

June 2013 General Membership Meeting

- The Transformation of Connecticut's Cleanup Program "Now Everyone is Invited to Join the Party!"
 - Presented by Stuart Manley, LEP, CHMM



- Legislative Update
 - Presented by Chris McCormack, Member



The Transformation of Connecticut's Cleanup Program

- "Now Everyone is Invited to Join the Party!"

Agenda:

- Current Regulatory Programs
 - □ RSRs
 - ☐ Challenges in the Cleanup Program
- Proposed Revisions
 - ☐ Release Reporting Regulations
 - ☐ Early Exits
 - ☐ Tiered Exits
- ☐ Significant Environmental Hazard (SEH) Reporting



Current Regulatory Program

- Currently 16 regulatory programs
 - Partial List
 - ➤ Transfer Act
 - ➤ Voluntary Remediation
 - >RCRA Corrective Action
 - ➤ UST Fund (now defunct)
 - **≻**Spills

- >State Superfund
- ➤ Significant Environmental Hazard
- ➤ Potable Water
- ► PCB Program
- Only certain programs incorporate the Remediation Standard Regulations (RSRs)
- The interaction with the regulators and achieving endpoint(s) of the other programs are not uniform



CT - Remediation Standard Regulations

- Regulations of CT State Agencies (RCSA) Section 22a-133k-1 through -3
 - Effective January 30, 1996
 - Applies to any action taken to remediate polluted soil, surface water, or groundwater
 - Provided that the action is required by regulation, statute or order of the Commissioner
 - Established default numerical cleanup criteria
 - "Risk based" criteria based on default exposure assumptions
 - One size fits all
 - Permits some modifications to default criteria
 - Limited self-implementing options (long approval process for alternate criteria)
 - Has become the default standard applied to all sites



CT - Remediation Standard Regulations

- Requirements for determining compliance
 - All data below criteria or use statistics (95% UCL)
 - Compliance groundwater monitoring
 - Post-remediation groundwater monitoring
- LEP "Verifies" that a site is "Clean" (when delegated)
 - Verification is equivalent to Commissioner's approval
 - Subject to audit by CTDEEP
 (3-year time limit established in 2007)
- Project Milestones
 - Originally no deadlines created
 - Current program:
 - Investigation complete within 2 years (established in 2007)
 - Remediation starts within 3 years (established in 2007)
 - Remediation complete within 8 years (established in 2009)



Challenges in Cleanup Program

- Site-wide investigation
 - AOC "witch hunt"
 - Must incorporate "multiple lines of evidence"
 - Cumbersome process to document closure
- Investigate all impacts above background
 - Background = non-detect
 - "Guilty until proven innocent?" must investigate all AOCs
 - Risk based criteria overly conservative
 - Audit process is not transparent i.e. "black box"
- LEP, as an individual, is accountable for decisions
 - Mandate to be protective of human health and environment
 - Shift in role from client advocate to agent of regulatory agency
 - Result = LEPs held to a higher standard??



Example of a comprehensive Site investigation



Only limited additional risk reduction was achieved over known releases present at the start of the investigation

Proposed Revisions

- * CTDEEP Evaluation of Current Status
 - Patchwork of regulatory programs
 - Not achieving risk reduction
 - Sites are not touched or moving toward clean closure
 - Different sites with same impact have different regulatory process (if any!) and different endpoints
- CTDEEP white paper of proposed changes
 - Multiple rounds of workgroups
 - Draft proposal issued in Feb 2013



Proposed Revisions

- Unified Program, eliminates all other State programs
- New Released-Based System
 - One entrance ramp i.e. everyone is invited!
- Multiple Exit Points
 - New "Early Exit" Off- Ramps
 - Tiered Exits for release verification/closure



Release Reporting

- Connecticut General Statute (CGS) 22a-450:
 - "...the person in charge of any establishment, ...which by accident, negligence or otherwise causes the discharge, spillage, uncontrolled loss, seepage or filtration of oil or petroleum or chemical liquids or solid, liquid or gaseous products, or hazardous wastes which poses a potential threat to human health or the environment, shall immediately report to the commissioner such facts...."
 - Regulations were never formally adopted therefore not uniformly implemented
 - Approx. 8,000 spills are reported each year.
 - The vast majority of these are not within a regulatory program
 - They do not receive any formal administrative "closure."



New Entrance Ramps – the "Wide Net"

- New Release Reporting
 - —Contemporaneous release 20 pounds or 3 gallons
 - —Historical releases contaminants at concentrations greater than 2-times applicable cleanup criteria
 - —Potential "threatened releases"
- * All releases must be remediated to meet RSR criteria and timeline, even if not reportable



Early Exits – "Larger Holes"

- Early Exit Certification of Closure
 - Qualified individuals can "certify" some spills or historical releases closed
 - Facility personnel may closed "contained" release (release to secondary containment)
 - Environmental Release Professional (ERP),
 - New license close certain spills or releases;
 - » Depending on severity/complexity of the release and
 - » Timeliness of the cleanup.
 - The more complex remedial actions must use tiered exits (and can't be closed by the ERP).



