

REMEDIATION ROUNDTABLE

April 12, 2011



BUREAU OF WATER PROTECTION AND LAND REUSE
CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION

ROUNDTABLE PROCEDURES AND MECHANICS



CAMILLE FONTANELLA

REMEDIATION ROUNDTABLE



- An open forum for the exchange of ideas and information on CT's Remediation Programs
- Bi-monthly (every two months) on 2nd Tuesday
- Next meeting: June 14, 2011
- Schedule and agenda on website
www.ct.gov/dep/remediationroundtable
- May submit topic suggestions to Camille Fontanella at
DEP.remедiationrondtable@ct.gov

REMEDIATION ROUNDTABLE



GROUND RULES

- ▣ Your involvement and constructive, creative ideas will make this a success
- ▣ Agenda items may include program proposals and updates, training, field/implementation issues, and regulatory application
- ▣ Specific sites/cases will not be addressed
- ▣ Be respectful of time constraints
- ▣ Agendas will be shaped by your suggestions

FUTURE AGENDAS

SURVEY



- First Survey is on the web!!!
 - www.ct.gov/dep/remediationroundtable
- 14 topics generated by written comments you submitted
- Let us know...
 - Which are most important to you?
 - Which ones would be suitable for agenda topic?
- Posted through May 10
- **70 completed survey so far**

TODAY'S AGENDA



PROPOSED ITEMS

- RCP and DQA/DUE Guidance Documents Updates
- Future Guidance
- Announcements
- Public Participation
 - ▣ Feedback on Evaluation of Cleanup Programs
baseline paper
 - ▣ First Breakout Group

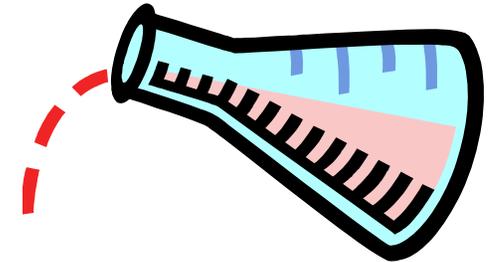
REASONABLE CONFIDENCE PROTOCOLS GUIDANCE



PETER HILL

RCPs GUIDANCE

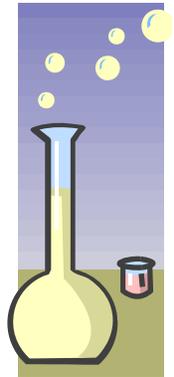
BACKGROUND



- RSRs use numeric criteria
- Analytical data may be biased, need to understand the quality of the analytical data to make decisions that are based on data of **known and sufficient quality**
- RCPs make it easier to obtain analytical data of known quality

RCPs GUIDANCE

□ Clarifications were made to the Preamble:



- ▣ RCPs are one way to obtain analytical data of known quality
- ▣ Developed to facilitate both EP evaluation and DEP review

RCPs GUIDANCE

BENEFITS OF USING RCPs:

- Consistency in evaluation and presentation of data quality information that will facilitate review
- For non-RCP procedures, DEP will ask how the analytical data is of known and documented quality
- Use of non-RCP methods may involve a commitment of additional resources



RCPS QUESTIONS / COMMENTS

www.ct.gov/dep/remediation



THANK YOU FOR PARTICIPATING!

DATA QUALITY ASSESSMENT/DATA USABILITY EVALUATION GUIDANCE



PETER HILL

DQA/DUE GUIDANCE

NOW THAT THERE IS DATA OF KNOWN QUALITY...

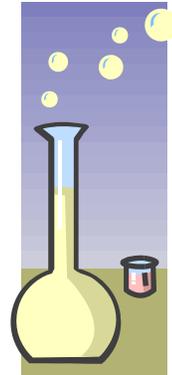


- Describes a CTDEP- accepted, two-step process for data evaluation using the PARCCS parameters
- **PARCCS Parameters** = precision, accuracy, representativeness, comparability, completeness and sensitivity

DQA/DUE GUIDANCE

□ Clarifications were made to the Preamble:

- ▣ One approach for evaluating analytical data in relation to its intended purpose
- ▣ Developed to facilitate both EP evaluation and DEP review



DQA/DUE GUIDANCE



BENEFITS OF USING DQA/DUE:

- Provides consistency in evaluation and presentation of data quality information that will facilitate review
- An alternative process should be documented in order to explain the thought process
 - ▣ May involve a commitment of additional resources

DQA / DUE QUESTIONS / COMMENTS

www.ct.gov/dep/remediation



THANK YOU FOR PARTICIPATING!

