

REMEDIATION ROUNDTABLE



September 13, 2011



Remediation Division
Bureau of Water Protection and Land Reuse
Connecticut Department of Energy and
Environmental Protection

WELCOME!



CAMILLE FONTANELLA

REMEDIATION ROUNDTABLE



- An open forum for the exchange of ideas and information on CT's Remediation Programs
- Next meeting: **November 8, 2011**
- Schedule and agenda on website
www.ct.gov/dep/remediationroundtable
- Submit comments to Camille Fontanella at
DEP.remедiationrondtable@ct.gov

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

TODAY'S AGENDA



- **Commissioner Daniel Esty**
- **Public Participation**
 - Workgroup Report Out
 - ✦ List of Contaminated Sites Workgroup
 - ✦ Urban Fill Workgroup
- **Updates:**
 - Comprehensive Evaluation / Transformation
 - Proposed Changes to the RSRs
 - Brownfield Initiative
 - Survey Says!

COMMISSIONER ESTY



Connecticut Department of

ENERGY &

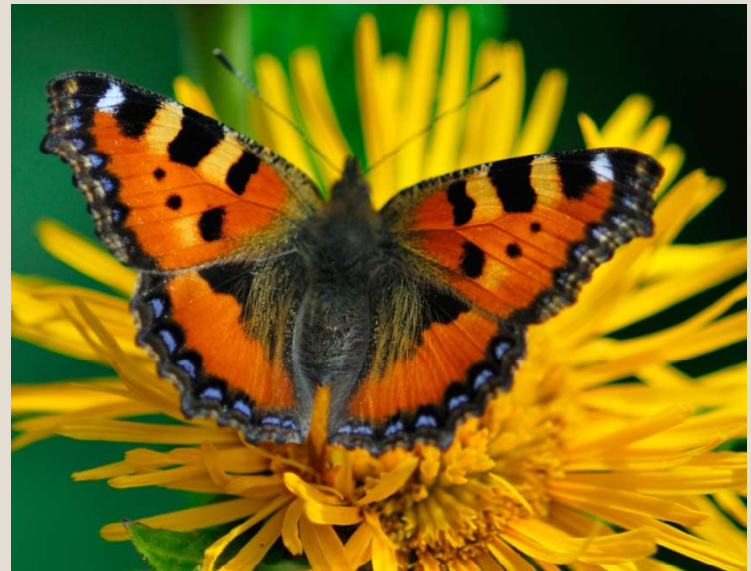
ENVIRONMENTAL

PROTECTION

COMPREHENSIVE EVALUATION AND TRANSFORMATION



SUMMARY AND UPDATE



GRAHAM STEVENS

WHERE THIS PROCESS BEGAN



- Commissioner Esty has made transformation of CT's Brownfield programs a top priority
- DEEP released a white paper on Remediation Programs in January 2011
 - [Comprehensive Evaluation of Connecticut Site Cleanup Programs](#)
- This document provides baseline information on remediation programs and laws that influence remediation

TRANSFORMATION TIMEFRAME



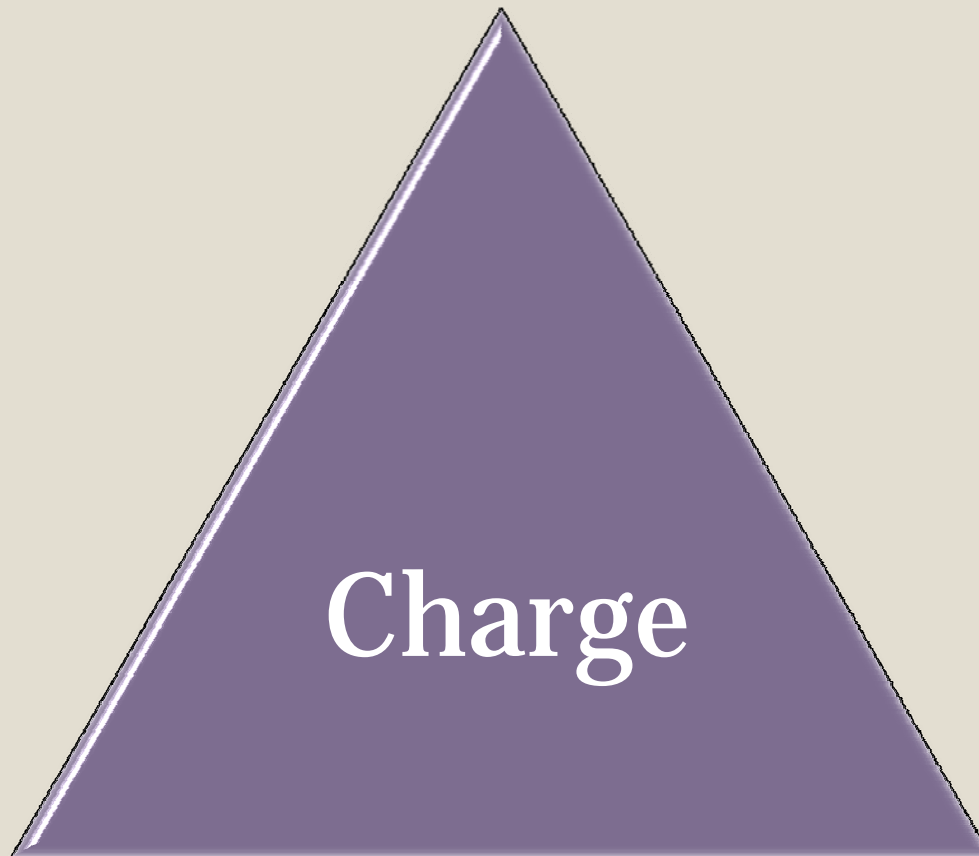
DEEP will issue Report to Governor and Legislature (Commerce & Environment Committees) by **December 15, 2011.**

WHY ARE WE LAUNCHING THIS PROCESS?

