

# REMEDIATION ROUNDTABLE

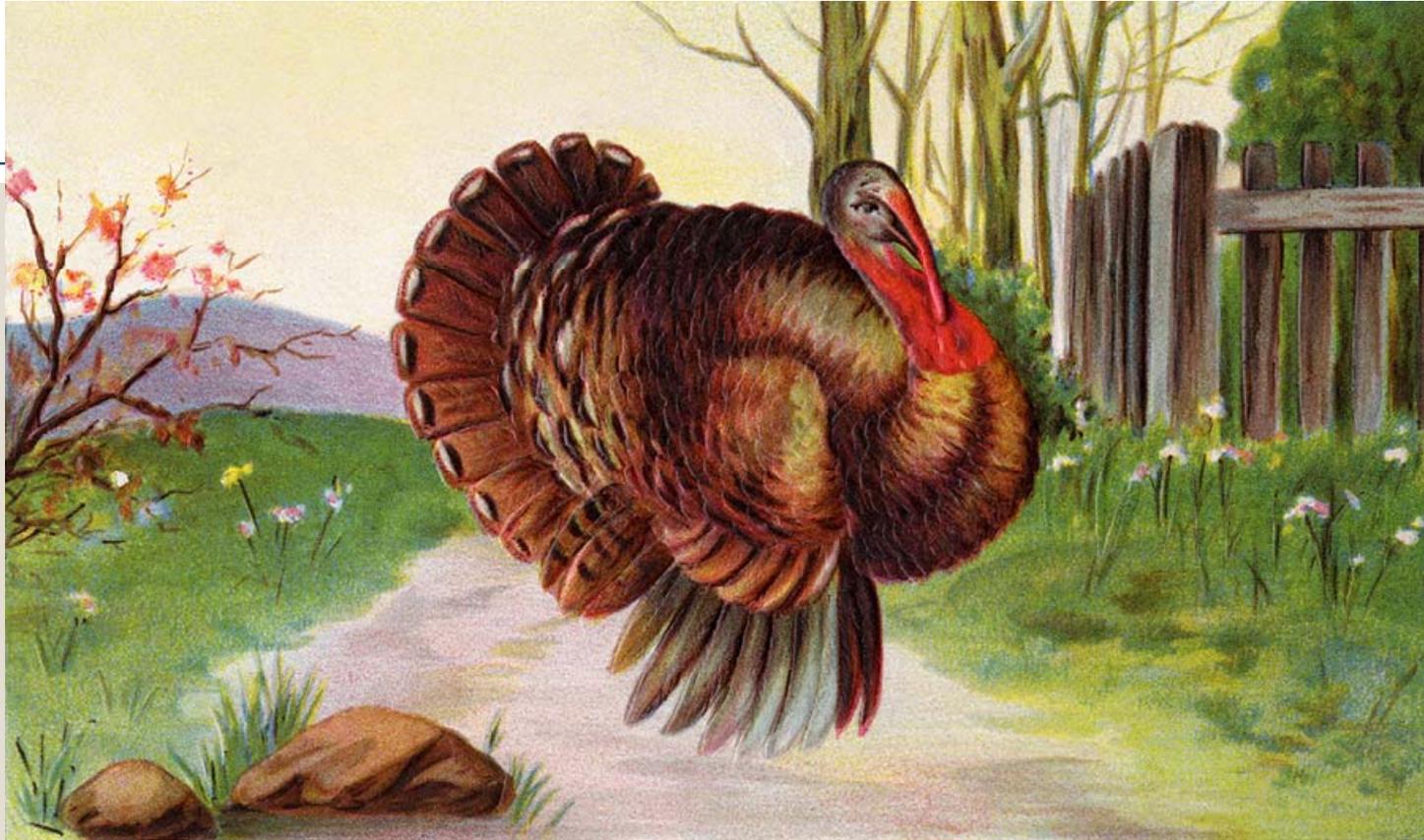


**November 8, 2011**



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: February 14, 2012
- Schedule and agenda on website  
[www.ct.gov/dep/remediationroundtable](http://www.ct.gov/dep/remediationroundtable)
- Submit comments to Camille Fontanella at  
[DEP.remедiationroundtable@ct.gov](mailto:DEP.remедiationroundtable@ct.gov)