FUTURE GUIDANCE



ROB BELL

AUDIT METRICS



- Verifications received = **504**
- Verifications that were not audited or that passed audit = **87%**
- Verifications that did not pass / more work required before re-verification = **13%**

FUTURE GUIDANCE

GUIDANCE DOCUMENTS IN PROGRESS INCLUDE:

- Technical Impracticability
- Alternative Groundwater Monitoring Plan
- Targeted Brownfield Remedy
- In-situ Chemical Oxidation
- VPH/EPH
- ELUR
- Filtering Groundwater Samples
- Soil Vapor Sampling
- Well Construction and Design
- Low Flow Sampling Procedures
- Indoor Air Sampling
- Calculating the 95UCL

FUTURE GUIDANCE



Which of the future guidance documents under development are most important to you?

Please send your suggestions for other guidance to

dep.remediationroundtable@ct.gov

FUTURE GUIDANCE QUESTIONS / COMMENTS

www.ct.gov/dep/remediationroundtable



THANK YOU FOR PARTICIPATING!

ANNOUNCEMENTS



**LEE SUAREZ, MAURICE HAMEL, AND
PETER HILL**

IN-SITU REMEDIATION COURSE



- May 10, 2011 EPOC
- Potentially on May 17, 2011 and Fall 2011

- Seminar objectives:
 - ▣ To provide environmental professionals with an understanding of the primary issues that should be considered before undertaking remediation that includes subsurface injection
 - ▣ To provide insight into DEP's expectations regarding requests for authorization of these injections

IN-SITU REMEDIATION COURSE



SPECIFIC TOPICS:

- ❑ Overview of Primary *In-Situ* Remediation Technologies
- ❑ Chemical Principles Associated with Technology
- ❑ Site Characterization for Remedial Alternatives Evaluation and Implementation
- ❑ Pre- and Post-Remediation Monitoring
- ❑ Regulatory Aspects of *In-Situ* Remediation in CT
- ❑ Work plan and Common Design Elements
- ❑ Case Studies and Discussions

TECHNICAL IMPRACTICABILITY

- Workgroup update



ETPH AND EPH/VPH FORMS



STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER PROTECTION AND LAND REUSE
REMEDIATION DIVISION
79 ELM STREET, HARTFORD, CT 06106-5127
(860) 424-3705 www.ct.gov/dep/remediation

DEP USE ONLY (Date Stamp)

REQUEST FOR APPROVAL FOR USE OF ETPH METHOD AND ASSOCIATED CRITERIA AS AN ADDITIONAL POLLUTING SUBSTANCE

In accordance with RCSA Section 22a-134 through k-3 (RSRs)

Please complete this transmittal form to request the Commissioner's approval, as required pursuant to the Remediation Standard Regulations, Sections 22a-134 through k-3 (RSRs) of the Regulations of Connecticut State Agencies (RCSA), for use of the Extended Total Hydrocarbons (ETPH) methodology and criteria listed below, which have been pre-evaluated for use by the Departments of Public Health and Environmental Protection.

The use of this form will expedite the approval process of the established methodology and criteria. Upon approval, this form will be returned to the sender to request such approval. If an alternative methodology and/or criteria is proposed, it should be submitted using the "Approval Request or Notice Transmittal Form" along with all information required by the applicable paragraph(s) in the RSRs for each proposed criteria.

All sections of this form must be filled out, as applicable.

