



THOMPSON LANDFILL THOMPSON, CONNECTICUT STEWARDSHIP PERMIT RENEWAL PUBLIC INFORMATION MEETING

September 4, 2024

Presented by: Veronica Tanguay, DEEP Remediation Division
David Hazebrouck, Lake Shore Environmental, Inc.

HOUSEKEEPING NOTES



Please hold all oral questions until the end of the presentation



Any questions posted in the “chat” function will be addressed at the end of the presentation



All participants will be muted until the meeting is open to public participation

Please note that all, or portions, of the meeting may be recorded

AGENDA

- **Welcome from CT DEEP and Introductions**
- **History of Landfill Permitting & the EPA RCRA Program**
- **Permit Overview**
 - Explanation of the Stewardship Permit Program
 - Goals of Stewardship Permits
 - How Stewardship Permits Connect the Community
- **Facility Overview**
 - Property Location
 - Facility History
 - Environmental Concerns
- **Timeline of Investigations and Remediation**
- **Actions to be Completed Under Renewed Stewardship Permit**
- **Opportunity for public comments and questions**

INTRODUCTIONS

Connecticut DEEP

- Veronica “Roni” Tanguay
Environmental Analyst
Remediation Division
- Sarah McQuade
RCRA Corrective Action Program
Remediation Division

Town of Thompson

- David Hazebrouck
Licensed Environmental Professional
Lake Shore Environmental, Inc.

LANDFILL PERMITTING HISTORY

Landfills have been a means of disposing of solid waste in a sanitary manner for much of human history



Early-1900s to mid-1990s

- Landfills in CT were permitted by local and state authorities through previous entities such as the Connecticut Water Resources Commission
- In 1995, stricter federal rules for landfills took effect, prompting almost all landfills in CT to permanently stop receiving municipal solid waste [trash] and move to sending trash to waste-to-energy facilities



Types of Landfills

- **Municipal solid waste landfill** – typical household trash
- **Hazardous waste landfill** – waste that is potentially dangerous or harmful to human health or the environment
- **Bulky waste landfill** – oversized and specialty materials that can't be collected as part of the normal trash system
- **Ash monofil** – landfills that only receive ash from incinerators
- **And more...**



Landfills in CT

- Some landfills still operate in CT
- A few bulky waste landfills
- A private ash landfill in Putnam receives ash from waste-to-energy facilities



Closed Landfills

- Landfills are capped with engineered materials to prevent rain from infiltrating waste to minimize potential pollution to groundwater and rivers

Visit the [EPA Landfills page](#) and the [DEEP Solid Waste Management page](#) for more information

HAZARDOUS WASTE DISPOSAL & CONNECTICUT'S INDUSTRIAL PAST

Connecticut has a history of industrial manufacturing involving metal fabrication and finishing activities that generate industrial wastes



Regulatory History

- **1967** - CT required industrial wastes not be discharged directly into rivers without treatment & permitting.
- **1970** - Federal Clean Water Act similarly required treatment & permitting
- Sludges from treating certain wastes prior to discharging to rivers were placed on the ground to keep the sludges out of rivers
- **1980s** - EPA created rules that said placement of such wastes on the ground would require permits & cleanup when the disposal activity ended



Hazardous Waste Disposal

- **Hazardous** wastes were disposed of in various landfills across CT, thus designating these landfills as a “**hazardous waste facility**” under EPA RCRA Program
- **Municipalities** in which hazardous wastes were disposed of were required to file a **RCRA Part A form** which granted them interim status **until a permit could be issued.**



Permit Requirements

- **Hazardous waste landfills** receive **RCRA Stewardship Permits** to provide the framework for **ensuring** maintenance and monitoring continues **for future generations**
- **This is the case for the Thompson Landfill**

RESOURCE CONSERVATION AND RECOVERY ACT

HISTORY

Resource Conservation and Recovery Act

- Known as “RCRA”
- Established by EPA in 1976 to save energy, recover resources through waste reduction, and prevent Superfund sites [abandoned contaminated properties]
- Purpose of the RCRA Corrective Action program is to ensure that hazardous wastes are managed properly to prevent releases and to ensure cleanup of releases.

