

Regulatory Oversight Issues and Overview of Draft NJDEP Triad Guidance

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How is Triad Different Than What We Do Now?

- ◆ Strategic Planning
- ◆ Sampling Goal = develop an accurate CSM
- ◆ Invest time upfront to save total project time



Why Use Triad?

- ◆ War on caseload - reduce referrals
- ◆ Improve project focus & communications
- ◆ Eliminate excessive data needs
- ◆ Savings of \$4,430,000 for 11 projects
- ◆ from: "Using The Triad Approach To Improve The Cost-Effectiveness Of Hazardous Waste Site Cleanups"
EPA 542-R-01-016, October 2001

Policy Statement

- ◆ DEP supports and encourages Triad
- ◆ DEP evaluated the Technical Rules for compatibility with Triad
- ◆ Current guidance = draft Chapter 7 of the Field Sampling Procedures Manual
- ◆ Triad users are encouraged to use an MOA

NJDEP Guidance Document

- ◆ Policy Statement
- ◆ Technical Rules Compatibility With Triad
- ◆ Application of Field Analytical Methods (When)
- ◆ Field Analytical Techniques (What)

NJDEP Guidance Document

- ◆ Specific Advantages Of Field Analysis
- ◆ Selection Of A Field Analytical Method
- ◆ Quality Assurance Requirements
- ◆ References/Resources
- ◆ Glossary

Technical Rules Compatibility With Triad

- ◆ NJAC 7:26E-1.12, etc - Department Oversight Required (rads, IEC, free product, etc)
- ◆ NJAC 7:26E-1.4, etc - Department Notification (sampling, IRA-IEC, upgradient ground water contamination, etc)
- ◆ NJAC 7:26E-2.1(a)5, etc - Potentially Complex Aspects of Investigation and Remediation (alternative method, background investigations, eco, off-site contamination, etc)



Technical Rules Provisions

NJAC 7:26E-2.1(b)

Use FAMs without a variance:

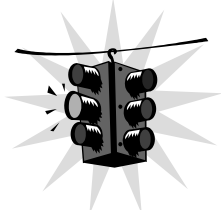
- ◆ for delineation when the contaminant identity is known or if there is reasonable certainty that a specific contaminant may be present.
- ◆ to bias sample location to the location of greatest suspected contamination.
- ◆ for initial characterization for large areas (50% of samples).

Technical Rules Provisions

Don't use FAMs:

- ◆ to verify contaminant identity or clean zones.

Note: variances allow for reduction of the 100% certified lab sample requirement to 25-50%.



Technical Rationale for Variances

- ◆ Demonstrated accuracy of the method by site pilot study
- ◆ SW846 or other verified method
- ◆ Method deliverables
- ◆ Documented minimal matrix effect



Overview of Sample Analyses Table 7-1

Screening Analyses

examples: PID, FID, Hydrophobic Dye

- ◆ Health & Safety
- ◆ Field use when excavating
- ◆ Contaminant Screening & Delineation

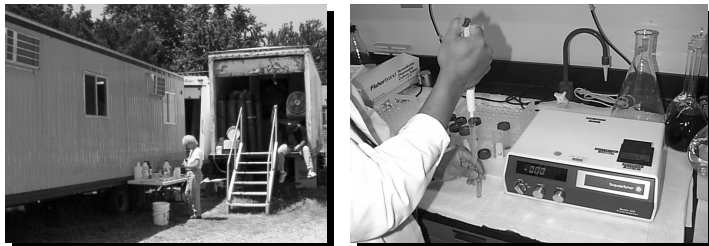
Supportive Analyses

examples: Portable GC, IA Kits

- ◆ Clean sample confirmation during SI if >10 samples collected
- ◆ Clean sample confirmation during SI with variance if <10 samples collected
- ◆ Contaminant delineation
- ◆ Clean zone confirmation with variance

Correlating Data from Field Methods with Standard Analytical Methods

- ◆ Can document bias in the field method
- ◆ Can aid interpretation of data that are not analyte-specific
- ◆ Degree of correlation can be calculated



Confirmatory Analyses

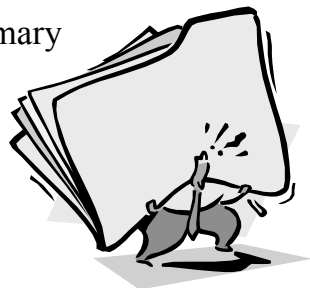
examples: Fixed/Mobile Certified Lab Analyses

- ◆ Contaminant identification
- ◆ Clean zone confirmation



Screening Analyses Deliverables

- ◆ Instrument calibration records
- ◆ Instrument maintenance logs
- ◆ Non-conformance summary



Supportive Analyses Deliverables

- ◆ Initial calibration curves
- ◆ Continuing calibration curves: 1/10 samples
- ◆ Field Duplicates: 1/20 samples
- ◆ Background/Blank data
- ◆ Analyses Run Log
- ◆ Raw data submission (chromatograms, recorded instrument readouts, etc.)
- ◆ Chain of Custody/sample tracking sheets

Supportive Deliverables (con't)

- ◆ Non-conformance summary w/deviations from approved SOP & QA/QC parameters outside control limits
- ◆ Matrix Spike Recovery (case-by-case)
- ◆ Surrogate Analyte Analysis (case-by-case)
- ◆ Method Blank Analysis (case-by-case)
- ◆ QC Check Sample Analysis (case-by-case)

Open Issues & Future Sessions

- ◆ Certification for FAMs
- ◆ Electronic data
- ◆ Technical support on Websites
- ◆ Dec 4 session on Real-Time Measurements
- ◆ Annual Triad sessions