



Connecticut Reasonable Confidence Protocols (RCP)

Enhanced Laboratory Quality Assurance and Quality Control Procedures

Overview

The Connecticut Department of Environmental Protection (DEP) developed guidelines for enhanced QA/QC procedures for analytical methods and reporting commonly referred to as the Reasonable Confidence Protocols (RCPs). The RCPs will recommend method-specific performance criteria and will recommend methods for reporting QA/QC data. This guidance covers enhanced QA/QC for SW-846 and the Connecticut ETPH methods. The main reasons for the guidance were the wide variability of QA/QC practices by laboratories and SW-846 methods do not require specific QA/QC requirements.

Regulation Summary

The RCPs will be incorporated as an Appendix to the “State of Connecticut Department of Environmental Protection, Draft Site Characterization Guidance Document.” The other components of this guidance include a laboratory certification form and a laboratory communication form.

RCP Requirements

The laboratory certification form will be used to document compliance with the DEP RCPs. This form will be used to determine if the data meets the DEP’s requirements for “Reasonable Confidence.” The use of the laboratory communication form is optional and may be modified by the environmental professional to ease communication with the laboratory.

Methods of Concern

The following methods currently have RCPs:

- 6010
- 6020
- 7000 series
- 7196
- 7470/7471
- 8021
- 8081
- 8082
- 8151
- 8260
- 8270
- 9010/9012/9014
- ETPH
- SPLP 1312
- TCLP 1311
- TO-13
- TO-15
- TO-17

RCP QC Requirements

- Site-specific MS/MSD preferred
- All compounds calibrated and reported unless directed differently
- Minimum Relative Response Factor (RRF) of .05 for 8260
- Full MS/MSD and LCS spikes—fixed windows for acceptance criteria
- Clear documentation of exceptions in the case narrative or comments
- Applicable to SW-846 methods only; no EPA methods
- Report multiple dilutions
- Sonication of soils for extraction is not allowed unless debris is present
- Report 1262 and 1268 arochlors when PCBs are analyzed
- MQL must be lower than the action level and low point in the calibration curve is used for the LOQ; no J flags unless indicated.



Massachusetts Contingency Plan (MCP)

QA/QC Requirements for Laboratories in the Compendium of Analytical Methods (CAM)

Overview

In August 2003 the Massachusetts Department of Environmental Protection (MA DEP) enacted a data quality enhancement program to provide environmental professionals with recommended laboratory procedures, field sample quality assurance/quality control and reporting requirements for analytical data. The laboratory procedures provided include method-specific QA/QC requirements and performance standards. Compliance with the QA/QC requirements and performance standards for these methods will provide a Licensed Site Professional (LSP) with the “presumptive certainty” regarding the usability of analytical data to support MCP decisions.

Regulation Summary

The MCP is used to support assessment and evaluation decisions at disposal sites regulated under M.G.L.c. 21E. If an alternative to the recommended QC requirements and/or performance standards is chosen, the LSP is required to demonstrate that all analytical and environmental monitoring data used to support MCP decisions are in compliance with the requirements of 310 CMR 40.0017 (2), the Response Action Performance Standards (RAPS).

MCP Requirements

In order to achieve presumptive certainty, professionals must:

- Use the MCP Analytical Methods detailed in the CAM.
- Report concentration data for all compounds/elements on the method-specific analyte list.
- Adopt the Tentatively Identified Compound (TIC) reporting requirements specified in the CAM.
- Comply with the applicable QC requirements prescribed for the individual testing procedures in the CAM.
- Collect and analyze field samples and field QC samples in the manner prescribed in the CAM.
- Provide acceptable sample custody documentation.
- Adopt the reporting formats, contents and certifications specified in the CAM.

A Presumptive Certainty form stating that the laboratory complied with the requirements of the MCP is required to be submitted with the data.

Methods of Concern

The following methods are covered by the MCP:

- 8260B
- 8270C
- 6010B
- 7470/7471
- 7000 series
- 6020
- MA VPH
- MA EPH
- 8082
- 8081A
- 8151A
- 8021B
- 9014
- 7196A
- 8330

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Lancaster Laboratories, Inc.
2425 New Holland Pike
Lancaster, PA 17601
717-656-2300

For more information,
please contact
Kevin Moran at Ext. 1339