality and Organizational Excellence, 14 trained ISO 9000 Lead Auditors, and one trained ISO 17025 Lead Auditor.

Facility

The QATS Program facilities include a full service analytical laboratory dedicated to prepare, test, store and distribute PES/RM materials as required by contract. The facility features 18,500 square feet of laboratory and office space, a repository for PES/RM sample storage, a repository for asbestos sample storage, a containment laboratory for handling highly hazardous materials, an audit area for electronic and hardcopy data audits and data materials storage, and a conference room capable of hosting meetings of up to 50 attendees.



The Quality Assurance Technical Support Program's Quality Management System is certified to the ISO 9001:2008 International Standard

Contact

2700 Chandler Avenue, Building C Las Vegas, NV 89120 Tel: +1 702 795 0515 Fax: +1 702 795 8210

Sara Duncan, EPA ASB QATS Project Officer

Tel: +1 703 603 9097

Email: duncan.sara@epa.gov

Clyde Hedin, QATS Program Manager

Tel: +1 702 895 8711

Email: clyde.hedin@CBIFederalServices.com

Visit www.CBI.com