



RCRA Long-Term Stewardship (LTS) Brownbag Webinar

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Why Long-Term Stewardship?

- Consolidate and document status of the site's investigation, remediation, and engineering and institutional controls.
- Monitor existing controls into the future.
- Ensure remedy remains protective for the long term.

EPA Long-Term Control Tracking in Connecticut

- 296 RCRA sites on the GPRA 2020 list in New England
- 167 RCRA sites in CT
- Across these 167 RCRA sites, EPA has identified and logged 117 engineered controls and 73 institutional controls through an in-depth file review of each individual site.
- Overall, EPA is aware of 113 sites in CT to date with some kind of long-term control.

EPA R1 LTS Checklist Process

- Key goals of LTS checklist process include modernizing accessibility to information on a site, identifying long term controls to be tracked, and reminding property owners of their obligations.
- EPA regional approach combines a file review with an in person assessment, gathering information to fill out a standard LTS checklist
- During file reviews, additional identified controls are tracked in RCRAInfo
- The checklist process can be done at any time in the facility's remedy journey, before or after permits or enforcement actions are issued.
- The process needs to continue into the future on a regular basis.

Updating Information Systems

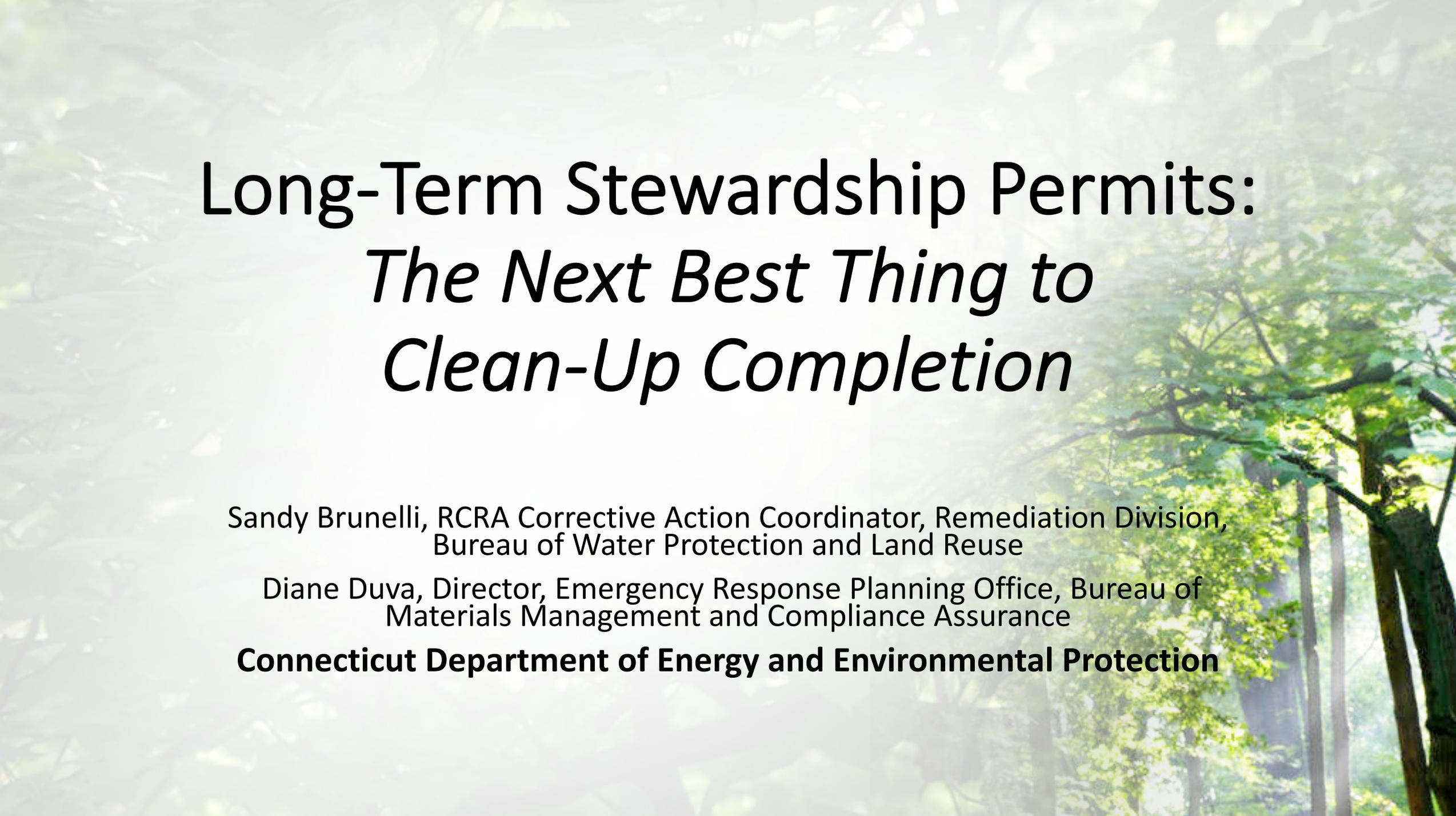
- Important documents are scanned, made available online in the SEMS document management system.
- Geographic locations of controls are recorded and displayed in Cleanups in My Community and in a Regional Web Map.
- Information captured documenting current site use and stored in the R1 LTS checklist, and by extension, the site record.