# TODAY'S AGENDA



- **Deputy Commissioner Macky McCleary**
- **Updates:**
  - Brownfield Public Act 11-141
  - Comprehensive Evaluation / Transformation
- **Short Presentations**
  - Proposed Changes to the RSRs
  - Significant Environmental Hazards
- **Public Participation**
  - Urban Fill Workgroup
  - General Q&A

# DEPUTY COMMISSIONER MACKY McCLEARY



Connecticut Department of

**ENERGY &**

**ENVIRONMENTAL**

**PROTECTION**

**PUBLIC ACT 11-141  
SUBSTITUTE HOUSE BILL 6526  
HIGHLIGHTS**



**2011  
BROWNFIELD  
BILL**



**ROBERT BELL**

# 20 SECTIONS



- **Transfer Act amendments - §§4 and 10**
- **New Remediation / Revitalization Program - §17**
- **WQS amendment - §5**
- **Fees amendment - §8**
- **ELUR amendments - §§12-14**
- **Abandoned Brownfield Cleanup Program - §9**

## 2 TRANSFER ACT AMENDMENTS

### OLD

- CP required to cleanup all releases that occurred up to date of verification or RAR
- Definition of transfer: **includes** from Bankruptcy Court or Muni to non-profit

### NEW

- CP required to cleanup releases that occurred up to **later of Phase II completion or filing Form III/IV**
- Definition of transfer: **excludes** from Bankruptcy Court or Muni to non-profit

# **NEW REMEDIATION/ REVITALIZATION PROGRAM [§17]**



- **Purpose: more reuse of degraded properties, more risk reduction**
- **Who? Prospective purchasers and innocent owners**
- **Incentive: if clean up property, will be exempt from pre-existing releases that moved off-site, plus liability protection**

# NEW PROGRAM - ENTRANCE



- **DECD determines entry and consults with DEEP**
  - Brownfield
  - Sustainability and/or economic benefit factors
- **32 sites per year**
- **Fee – 5% assessed value, options to reduce**
- **Prospective purchaser or innocent owner not affiliated with anyone that caused or contributed to pollution**

# NEW PROGRAM - FIT WITH OTHER LAWS



- Exempts Eligible Person from other CT cleanup laws for prior releases
  - Except LUST, PCB
- Transfer Act – exempts Eligible Person from Transfer Act if establishment
- Other persons who have legal obligations retain such legal obligations
  - Including prior Certifying Parties under Transfer Act
- Federal law –unaffected
  - e.g., RCRA CA

# NEW PROGRAM – CLEANUP REQUIREMENT



- On-site only
- LEPs
- 2 yr, 3 yr, 8 yr
- DEP audit – 180 days if decide to audit

# NEW PROGRAM – LIABILITY LIMITS



- Eligible parties receive liability shield from state and 3<sup>rd</sup> parties for pre-existing releases
- Subsequent owners
  - Protections transfer to new owner if compliance with cleanup
- Prior owners
  - After cleanup completed, liability protection for on-site releases

# FEES [§8]



- 3 new fee waiver scenarios
- Fees under Transfer Act and Voluntary Programs for “brownfield” sites (defined in 32-9kk)
  - 1) If receive public \$ for investigation/cleanup, or
  - 2) If state entity is siting a state facility on brownfield
  - 3) Any Fee due to DEEP, if brownfield and
    - ✦ fee results from actions of other party prior to new person’s acquisition, and
    - ✦ New person intends to investigate/cleanup.
    - ✦ e.g., RCRA CA has fee that might carry-over to new owner