RCRA Stewardship Permit program

- Part of RCRA facility permitting. In 2001 EPA authorized Connecticut to issue enforceable documents such as permits to address and memorialize the cleanup of facilities that previously managed hazardous wastes.
- DEEP Remediation Division issues & manages RCRA Stewardship Permits through delegation of authority from US EPA.

PERMIT OVERVIEW

Why we are here?

- To continue the property's assessment, monitoring, and post-closure progress

Why is a Stewardship Permit Required?

- Regulatory basis:
 - Federal and state laws require that this type of Facility has an enforceable monitoring and maintenance schedule in place to ensure remedies remain effective into the future (i.e., landfill cap integrity)

PERMIT OVERVIEW

What is a Stewardship Permit?

- Landfills require long-term monitoring and care to ensure that the remedy remains protective of human health and the environment.
- There is a need to keep our promise to the future by having a transparent process that tracks those obligations.
- A Stewardship Permit issued by the State of Connecticut is an enforceable mechanism to help keep that promise.
- Stewardship Permits issued to landfills are renewed every 10 years.
- Stewardship Permits are issued to many different sites across the State ranging from landfills to industrial/commercial properties that may all have different use endpoints.
- This is the first Renewal for the Thompson Landfill Stewardship Permit

GOALS OF STEWARDSHIP PERMITS



Protect human health and the environment and ensure remedy remains effective into the future