Completed Checklist Report

- Final LTS checklist report provides summary document as a snapshot in time with up to date site information.
- Contains electronic copies of land use restriction documents, notes on current site use, remedy adjustments needed.
- EPA can leverage existing state mechanisms to provide another mechanism for long term oversight on a facility that expands beyond EPA authority/resources or, depending on on-site observations, a mechanism for enforcement.

CT DEEP Stewardship Permit

- How does it fit in?
 - Provides the enforceable mechanism for ensuring the institutional controls and engineering controls as well as any investigation or remediation not yet completed.
- How does it complement regional LTS efforts?
 - The EPA LTS Checklist will be important into the future as the field check on controls. It can be used at facilities at any stage of the remedy implementation.
 - The stewardship permit spells out the LTS obligations.



Long-Term Stewardship Permits: *The Next Best Thing to Clean-Up Completion*

Sandy Brunelli, RCRA Corrective Action Coordinator, Remediation Division,
Bureau of Water Protection and Land Reuse

Diane Duva, Director, Emergency Response Planning Office, Bureau of
Materials Management and Compliance Assurance

Connecticut Department of Energy and Environmental Protection

Overview

The Story

Why did Connecticut develop Stewardship Permits?



The Vision

What is the vision of Connecticut's Long-Term Stewardship program?



The Permit

How does Connecticut use Stewardship Permits to manage Long-Term Stewardship obligations?