# BROWNFIELD PUBLIC ACT QUESTIONS / COMMENTS



**THANK YOU FOR PARTICIPATING!**

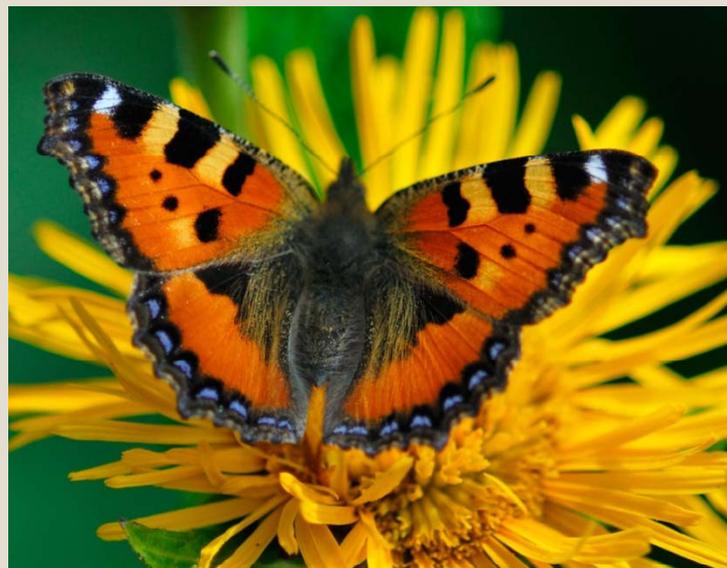
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# COMPREHENSIVE EVALUATION AND TRANSFORMATION



## SUMMARY AND UPDATE



GRAHAM J. STEVENS

# TRANSFORMATION



- **Two major efforts thus far:**
  - **Visioning Session, and**
  - **Evaluation Workgroup Reports**

# TRANSFORMATION



- **Visioning Session:**
  - Public Visioning Session held (June 27, 2011)
  - Draft Report posted (August 4, 2011)
  - Visioning Materials posted (August 4, 2011)
  - Follow-up Questions posted (August 4, 2011)
  
  - DEEP accepted comments and Visioning Session materials through October 17, 2011
- **Numerous comments and materials have been received**

# TRANSFORMATION



- **Visioning Session:**
  - DEEP is now evaluating all of the Visioning Session materials and comments
  - DEEP will use this information to create a draft Vision for a Transformed Cleanup Program
  - This draft Vision for a Transformed Cleanup Program will be available for public input
  - *This Vision will be used to balance competing demands of the transformed program*

# TRANSFORMATION



- Evaluation Workgroups and Reports:
  - Evaluation Workgroup Topics Discussion held (August 9, 2011)
  - Evaluation Workgroups Summary Report released (August 16, 2011)
  - DEEP solicited Workgroup Volunteers (August 16, 2011)
  - DEEP notified selected Workgroup Volunteers (August 26, 2011)
  - Workgroups submitted Draft Evaluation Reports to DEEP and Draft Reports posted (September 30, 2011)
  - DEEP accepted comments and the Draft Evaluation Workgroup Reports through ~~November 7~~ **November 14**
- Numerous comments have been received



# TRANSFORMATION



- **Next Steps:**
  - DEEP will use public comments and materials submitted to create a draft Vision and draft Conceptual Legislative Proposal for public input
  - DEEP will post the Draft Vision and Conceptual Legislative Proposal on or around ***November 21, 2011***
  - DEEP will submit a Final Report describing the evaluation process, the Vision, and a Conceptual Legislative Proposal to the Governor and Legislature by **December 15, 2011**

# TRANSFORMATION



- **Final steps:**
  - DEEP will work to finalize an initial draft Legislative Proposal based on the concepts outlined in the Final Report
  - DEEP will solicit input on the draft Legislative Proposal (*anticipated posting in late January 2011*)
  - DEEP will submit the Legislative Proposal to the General Assembly (*anticipated in mid to late February 2012*)
  - Public participation will continue through the normal legislative process