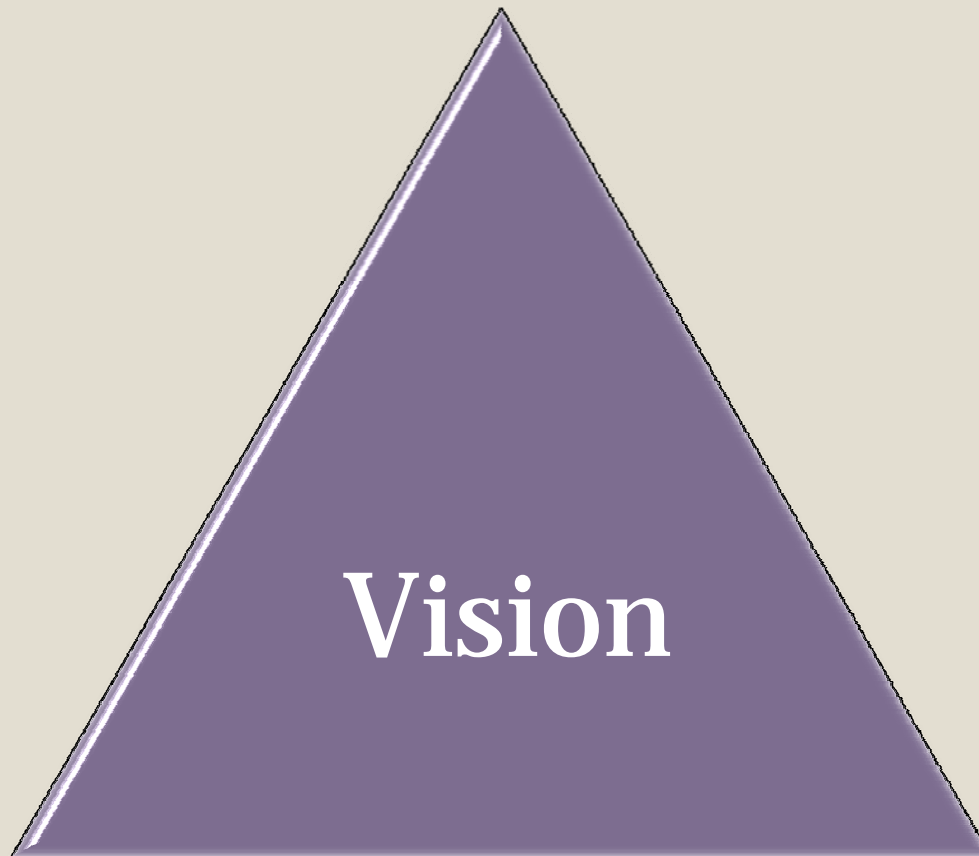


- DEEP has an opportunity to make significant improvements to our cleanup programs
- DEEP has support through all levels of government to make wise improvements that will make cleanups more effective and more efficient
- Current programs have significantly reduced risk, and we have all learned from the programs in place since 1967