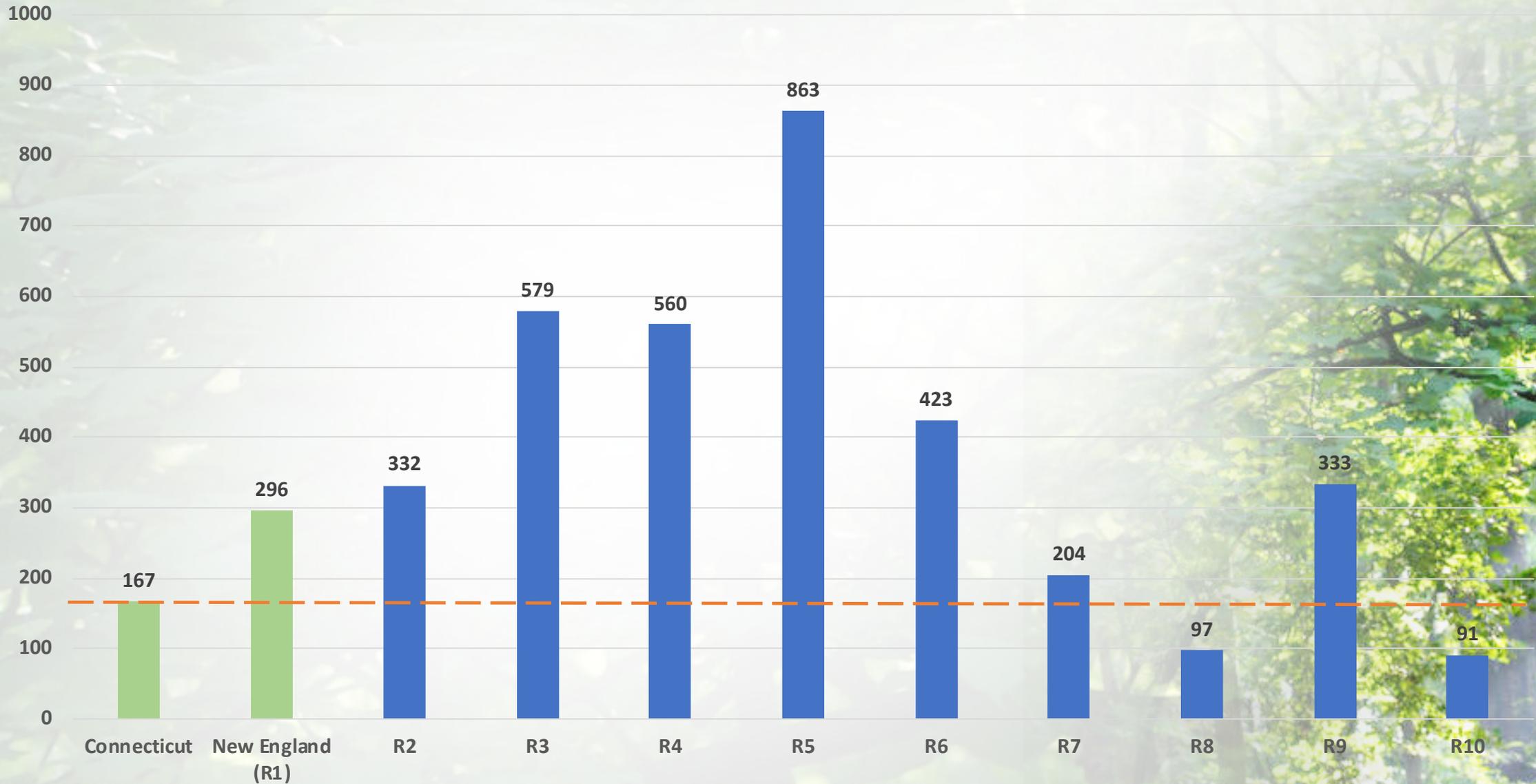


The story: Connecticut's Industrial Legacy & Early Clean Water Act Action

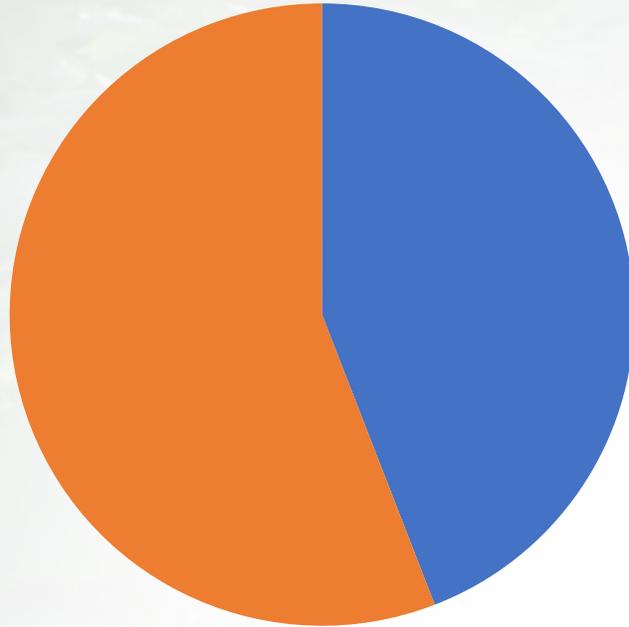
- Connecticut's industrial history
- Connecticut's Clean Water Act predated the federal Clean Water Act
- This means industrial discharges to rivers ended in the late 1960s
- And the discharges went to the land instead...
 - ... Thus, a lot of Land Disposal Facilities in Connecticut!