# COMPREHENSIVE EVALUATION AND TRANSFORMATION QUESTIONS / COMMENTS



**THANK YOU FOR PARTICIPATING!**

[www.ct.gov/dep/remediation](http://www.ct.gov/dep/remediation)



# REMEDICATION STANDARD REGULATIONS: PROPOSED CHANGES



**JAN CZECZOTKA**

# RSR REVISIONS - HISTORY



- **Collaboration of External Advisory Committee in 2006**
- **Proposed in August 2008**
- **Withdrawn in May of 2009**

# RSR REVISIONS - GOALS



- **Protection of human health and the environment**
- **Increase in:**
  - Predictability and efficiency
  - Self-implementation
  - Flexibility – site-specific
- **Drive remediation**

# RSR REVISIONS



## Current Proposal Highlights

Definitions (new and amended)	Groundwater Monitoring
Approval and Variance Requests Prescribed Forms	SWPC
Exceptions for Incidental Releases	Volatilization
Corrections APS formulas	Post-Remediation Compliance
Pollutant Mobility	Numeric Criteria for Lead, ETPH, EPH, VPH, APH
Engineered Controls	ELUR Regulations

# RSR REVISIONS



- **New and Amended Definitions**
  - New – ETPH, EPH, VPH, and APH
  - Amended - Inaccessible Soil
- **Requests for a variance and other approvals to be submitted on form prescribed by Commissioner**
  - “Remediation Standard Regulations Approval Request or Notice Transmittal Form”

# RSR REVISIONS



- **Exceptions for incidental releases to soil - the following releases do not need to be addressed:**

- **Soil releases from:**

- ✦ **Normal operation of motor vehicles (not including refueling, repair, or maintenance)**
- ✦ **Normal bituminous asphalt paving/maintenance of paved surfaces (products used for their intended purpose)**

# RSR REVISIONS



- **Exceptions for incidental releases to groundwater - the following releases do not need to be addressed:**
  - Groundwater releases of trihalomethanes from leaking water supply distribution systems
- **Corrections to formulas for Additional Polluting Substances - Residential DEC formulas and GWPC formula**

# RSR REVISIONS



## Currently Required:

- Pollutant Mobility Exception – application of GA PMC in GB area IF:
  - GB area
  - Seasonal high water table below bedrock

## Revision Allows:

- Do NOT have to apply GA PMC in GB area at all (compliance with existing ground-water use must be demonstrated)

# RSR REVISIONS



- Pollutant Mobility Exception – Except for VOCs, PMC do NOT apply IF:
  - **EITHER** unobstructed infiltration over 80% of area for >5 years **OR** Commissioner's written determination of sufficient infiltration based upon:
    - Groundwater fully characterized demonstrating:
      - ✦ Representative locations, extent of contamination delineated, and no increase in contamination
    - 4 consecutive quarters show
      - ✦ < SWPC and GWPC in GA or APA areas **OR** < SWPC in GB area

# RSR REVISIONS



- Groundwater monitoring after remediation must determine:
  - Effectiveness of soil remediation / isolation
    - ✦ No additional groundwater monitoring if remediated to comply with DEC only
  - Compliance with applicable background, SWPC, RVolC
  - No interference with existing uses in GB area

# RSR REVISIONS



- Establishing groundwater compliance:
  - After remediation
  - No influences on hydrology
  - Stable geochemical conditions
  - No increase in concentrations

# RSR REVISIONS



- **Establishing groundwater compliance:**
  - Minimum 4 quarters, representing seasonal variations, completed in two years
  - Commissioner may approve alternate method (same)
  - Meet background or GWPC, as applicable
  - Meet SWPC by
    - ✦ 95%UCL of plume <SWPC and no sample >2X SWPC
  - OR
  - ✦ Point of discharge concentrations <SWPC