WE STARTED WITH A STATUTORY CHARGE

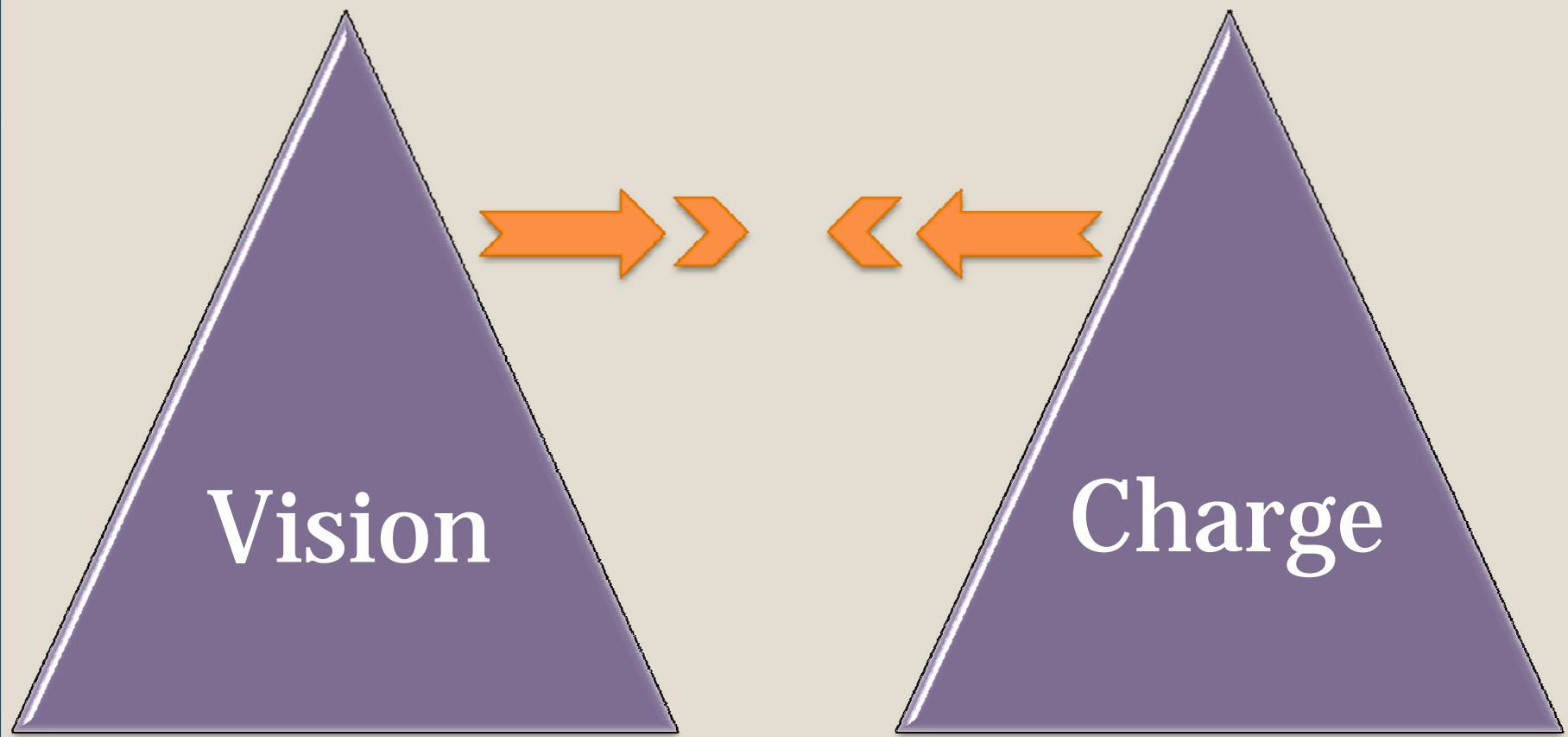


WE ARE WORKING ON A VISION

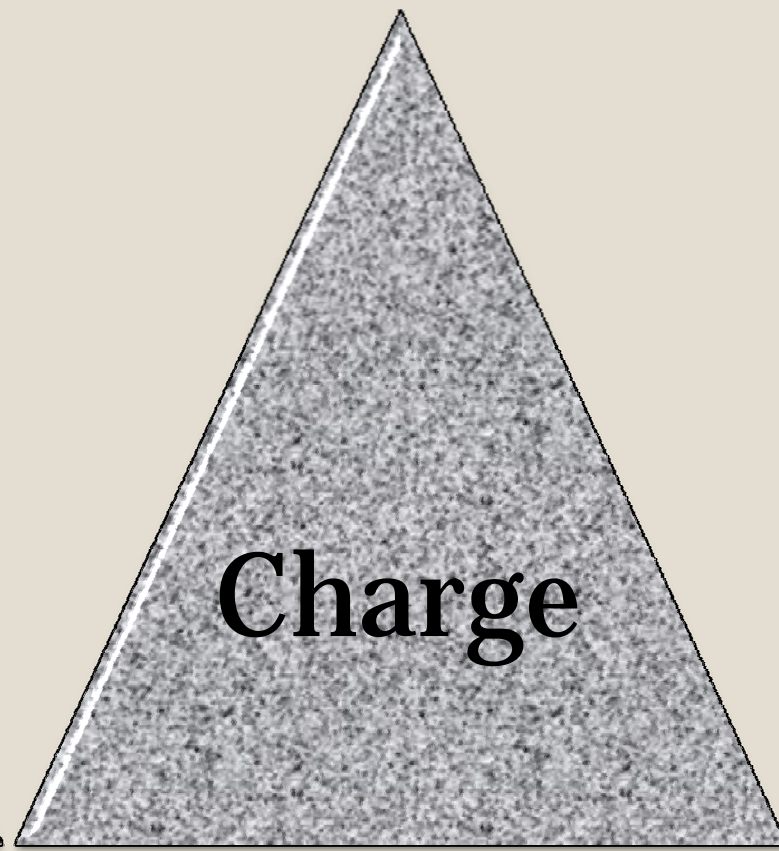
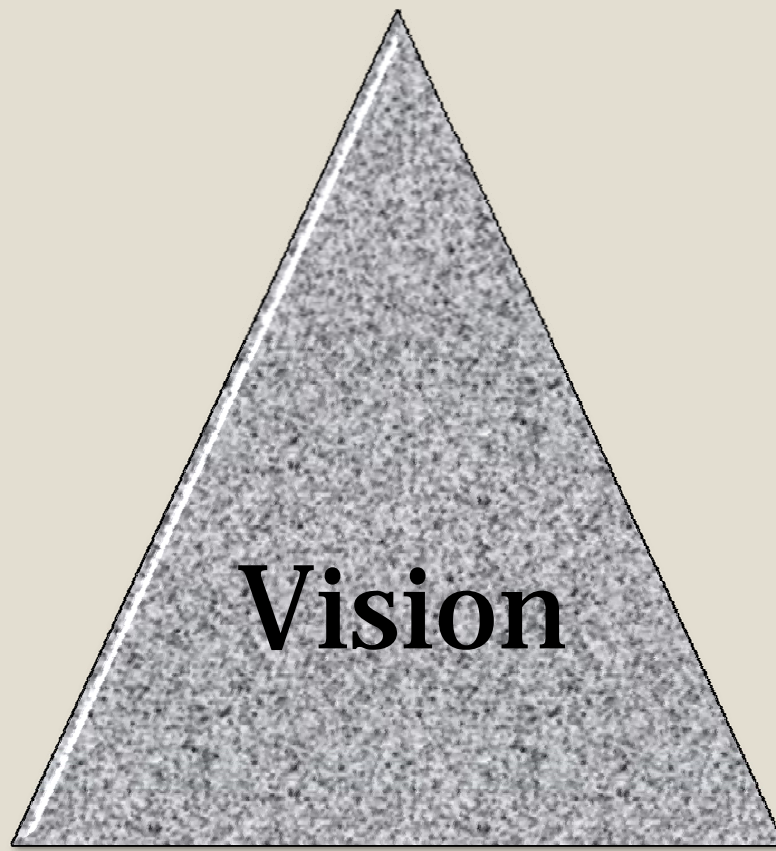