U.S. RCRA TSDFs on 2020 Baseline by Region



Connecticut's RCRA Facility Universe



238 TSDFs in our RCRA facility CA Universe
167 on the GPRA 2020 Universe
105 LDFs
133 STs

■ Land Disposal ■ Treatment and Storage

Connecticut developed Stewardship Permits/LTS program to address the large number of LDFs in Connecticut that need long-term post-closure care.

Long-Term Stewardship is needed for Post-Closure Care and for Remedies with Controls

- EPA/States prefer restoration and final walkaway remedies that don't require any government agency monitoring
- Still, cleanup standards are risk-based: and not all cleanups result in unrestricted use
- So when needed, we rely on **engineering and institutional controls** to protect people and the environment
- Government agencies need to keep track of what needs long-term monitoring and care

When Cleanup is Complete Without Controls...

... the future is easy for government agencies



Sometimes it is easy to see when cleanup is done...

When Cleanup is Complete With Controls...

... the future is not easy for government agencies

In other cases, it *may appear that* remediation is complete, but there are *Controls that must remain in place to keep the remedy protective into the future.*

Many sites will be cleaned up with the use of controls and need those controls in place, now, in the very near future, and for some, always.



Hazardous Waste Landfill in Southwest Connecticut that looks closed and done, though actually requires a lot of active maintenance to maintain the controls.