# RSR REVISIONS



- **Establishing groundwater compliance:**
  - Volatilization Criteria for groundwater – representative samples of plume <VolCriteria **OR**
  - Volatilization Criteria for soil vapor – representative samples in soil over plume and under structure <VolCriteria
    - ✦ Still an alternative to groundwater volatilization compliance
  - 95% UCL no longer available for soil vapor
  - Other compliance options

# RSR REVISIONS



- **Post-remediation groundwater section removed and combined with overall groundwater compliance section**
- **Changes/additions to numeric criteria:**
  - Lead = 400ppm / 800ppm for RDEC / IDEC
  - ETPH for DEC, PMC, GWPC, SWPC
  - EPH by carbon range for DEC, PMC, GWPC, SWPC
  - VPH by carbon range for DEC, PMC, GWPC, SWPC, groundwater VolC
  - Air-Phase Petroleum Hydrocarbons (APH) by carbon range for Soil Vapor VolC

# RSR REVISIONS



- **Changes to ELUR Declaration:**
  - Declaration Form for either Commissioner's or LEP's signature
  - Reference to Decision Document in Paragraphs 1 and 2
  - Reference to Emergencies
  - Release of Restrictions

# RSR REVISIONS QUESTIONS / COMMENTS



**THANK YOU FOR PARTICIPATING!**

[www.ct.gov/dep/remediation](http://www.ct.gov/dep/remediation)



# SIGNIFICANT ENVIRONMENTAL HAZARDS



**KEN FEATHERS**

# HAZARD NOTIFICATION - BASICS



- **Statute**
  - CGS 22a-6u
- **Information**
  - Fact sheets and FAQs on Web (being updated)
- **Conceptual Model for SEH program**
  - “...in the course of investigating...”
  - “ ...owner becomes aware...”

# 7 HAZARD CONDITION TYPES



- DW Well polluted above criteria
- DW Well w/detectable pollution (below criteria)
- Plume threatens supply well (w/in 500 ft DG)
- Surface soil poses threat (30x DEC)
- Volatilization threat to structure (30x Vol)
- Surface water threatened (10x WQS acute)
- Explosion threat

# TECHNICAL CONSIDERATIONS



- Presence of Wells
- Downgradient Direction
- NAPL
- Timing of determination
- Sparseness of data – extrapolation
- Source of DW well pollution

# NOTIFICATION



- **Who must notify**
  - Property Owner / TEP / TEP Client
  - Not required ONLY if under Final Order
- **Timing of notification**
  - **Immediate** / **7 days** / 90 days DEC
- **Form and Instructions – optional data**
- **Handling at DEEP**
  - Time sensitive
  - Hazard Notification Lead Staff

# ACKNOWLEDGEMENT



- **DEEP options**
  - Immediate action
  - Plan for abatement action
  - No action requested – DEEP may act
- **Technical considerations**
  - Release and pathway focused risk abatement
  - Eliminate unknowing exposure
  - Phased/stepwise implementation – quick!
- **Other issues ( 3rd party RP / source unknown)**

# PUBLIC INVOLVEMENT



- **Web site SEH listing**
- **Notification to Elected Officials**
  - Town Chief Elected Official /cc Manager
  - State Representative
  - State Senator
  - CC to Local Health Official
- **Posting of Notification during construction**
- **Drinking water receptor notification**

# HAZARD ABATEMENT ACTION



- Initial response may be started by phone call
- Immediate action requested by acknowledgement letter – SEH lead
- Abatement Action Plan
- Field oversight/inspection
- Abatement Action Reports (w/ recommendations)
- Continued re-validation of “no exposure”

***ABATEMENT ACTION ≠ REMEDIATION***

# MITIGATION OF SHORT-TERM RISK



- Actions taken have **controlled** hazard
  - May need monitoring or O&M
  - Notify DEEP of changed conditions

**Resolution of SEHN - No further action is needed regarding short-term risk**

- Additional data/review shows **no hazard**
- Actions taken have **abated** hazard
  - “...such that [SEH] notice ...would not be required...”