Vision

VISION AND CHARGE FORM BEDROCK FOR TRANSFORMATION



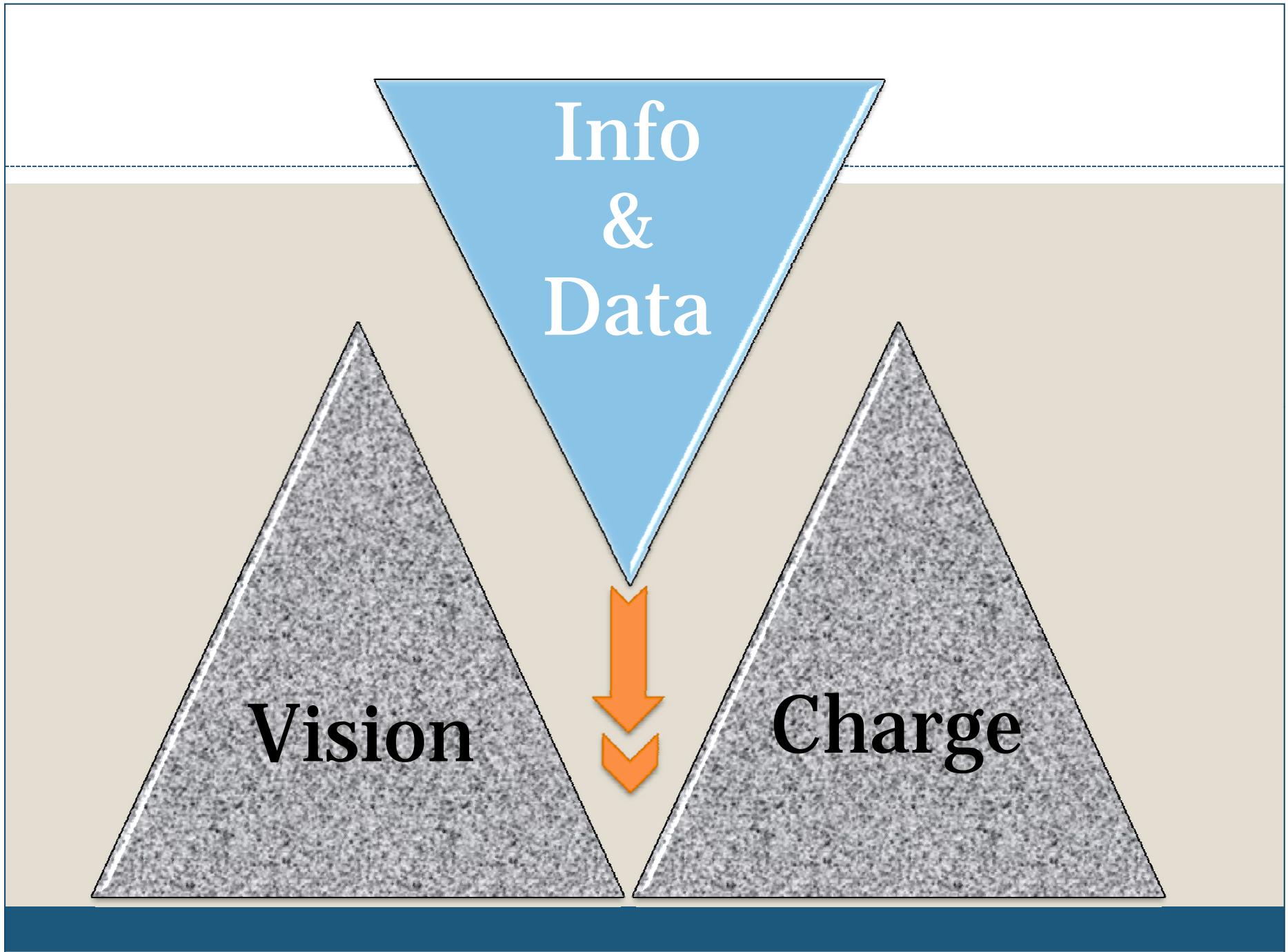
VISION AND CHARGE FORM BEDROCK FOR TRANSFORMATION



NOW WE ARE ADDING INFORMATION AND DATA



