



Texas Risk Reduction Program

TRRP-13 Review and Reporting of COC Concentration Data

Overview

The Texas Commission on Environmental Quality (TCEQ) enacted the Texas Risk Reduction Program (TRRP) in September 1999 to provide a statewide corrective action program to protect both human health and the environment from releases of chemicals of concern (COC). The program applies to releases of COCs that are produced, stored or disposed at commercial and industrial facilities or operations.

TRRP also applies to the closure of tanks, landfills and other waste management facility components at locations that are regulated under the following programs:

- State Superfund
- Industrial Solid Waste and Municipal Hazardous Waste
- Voluntary Cleanup
- Underground Injection Control
- Wastewater Treatment
- Petroleum Storage Tank

Why Choose Lancaster Laboratories?

- Our staff has an in-depth understanding of TRRP requirements and has been directly involved with the program since inception.
- We provide TRRP-13 compliant analytical data and deliverables.
- We also provide low-level analyses such as 25-mL Purge 8260B for VOCs, SIM GC/MS 8270C and ICP MS 6020 to meet TRRP PCLs.

Regulation Summary

TCEQ has developed regulatory guidance (RG) documents to help the regulated community, environmental professionals and the general public understand and implement TRRP as described in 30 Texas Administrative Code (TAC) Chapter 350.



The document most critical to analytical laboratory data is RG-366/TRRP-13, "Review and Reporting of COC Concentration Data."

TRRP-13 was finalized in December 2002 and applies to data generated on or after February 1, 2003. The document includes requirements for:

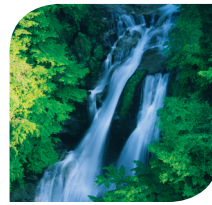
- Sample analysis and quality control
- Data reporting requirements—Laboratory Review Checklist (LRC)
- Evaluation of laboratory data—Data Usability Summary (DUS)

TRRP-13 Requirements

TRRP-13 specific data reporting requirements include MDLs, SQLs, MQLs (see back), LRCs for reportable and supporting data and exception reports used to document any anomalies observed during the project. This level of review by the laboratory is more intensive than most other state or federal programs and ensures program compliance.

TRRP-13 Laboratory Data Deliverables typically include:

- Cover page
- Cross reference table
- Analysis reports
- Quality control forms
- Laboratory review checklists
- Exception reports
- Field chain of custody



Once data has been generated and reviewed at the laboratory, it's sent to the client for completion of the Data Usability Summary. The TRRP DUS requirements are similar to data validation criteria and are used to assess data quality and usability.

TRRP-13 includes specific laboratory quality control procedures including matrix-specific MDLs determined for each COC, LCS and MS/MSD samples spiked with all COCs and the quarterly analysis of a Detectability Check Sample (DCS).

DCS analysis and detection is critical to confirm a laboratory's ability to detect sample concentrations at or near the MDL for all COCs.

The DCS process includes sample preparation and accounts for compound extraction efficiencies. The DCS concentration is equal to or up to three times the MDL concentration.

Definitions

MDL—Method Detection Limit

The minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero. MDLs are determined annually on each instrument for each method in aqueous and solid matrix following the seven replicate procedure outlined in 40 CFR Part 136 Appendix B.

MQL—Method Quantitation Limit

The concentration of the lowest nonzero standard in the laboratory's initial calibration curve is based on the final volume of extract (or sample) used by the lab. A low-level check standard with acceptable range of $\pm 20\%$ is used for ICP analysis. Ideally, the MQL needs to be at or below the Level of Required Performance (LORP) required for the project. The LORP is defined as the site-specific Protective Concentration Level (PCL) values.

SQL—Sample Quantitation Limit

The MDL is adjusted to reflect sample-specific criteria such as dilution, moisture content, sample size, etc.

Data reported between the MDL and MQL require the application of a J flag to COC concentrations.

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Lancaster Laboratories, Inc.

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

For more information,
please contact
Don Wyand at Ext. 1525