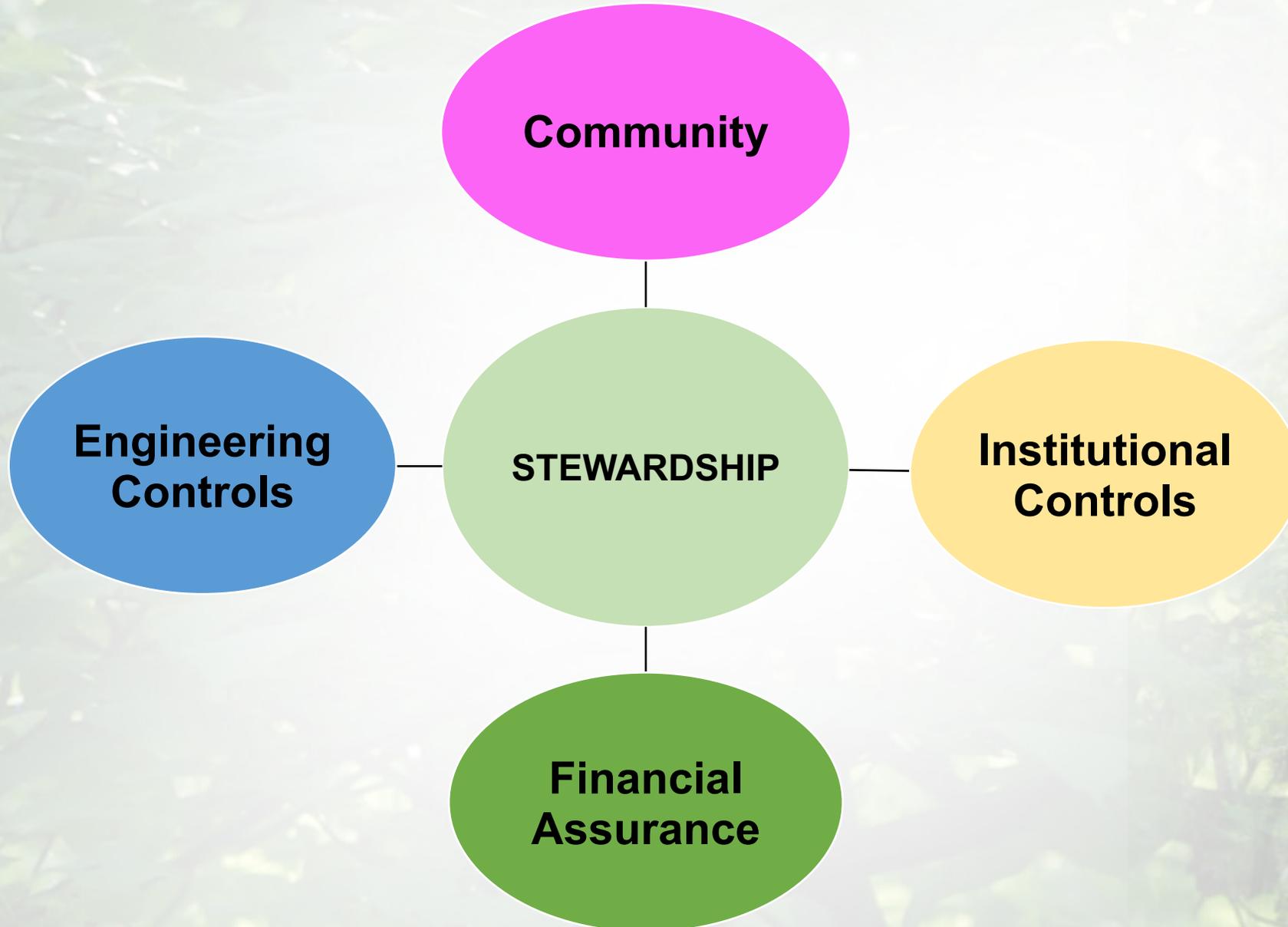
The Vision: Long-Term Stewardship

- Keep our promise to the future by institutionalizing remedies that effectively protect human health and the environment
- Remove clean-up uncertainty so we can move forward and restore and revitalize our urban centers
- Reuse land to promote and maintain a sustainable economy
- Guide growth to preserve open land
- Ease transfer of property ownership for RCRA facilities

How Stewardship Permits fulfill the Long-Term Stewardship Vision

- When we rely on **engineering and institutional controls** to protect people and the environment, government agencies need to keep track of what needs long-term monitoring and care
- This means we need an enforceable mechanism to ensure the remedy remains effective into the future
- Agencies already have enforcement and permitting authority
- EPA granted flexibility to states in the Post-Closure Rule on how to impose a mechanism for long-term stewardship

Stewardship Permits Link Together



The Next Best Thing to Clean-Up Completion: A Permit with a Schedule

A Stewardship Permit with an enforceable schedule:

- **Documents** and creates a historic record of the work completed and contains a Compliance Schedule that specifies timeframes in which work must be completed, for anything not yet finished;
- **Reduces uncertainty** in the requirements for Closure, Post-Closure Care, Corrective Action and Monitoring; and
- **Clarifies** to investors, developers, banks, and insurance underwriters that it is okay that remedies use schedules to complete remediation and controls to maintain effective remediation.

Permits are about keeping our promises that a remedy will remain protective of human health and the environment into the future.

RCRA Specifics

Connecticut's Stewardship Permit serves the function of a:

- HSWA [Hazardous and Solid Waste Amendments] Permit
- RCRA Post-Closure Permit
- Corrective Action Permit

Permit essentials

- Post-Closure Permits require groundwater monitoring, corrective action, and post-closure care. *40 CFR 270.1(c)*
- Permits need a Schedule of Compliance ["to-do" list, including Corrective Action and Financial Assurance] for anything that has not been completed by the time of permit issuance. *40 CFR 264.101*

Elements of Stewardship Permits

- I. **Standard Language** authorizing permit issuance and compelling compliance
- II. **Authorized Activities**
 - investigate, clean up
 - install and maintain engineered controls
 - apply institutional controls
- III. **Schedule of Compliance**
 - “to-do” list for unfinished business
 - establish **Financial Assurance** on a schedule
 - Provide for public participation in remedy and determination remediation is complete
- IV. **Appendices**
 - (e.g., Areas of Concern addressed)

Examples of Stewardship Permit Uses

- RCRA Hazardous Waste Land Disposal Facilities where waste or residual contamination remains in place
- To trigger investigation and cleanup at other Hazardous Waste TSDFs with outstanding obligations to complete remediation (used in place of enforcement)
- Other Hazardous Waste Treatment or Storage Facilities with long-term stewardship controls needed to maintain effectiveness of property wide remediation

EPA and State Coordination

Connecticut and US EPA Region 1 are working together on long-term stewardship properties of all types:

- ✓ EPA checklists across multiple types of sites provide eyes on the ground;
- ✓ Prompts EPA and DEEP staff to get to the site together; and
- ✓ EPA can collect field information and provide that information to the state.