Check the box to indicate the program for which this form is being submitted:

- Connecticut General Statutes (CGS) section 22a-134a(a)-(e), Property Transfer Program
- CGS section 22a-133x, Voluntary Remediation Program
- CGS section 22a-133y, Voluntary Remediation Program
- Other (specify)

ETPH AND EPH/VPH FORMS

"I hereby request approval, in accordance with Sections 22a-133k-2(b)(4), 22a-133k-2(c)(5), and/or 22a-133k-3(h) of the RCSA, to use the analytical method titled "Analysis of Extractable Total Petroleum Hydrocarbons (ETPH) Using Methylene Chloride Gas Chromatograph/ Flame Ionization Detection", approved by the Connecticut Department of Public Health on June 22, 1999, together with the criteria listed in the tables below for petroleum hydrocarbons in soil and/or groundwater as additional polluting substances at the location identified above. I understand that the use of the "State of Connecticut Department of Environmental Protection, Recommended Reasonable Confidence Protocols, Quality Assurance and Quality Control Requirements for Extractable Petroleum Hydrocarbons, by the State of Connecticut, Department of Public Health ETPH Method" (July 2006) will provide analytical data of known quality."

Check the box indicating the criteria for which approval is requested (selected criteria must correspond to the groundwater classification of the site):

	Residential Direct Exposure Criteria (mg/kg)	Industrial/Commercial Direct Exposure Criteria (mg/kg)	Groundwater Protection Criteria (mg/l)	GA Pollutant Mobility Criteria (mg/kg)	GB Pollutant Mobility Criteria (mg/kg)
Criterion (using ETPH method)	<input type="checkbox"/> 500	<input type="checkbox"/> 500	<input type="checkbox"/> 0.1	<input type="checkbox"/> 500	<input type="checkbox"/> 2,500
			Groundwater Protection Criteria (mg/l)	GB Pollutant Mobility Criteria (mg/l)	
Criterion (using ETPH-SPLP method)			<input type="checkbox"/> 0.1	<input type="checkbox"/> 1.00	

Signature of Person Requesting Approval

Signature	Date
Printed Name of Signatory	Title (if applicable)

ETPH AND EPH/VPH FORMS

Section Below Reserved for DEP

The Request is hereby Approved Disapproved

Nothing in this response shall affect the Commissioner's authority to institute any proceeding, or take any action to prevent or abate pollution, to recover costs and natural resource damages, or to impose penalties for violations of law. If at any time the Commissioner determines that the approved actions do not fully characterize the extent and degree of pollution or have not successfully abated or prevented pollution, the Commissioner may institute any proceeding, or take any action to require further investigation or other action to prevent or abate pollution. This approval applies only to the methodology and criteria identified in this Request. In addition, nothing in this approval shall relieve any person of his or her obligations under applicable federal, state and local law.

Patrick F. Bowe
Director
Remediation Division
Bureau of Water Protection and Land Reuse

Date

If disapproved, rationale:

DRAFT

ANNOUNCEMENTS QUESTIONS / COMMENTS

www.ct.gov/dep/remediationroundtable



THANK YOU FOR PARTICIPATING!

PUBLIC PARTICIPATION



- Discussion of Agenda Items
- Your feedback on baseline paper
- Breakout Group on Topics and Logistics

BREAKOUT GROUPS

TAKE **20** FOR BRAINSTORMING ON:

- Topic Suggestions
 - ▣ Specific, focused topics
- Logistics
 - ▣ Number of people per group
 - ▣ Time needed for discussion

REPORT OUT!



BREAKOUT GROUPS



IDEAS FROM OTHER FORUMS:

- Solid Waste Advisory Committee
www.ct.gov/dep/SWAdvComm
 - ▣ DEP-lead subcommittees both outside advisory meeting and during last half of Advisory meeting
 - ▣ Monthly report outs
- Hazardous Waste Advisory Committee www.ct.gov/dep/hwac
 - ▣ Independent committees outside of advisory meeting
 - ▣ Quarterly report outs
- State Implementation Plan Revision Advisory Committee
www.ct.gov/dep/siprac
 - ▣ Sub-committees form as needed when topic arises

BREAKOUT GROUPS



DEP FACILITATOR

- Break the Ice – initiate conversation
- Identifies Notetaker
- Keep the Conversation on Track
- Be Mindful of Time
- Neutral Observer / Coach
- Identifies Reporter

BREAKOUT GROUPS

REPORT OUT



PUBLIC PARTICIPATION

- Ideas for agenda items at future meetings
- General Questions



THANK YOU!

DEP.remediationroundtable@ct.gov

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Next Roundtable: June 14, 2011