Info
&
Data

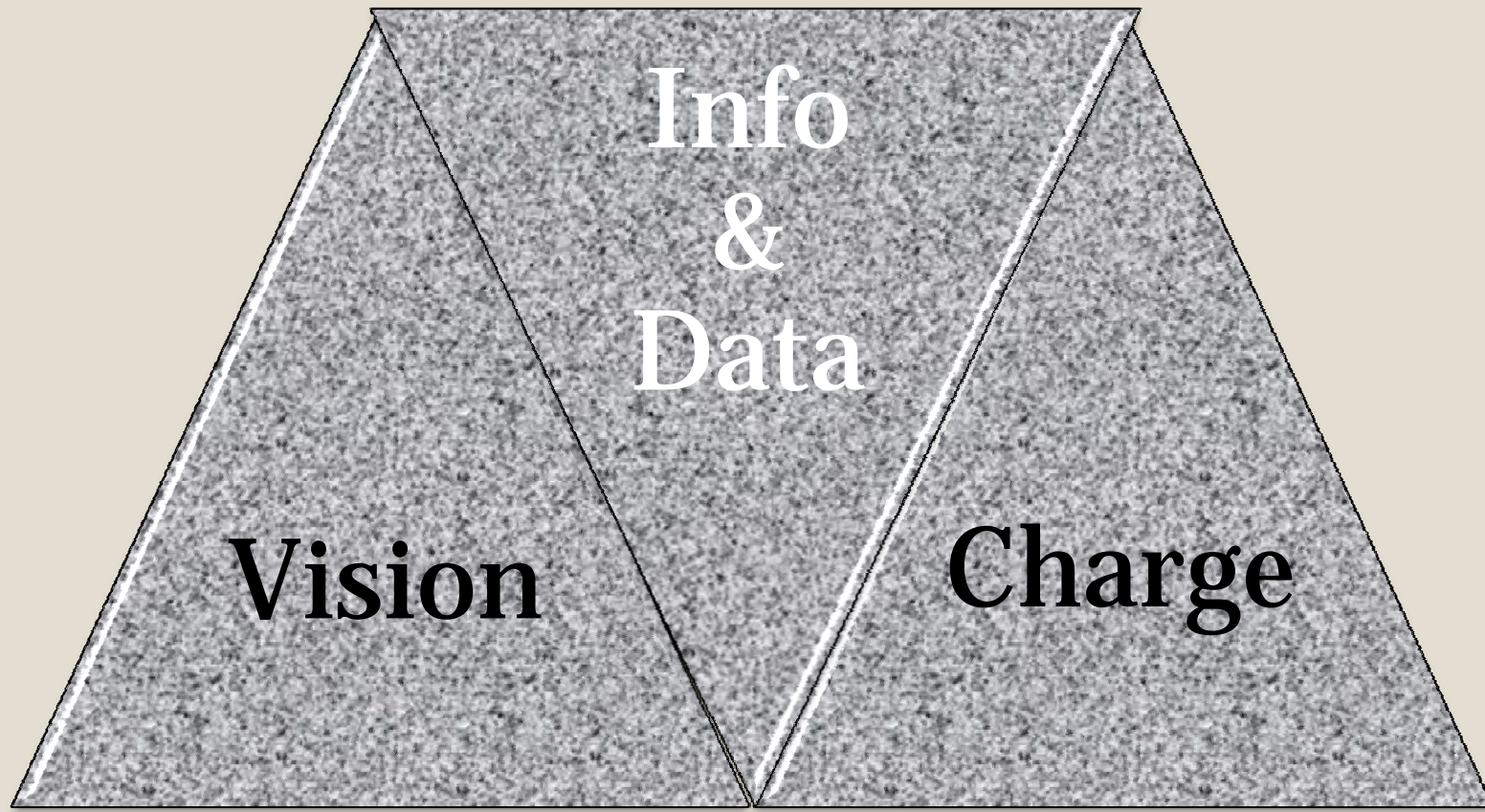


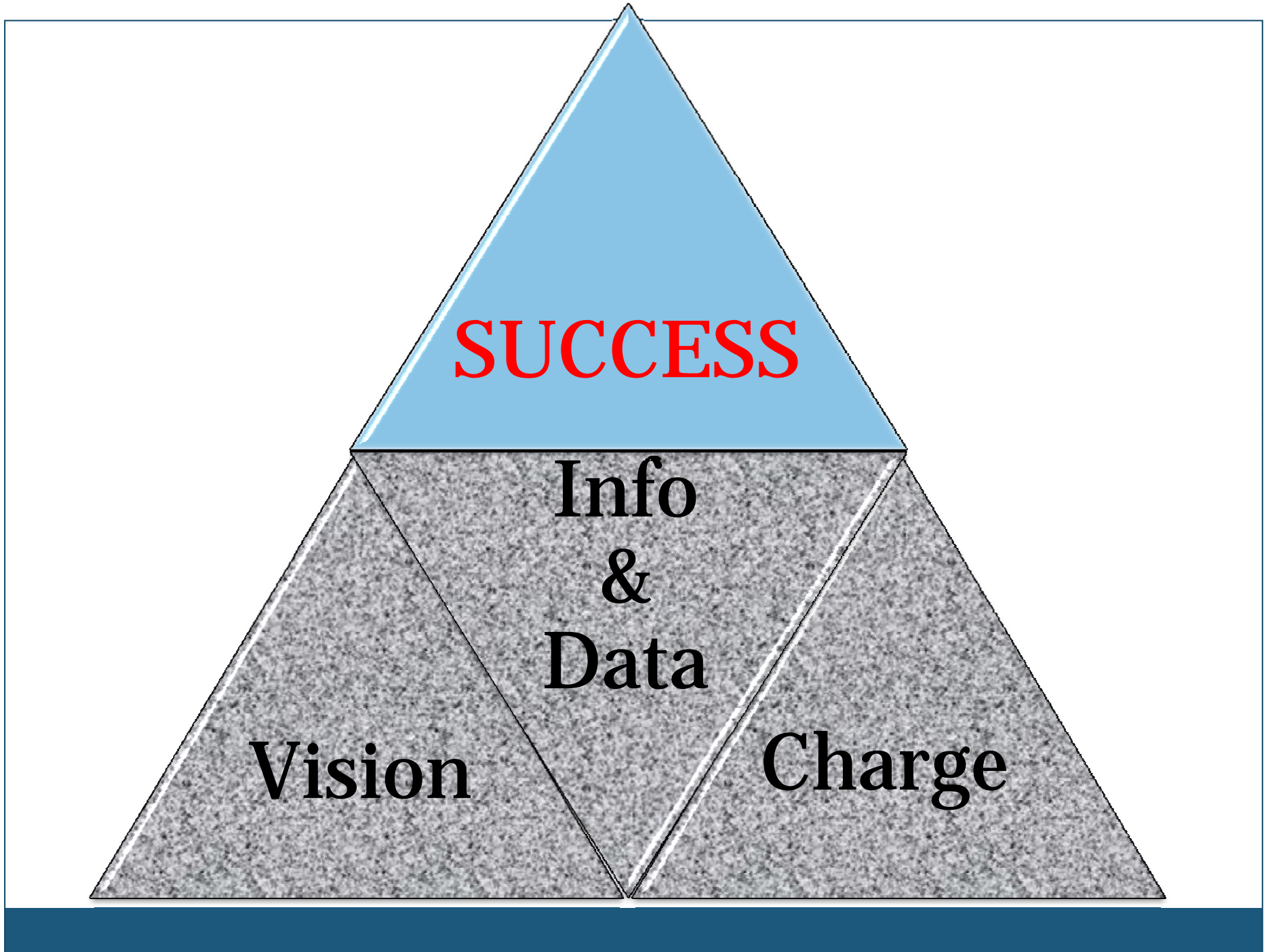
Info
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A SOLID BASE FOR TRANSFORMATION