Transferring Ownership of Permitted Facilities

- Agency's approval is required prior to transfer of the permit or change in ownership or operational control of the facility
- Permit transfer is a relatively simple process compared to re-issuing an enforcement action
- Permit transfer can be bundled with other agency permit transfers and can be processed through an agency's central permit ombudsman office
- 40 CFR 270.40 and 270.42

How to Succeed in RCRA Permitting

Understand existing environmental needs and coordinate with a facility's business needs:

- Timing constraints
- Ownership transfer plans
- Anticipate plans to separate or combine parcels now or in the future
- Agree on a schedule that makes sense
- Set clear expectations for the future
- Document decisions so they don't have to be revisited if clean-up process outlasts the regulator's assignment
- Revise the schedule as needed

Now, facilities, if you are really done-done-done (CA999), exit RCRA

- Ensure public participation in the proposed determination that facility-wide remediation is complete
- Document that clean-up is complete *without* controls
- Based on remediation completion, and if not yet permitted, the agency will terminate interim status and determine that no permit is needed because no further corrective action is needed and no controls are needed to ensure cleanup remedies remain effective
- *40 CFR 270.43*

The Best Thing:

Connecticut and EPA prefer permanent remedies and restoration (cleanup complete without controls)



CERTIFICATE OF COMPLETION

The Commissioner of Environmental Protection has made a final administrative decision that no activities are being conducted that require a RCRA permit at ABB Inc. for the portion of the site consisting of 300 Scotland Drive and a portion of 2000 Day Hill Road, EPA ID No. CTD001159557, located at 2000 Day Hill Road, Windsor, Connecticut.

Environmental investigation and remediation activities are complete at the facility. Opportunities for public comment were provided related to the environmental investigation and remediation. Opportunity for public comment was also provided related to the Commissioner's proposed disposition of the facility's permit status.

The issuance of this certificate is based on the completion of environmental clean-up work required by state laws and regulations, including RCRA Corrective Action and Closure, as determined by compliance with Connecticut's Hazardous Waste Management Regulations and Remediation Standard Regulations, as well as state and federal guidance. This clean-up is consistent with the requirements of Connecticut's Property Transfer Act defined in Connecticut General Statutes Sections 22a-134 and 22a-134(a) through (e), and may be used as the basis for submitting a Form II pursuant to Connecticut's Property Transfer Act.

September 29, 2009


Amey W. Marrella
Commissioner

The Next Best Thing to Clean-Up Completion: A Permit with a Schedule



CERTIFICATE OF STEWARDSHIP

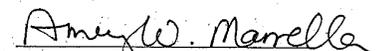
The Commissioner of Environmental Protection has made a final administrative decision to issue a Stewardship Permit to **ABB Inc.** for the former Combustion Engineering Facility, EPA ID No. CTD001159557, located at 2000 Day Hill Road, Windsor, Connecticut.

This permit is for the continuation of facility closure, post-closure care and corrective action activities, meaning environmental investigation and remediation, at the facility and may be transferred upon the written authorization of the Commissioner.

Opportunity for public comment has been provided in accordance with state and federal requirements.

This action is based on the obligation to initiate and complete closure, post-closure care and environmental clean-up work required by state laws and regulations, including RCRA Corrective Action and Closure, and requires compliance with Connecticut's Hazardous Waste Management Regulations and Remediation Standard Regulations, as well as state and federal guidance.

September 29, 2009


Amey W. Marrella
Commissioner

In Summary, Stewardship Permits:

- ✓ **Define** unfinished investigation and remediation work as well as the long-term obligations needed to ensure the property conditions are protective of human health and the environment.
- ✓ Provide opportunities for **public participation**;
- ✓ **Document** cleanup as it is completed; and
- ✓ Addresses **financial assurance** obligations.

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