Restore and revitalize urban centers



Guide growth to preserve open land

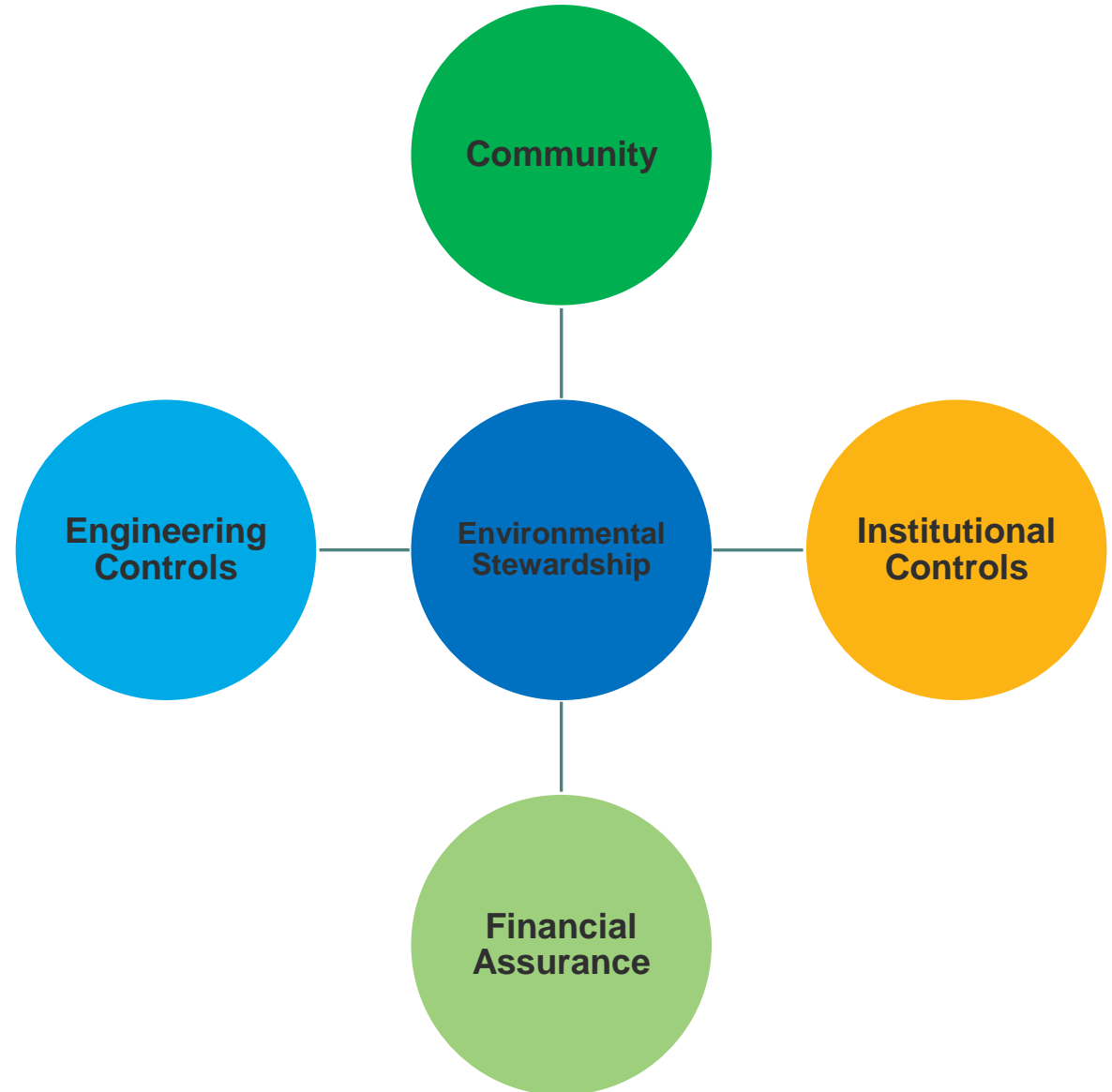


Preserve cultural & historic resources



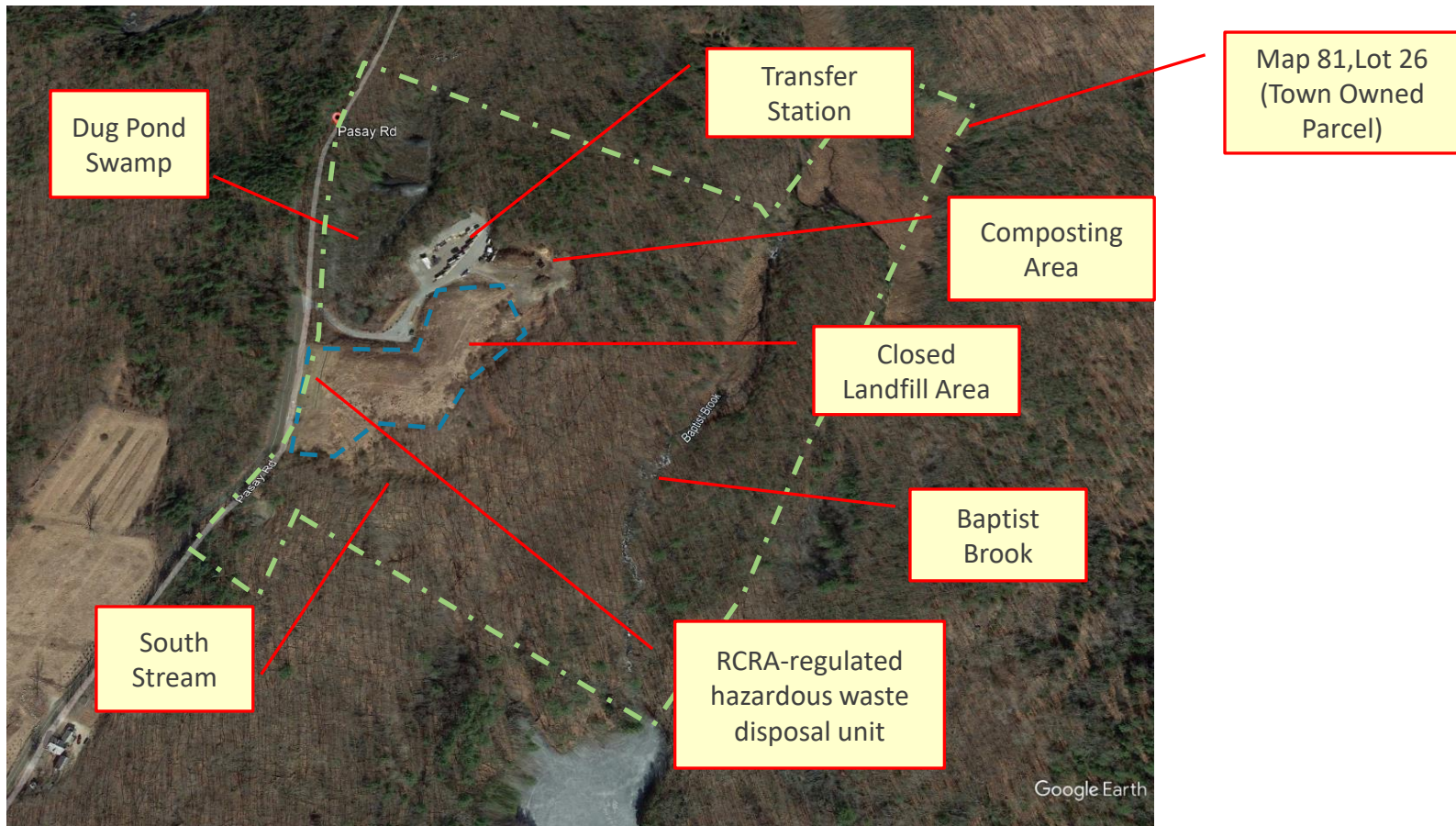
Promote and maintain a sustainable economy