SUCCESS

**Info
&
Data**

Vision

Charge

SUMMARY OF JUNE 27 VISIONING SESSION



- Almost 100 of our partners attended a full afternoon visioning session
- Participants included representatives from:
 - government
 - municipalities
 - regulated community (including RPs, redevelopers, and owners)
 - environmental constituents
 - LEPs
 - environmental attorneys

JUNE 27 VISIONING SESSION

PUBLIC INVOLVEMENT



- Submit your own vision by viewing the Session's PowerPoint and completing the guided questions on our *Stakeholder Input and Public Participation Web Page*
- Follow-up questions have also been published
- *Draft Visioning Session Report* available on the Transformation's Stakeholder page
- Please provide your vision, answer to follow-up questions and comments to the draft report to: *DEP.Cleanup.Transform@ct.gov*

SUMMARY OF AUGUST 9TH EVALUATION WORKGROUP DISCUSSION



- DEEP took the 29 identified workgroup topic ideas, the refined workgroup topics, and the stakeholder voting results and distilled these concepts into 6 evaluation workgroups
- Each workgroup has a specific scope and deliverable
- These 6 workgroups represent the most critical topics requiring evaluation at this stage of the process
- Reports are due to DEEP on September 28th

EVALUATION WORKGROUPS



- 1. Evaluation of CT's Cleanup Programs - Current State**
- 2. Evaluation Finish Lines and How Risk and Other Factors Influence Closure**
- 3. Entries Points and Triggers into the Current Connecticut Cleanup Programs**
- 4. Evaluation of LEP Program Performance and Utilization**
- 5. Evaluation of Pollution Responsibility and Liability Relief Provisions**
- 6. Evaluate Best Practices of Various State Cleanup Programs**

PUBLIC PARTICIPATION



- DEEP needs your continued cooperation and participation to make this *TRANSFORMATION* a success
- Please sign-up for e-Alerts on the Remediation web page
- Please stay involved

www.ct.gov/dep/remediation-transform

COMPREHENSIVE EVALUATION AND TRANSFORMATION QUESTIONS / COMMENTS



THANK YOU FOR PARTICIPATING!

www.ct.gov/dep/remediation



WORKGROUP REPORT OUT



LIST OF CONTAMINATED SITES (LCS) WORKGROUP



PARTICIPANTS



- Christine Lacas, Kevin Neary & Dave Madsen [DEEP]
- Anne Peters [Carmody & Torrance]
- Eric Boswell and Brian Washburn [HRP]
- Gabriel Knight [Stantec]
- Jim Hutton and Adam Henry [GZA]
- Rick Standish [Haley & Aldrich]
- Sarah Trombetta [TRC]
- Will Warren [Regional Economic Xcelleration]
- Zackary Smith [AECOM]

GOAL



- Provide recommendations to develop a more user-friendly, time-efficient, comprehensive list of contaminated sites that is associated with Geographic Information Systems for the public

TIMEFRAME



- June to August (3 Meetings)
 - June 22nd – Objective of the Workgroup
 - ✦ Homework assignment – List top 10 suggested fields
 - July 14th – Suggested additions to LCS
 - August 17th – Discussed LCS interface and Roundtable Presentation

List of Contaminated or Potentially Contaminated Sites

“Hazardous Waste Facilities” as defined by Section 22a-134f of the Connecticut General Statutes