# RELATIONSHIP TO VERIFICATION



- **MUST resolve SEH prior to verification**
- **File documentation of resolution may vary**
  - Certification letter – active abatement by owner
  - DEEP memo documenting resolution
  - Acknowledgement stating no further action
  - Special case – approval of passive oversight plan for a controlled SEH where source is remediated

# UPDATE PROJECT



- Scanning completed
  - Notifications and key DEEP letters
  - To provide for file room access
- Working on web report for older than 2002
- As of October 2011, DEEP records for 767 current SEHs shows
  - 25 % **resolved** and
  - another 34 % **controlled**
- DEEP may be calling to follow up on SEHs

# SIGNIFICANT ENVIRONMENTAL HAZARDS QUESTIONS/COMMENTS



**THANK YOU FOR PARTICIPATING!**

[www.ct.gov/dep/remediation](http://www.ct.gov/dep/remediation)



# WORKGROUP REPORT OUT



## **URBAN FILL WORKGROUP**



**MAURICE HAMEL**

# URBAN FILL WORK GROUP MISSION



*Achieve a viable remedial solution for urban fill sites.*

## TWO TIERED APPROACH

Short-term: Identify what currently is and isn't working, and provide specific recommendations to the Department that can be implemented within the current regulations.

Long-term: Make changes to regulations and statutes that would create a framework for flexibility in characterization and streamlined approval of remedial approaches.

# PROGRESS MADE



**This summer:**

- **Developed working definition of “Urban Fill”**
- **Evaluated current RSR options**
- **Surveyed how other states handle urban fill**

# PROGRESS MADE



## Currently:

- Developing conceptual tiered approach to address urban fill
- Coordinating efforts with the Comprehensive Evaluation and Transformation
- Coordinating efforts with Targeted Brownfield Remedy
- Established 5 subgroups to focus on key issues

# 5 SUBGROUPS



**Constituents of Concern** - recommend COCs and concentrations that would be considered “urban fill”

*[John Albrecht, Kathleen Cyr, Larry Hogan]*

**Site Characterization** – recommend minimum sampling needs, data quality objectives and analytical approaches suitable for “urban fill”

*[David Clymer, Stephen Holtman, Victoria Man]*

# 5 SUBGROUPS



**Engineered Controls** – recommend generic EC designs suitable for approval under a general permit, pending changes to statutes

*[George Gurney, Bert Sacco, Mike Susca]*

**Risk Assessment** – recommend conditions and concentrations allowable for use in a possible default risk assessment for “urban fill”

*[Tamara Devine Burke, Russell Downey, Darrick Jones]*

**Legal Issues** *[David Losee]*

# GUIDANCE DEVELOPMENT



- **Guidance (short-term)**
  - Definition of urban fill
  - COCs / concentration ranges
  - Characterizing urban fill
  - Generic types of engineered controls
- **Guidance (long-term)**
  - Revisions after legislation
  - Engineered Control General Permit ?
  - Risk Assessment options ?

# URBAN FILL WORKGROUP QUESTIONS / COMMENTS



**THANK YOU FOR PARTICIPATING!**

[www.ct.gov/dep/remediation](http://www.ct.gov/dep/remediation)



# PUBLIC PARTICIPATION



## GENERAL QUESTIONS / COMMENTS

[www.ct.gov/dep/remediation](http://www.ct.gov/dep/remediation)



# THANK YOU!

[DEP.remediationroundtable@ct.gov](mailto:DEP.remediationroundtable@ct.gov)

**NEXT ROUNDTABLE:**  
**FEBRUARY 14, 2012**

**HAPPY HOLIDAYS!**

[www.ct.gov/dep/remediationroundtable](http://www.ct.gov/dep/remediationroundtable)