New "Tiered Exits"

- Tiered Exits
 - A. Default numerical standards only
 - B. Institutional controls (ELUR or new "AUL")
 - 1. Default Criteria
 - 2. Alternate criteria and/or alternate cleanup assumptions
 - C. Engineered controls
 - 1. Default Criteria
 - 2. Alternate criteria and/or alternate cleanup assumptions site specific evaluation of potential risk exposure
- LEPs or CTDEEP staff will verify closure



Goals of the Transformation (according to CTDEEP)

- Single entrance ramp = wide net
- Early Exit Closure and Tiered Exits to reduce timeline to achieve closure = larger holes
- Robust auditing and enforcement with transparency
- Risk-based cleanup options
- Level playing field for all business
- Uniform guidance documents clarification of ambiguities, formal adoption process, standard of care



Completed (or nearly completed)

* RSR Amendments

- Non-controversial changes, for example:
 - Incorporate ETPH criteria
 - Exemptions for parking lot contamination,
 - Use groundwater data for pollutant mobility compliance
 - Increased flexibility in the use of Engineered Controls

Public Act 35/308

- Expanded Institutional Controls (AULs)
- SEH revisions
- Municipality Liability Relief



"Wave 2" - Winter 2013

- More RSR Amendments
 - Beneficial reuse of low-level contaminated soils
 - Early Exits
 - Tiered Exits
 - Site Specific Approaches
 - Alternate GWPC
 - Self implementing
 - Reduced groundwater monitoring for Early Exits



2014 and Beyond

- Implement Unified Program
- State wide re-evaluation of groundwater classifications
- Property Transfer Act sunsets
- * Revisions to cleanup criteria
 - CTDEEP required to hire an outside consultant to evaluate criteria



Significant Environmental Hazard (SEH) Reporting (CGS 22a-6u)

- Technical Environmental Professional (TEP)
 - Anyone who collects soil, water, vapor or air samples to investigate and remediate pollution
- ❖ TEP must notify the client and/or property owner of SEH condition w/in specified times
 - Property owner must notify CTDEEP
 - TEP is NOT obligated to report to CTDEEP
 - Unless drinking well impact or explosion threat
 - > TEP must confirm owner made notification
 - Client must notify CTDEEP if owner does not
- Larger universe of people will be evaluating data (facility personnel and ERPs) and subject to this requirement

- Drinking well (public or private) impacted
 - Above groundwater protection criteria (GWPC) or has free phase product (short notification timeframe)
 - Less than the GWPC (longer notification timeframe)
- Drinking well (public or private) threatened
 - Impact above GWPC and w/in 500 ft. & upgradient of well OR within 200 feet of a well in any direction
- ❖ A receptor survey for wells within 500 feet and samples collected from each well



- Surface Soil Contamination
 - At greater than 30x direct exposure criteria
 (DEC) for industrial/commercial (I/C) property
 - At greater than 15x I/C DEC for certain metals and PCBs if within 500 feet of:

Residential property
Park
School

Playground Daycare facility

 At greater than 15x residential DEC for residential property



- Vapor Intrusion Volatilization Criteria (VC)
 - Volatile organic compounds (VOCs) beneath a building at 10x the VC for that land use (residential or commercial)
 - Groundwater within 15 feet of the ground surface
 - Does not apply to VC set at 50,000 ppb for that land use
 - No notification while building is unoccupied
 - No notification if chemical is used in industrial operations
- Surface water discharge (inc. wetlands)
 - Greater than 10x acute aquatic life criteria (Appendix D of Water Quality Standards) or free phase product



- Explosion Hazard
 - Vapors from soil, groundwater or free product
 - Migrate into structures or utility conduits
 - Pose explosion hazard
- Exceptions provided
 - Hazard abated, mitigated or controlled
 - Further evaluation shows compliance
- Investigation and Mitigation plans must be developed and submitted



- Reporting time frames (TEP/Owner)
 - Drinking well above criteria: 24 hr/1 day (verbal), 5 days
 - Drinking well below criteria: 7 days/30 days
 - Surface Soil: 7 days/90 days
 - VOCs: 7 days/30 days
 - Surface water: 7 days/7days
 - Drinking well threatened: 7 days/7days
 - Explosion hazard: immediately/immediate (verbal) & 5 days (written)



SEH Reporting – CTDEEP Response

- Acknowledgement within 10 days
- Remedial plan approved (written notification) or directive to abate
- Public notifications
- Does not fulfill release reporting under CGS
 22a-450 (spill reporting) or federal agencies