TOWN OF: ANDOVER

<u>Name</u>	<u>Address</u>	<u>Site Definition</u>	<u>Investigation Started</u>	<u>Remediation Started</u>	<u>Post Remedial Monitoring Started</u>	<u>Remediation Completed</u>	<u>ELUR</u>	<u>ELUR Type</u>
Andover Elementary School	35 School Rd.	Leaking Underground Storage Tanks – Pending						
Andover Xtra Mart	497 Route 6	Leaking Underground Storage Tanks – Completed						
Christy	380 Route 6	Leaking Underground Storage Tanks – Completed						
Clark Property	372 Route 6	Leaking Underground Storage Tanks – Pending						
Drake's Blastrip	Route 6	Inventory of Hazardous Waste Disposal Sites						
Former Mercury Oil Facility	Jonathon Trumbull Highway & Long Hill Rd.	Leaking Underground Storage Tanks – Completed						
Former Post Narrow Fabric Co.	Long Hill Rd.	Leaking Underground Storage Tanks – Pending						
Former Post Narrow Fabric Co.	Long Hill Road	Leaking Underground Storage Tanks – Pending						
Heritage Auto Body Of Andover	5 Bunker Hill Road	Property Transfer – Form III Investigation started	10/12/2007					
Mendenhall's Amoco Inc.	Route 6	Leaking Underground Storage Tanks – Rem. Started						
Post Narrow Fabrics	Long Hill Road	Inventory of Hazardous Waste Disposal Sites						
Post Narrow Fabrics Company	Long Hill Road	CERCLIS						
Sdr Enterprize	11 Bunker Hill Road	Leaking Underground Storage Tanks – Completed						



CURRENT REQUIREMENTS



- **CGS 22a-134f & CGS 22a-133c**
 - Satisfy requirement to notify Town Clerks
 - ✦ Sites that are Commercial hazardous waste TSD facilities
 - ✦ Sites listed on the Hazardous Waste Disposal Site Inventory

- **Section 128(a) of CERCLA Funding**
 - Public Record must be maintained for the state to be eligible for section 128(a) federal funding
 - Specific information must be provided for the LCS to satisfy Public Record requirements

- **List updated quarterly**

1ST MEETING



- **Evaluate current requirement to have LCS**
- **Discuss how the group members use LCS**
 - Screening tool prior to Phase I ESA generation
 - Identify potential off-site concerns
- **Current use of LCS is minimal due to usability**
- **Discuss potential improvements to LCS**
 - Need better definition of what it means to be on LCS
 - Searchable and sortable functionality
 - Adding site information and programmatic status
 - Integrate LCS with GIS for a more user-friendly search

2ND MEETING



- Group members brought suggestions for 10 additional fields that they thought should be added to LCS
- **61** unique fields were suggested
- Fields were evaluated based on
 - Importance
 - Availability
 - Redundancy (can this information be found elsewhere)
- Group narrowed down the list to **22** core fields

Category	Suggested Fields	Status
Selected Fields	Site Name	Already Included
Selected Fields	Address	Already Included
Selected Fields	Town	Already Included
Selected Fields	Program	Already Included
Selected Fields	Status	Already Included
Selected Fields	Site/Case Number	Added Field
Selected Fields	DEEP Project Manager/Region	Added Field
Selected Fields	DEEP/LEP Lead and Affiliation	Added Field
Selected Fields	Responsible Party	Added Field
Selected Fields	Date Received	Added Field
Selected Fields	Investigation Started	Already Included
Selected Fields	Investigation Complete Due Date and Received (Yes/No)	Added Field
Selected Fields	RAP Due Date and Received (Yes/No)	Added Field
Selected Fields	Remediation Started	Already Included
Selected Fields	GW Monitoring (Yes/No) / Long Term Monitoring Underway (Yes/No)	Already Included
Selected Fields	Remediation Completed	Already Included
Future Additions	Date and Type of Last Submittal (Links to PDF of Report)	Future Additions
Future Additions	DEEP Approval (Yes/No)	Future Additions
Future Additions	Primary Pollutant	Future Additions
Future Additions	Site applied to UST Reimbursement Fund	Future Additions
Future Additions	Site approved under UST Reimbursement Fund	Future Additions
Future Additions	AKA Site Name	Future Additions

3RD MEETING



- Determined that LCS needs to be searchable in order for it to be successful
 - Searchable form will initially be in a downloadable Access database (similar to manifest database)
 - Option for a multi-criteria search by case #, town, address, site name, program
- Frequent database updates on DEEP server
- Eliminate blank space - show only fields associated with particular program
- Ultimately want a web interface for online access

FUTURE IDEAS



- Investigate creating a searchable web-based interface
- Investigate integrating Remediation GIS coverage with online GIS viewer (ECO)
- Create a process to handle public feedback on site information (quality control)
- Design query & report for downloadable database
- Develop a method to provide access to available PDF documents related to LCS
- Normalize data from Spills, LUST and Remediation to have one unique identifier

New LCS Release Stages



- **Stage 1:** GIS coverage of Remediation sites
 - ✦ 1 - 3 Months
 - ✦ Initially located on DEEP webpage as GIS coverage
 - ✦ Ultimately located on Online GIS viewer (ECO)
- **Stage 2:** Downloadable Access database
 - ✦ 6 – 12 months from OIM authorization
 - ✦ To be located on DEEP FTP site as downloadable zip file
 - ✦ Modify towns' cover letter to direct users to online resources
- **Stage 3:** Searchable web-based LCS
 - ✦ To be located on DEEP webpage
 - ✦ Provide towns with a link to a simple, printable version with web links

QUESTIONS / COMMENTS



www.ct.gov/dep/remediation



WORKGROUP REPORT OUT



URBAN FILL WORKGROUP



MECHANICS



- **Timeframe**
 - **June to August with meetings every two weeks**
- **Participants**
 - **Sandy Brunelli and Maurice Hamel [DEEP]**
 - **John Albrecht and Larry Hogan [AECOM]**
 - **Tamara Burke [CDM]**
 - **Dave Clymer [UTC]**
 - **George Gurney [Stantec]**
 - **Darrick Jones and Michael Susca [LBG]**
 - **David Losee [Halloran & Sage]**
 - **Victoria Man [Zuvic Carr]**
 - **Bert Sacco [TPA]**



WHY TALK ABOUT URBAN FILL?



- **Common on urban sites of all land uses**
- **Not related to specific releases**
- **Current regulatory framework offers insufficient options**
- **Other states may have a competitive advantage for brownfield development**

WORKGROUP GOALS



- Identify what is and isn't working within the current regulatory framework
- Propose solutions within the current regulations
- Consider changes to regulations and statutes
- Provide specific recommendations to DEEP
- Create framework for requests and timely approvals

**Achieve a permanent remedial solution
for urban fill sites**

WHAT WAS DISCUSSED...



- A working definition of urban fill
- Remedial options currently in the RSRs and their limitations
- How other states address urban fill
- Streamlining the approach to site characterization
- Streamlining the approach to risk assessment
- Self-implementing remedial options

Working Definition of Urban Fill



“Urban Fill”: material on a parcel as the result of [historical] filling activities that contains a mixture of one or more of the following: soil, coal ash, [slag, clinkers, dredge material], coal fragments, wood ash, asphalt paving fragments, brick, concrete, glass, and ceramics [and clean fill as defined under 22a-209-1 (2)], provided that:

- Contaminants present above RSR criteria in the fill are not the result of any specific release;*
- volatile organic substances are not present in the fill above RSR criteria; and*
- the placement of the fill was not prohibited at the time of the placement.*

Current RSR Options



- **Removal**
- **In-situ treatment**
- **Render inaccessible or environmentally isolated**
- **Widespread polluted fill variance**
- **Site-Specific Risk Assessment**

CURRENT LIMITATIONS



- Excessive time and money spent characterizing fill that may not pose a risk
- Limited number of self-implementing options
- Inaccessible soil RSR exemption is for DEC
- Current RSR fill options address PMC exceedances
- Unpredictable approval process and endpoint
 - Excessive DEEP review time with no central DEEP coordinator
- Localized removals do not address widespread problems
- Impacts from widespread removal of urban fill

OTHER STATES



- **Massachusetts**
 - Concentrations within published ranges from urban fill require no remedial action (i.e., “background” for urban fill)
 - ✦ Such concentrations are not considered reportable releases
 - Standardized risk assessments may be used if concentrations exceed published ranges and are self-implementing
 - ✦ Average site-wide data (excluding hot-spots) to develop an exposure point concentration to demonstrate compliance
- **Pennsylvania**
 - Act 2, the Land Recycling Program, encourages the voluntary cleanup and reuse of contaminated commercial and industrial sites
 - Regulated Fill reuse General Permit allows reuse of urban fill soil and other materials as construction material

SITE CHARACTERIZATION RECOMMENDATIONS



Site characterization for urban fill should be less stringent than typically required for specific release areas.

SOIL:

- Sufficient information should be gathered to adequately:
 - Define the horizontal and vertical extent appropriate to the remedy
 - Confirm the absence or define the extent of other releases
 - Confirm that the material meets the characteristics and conditions of the definition of urban fill
 - Delineation sufficient to characterize range of concentrations for urban fill COCs

SITE CHARACTERIZATION RECOMMENDATIONS



Site characterization for urban fill should be less stringent than typically required for specific release areas.

GROUNDWATER:

- Questions to be further discussed
 - What level of vertical and horizontal delineation of groundwater is necessary?
 - What level of well receptor survey is necessary?
 - What level of assessment is needed for SWPC compliance?

STREAMLINED RISK ASSESSMENT IDEAS



- Establish “typical” urban fill COC concentration ranges
- Standardize process for either quick approval or allow self-implementing, pre-approved formulas/exposure scenarios
 - Create risk assessment short form or checklist for urban fill concentration levels
 - Provisions for self-implementing risk assessment ~ MA
 - Consider a tiered approach based on land use, monitoring frequency, etc.
- Redefine “hot spots” to account for variability in distribution of urban fill
 - current 2x RSR limit for 95UCL leads to exceedances

SELF-IMPLEMENTING REMEDIATION IDEAS



- **Develop a list of pre-approved, self-implementing alternatives under pre-defined conditions**
- **Tiered risk approach, similar to MA, with remedy appropriate to concentrations and land use and receptors**
- **General Permit approach instead of individual EC approvals**
- **Waive or modify surety options and long-term monitoring requirements**
- **Options may require regulation changes**

WHAT'S NEXT?



- Workgroup to continue and provide more detailed recommendations to DEEP
- Solicit comments and evaluate feedback from Roundtable members
 - Public comment through ***October 21, 2011***
 - Send comments to:
DEP.Remediationroundtable@ct.gov

WHAT'S NEXT?



- **DEEP or workgroup to develop guidance which creates:**
 - Predictability in timeframe and process
 - Pathway to approval and permanent solution
 - Matrix describing self-implementing/pre-approved alternative remedies
 - Table of COC concentration ranges
 - Policy coordination with Solid Waste staff

QUESTIONS / COMMENTS



www.ct.gov/dep/remediation



THANK YOU!



DEP.remediationroundtable@ct.gov
www.ct.gov/dep/remediationroundtable

NEXT ROUNDTABLE: NOVEMBER 8, 2011