A Stewardship Permit creates a link between the property and the community and ensures remedies remain effective into the future



STEWARDSHIP PERMITS CONNECT THE COMMUNITY

THOMPSON LANDFILL PASAY ROAD



Thompson Landfill and Transfer Station are currently owned & operated by the Town of Thompson, CT.

THOMPSON LANDFILL PASAY ROAD HAZARDOUS WASTE MANAGEMENT UNIT (HWMU)



Thompson Landfill and Transfer Station are currently owned & operated by the Town of Thompson, CT.

THOMPSON LANDFILL HISTORY

- **1957-1970**

- The Thompson Landfill initially began open-faced, unlined landfill operations and refuse burning before adopting sanitary landfilling techniques.

- **1978-1982**

- A total of approximately 462 cubic yards of metal-hydroxide sludge was reportedly accepted and disposed of in lagoons that are considered RCRA Regulated Hazardous Waste Management Units (HWMUs).

- **1991**

- Landfill operations (which included municipal solid waste and refuse and occupied 14 acres of the 89-acre Town-owned Property) ceased.

- **1992**

- Landfill was covered with an earthen grass-covered cap.

- **1997**

- A municipal Transfer Station constructed; currently operates near the entrance to the Landfill on the eastern side of the Site.

POTENTIAL ENVIRONMENTAL CONCERNS

- **Maintain encapsulated condition of the Hazardous Waste Management Unit (potential source of cadmium, copper, chromium, nickel and zinc to groundwater)**
- **The landfilled municipal solid waste has contributed to two plumes of leachate (towards South Steam/Baptist Brook and towards Dug Pond Swamp) including sodium, iron, manganese, ammonia & nitrate.**
- **Nearby residences are served by private potable supply wells**
 - proactive monitoring of private wells is completed bi-annually and compared to regulatory standards

MONITORING PARAMETERS

Parameters	Analyses	Purpose	Current Frequency	Groundwater	Drinking Water
Field parameters	E.g.: ORP, specific conductance, temperature	Indicative of groundwater geochemistry	Semi-Annual	✓	✓
Leachate Parameters	E.g.: pH, ammonia, nitrate, TDS	Indicative of landfill leachate plume	Semi-Annual	✓	✓
Metals	E.g.: iron, nickel, manganese, chromium, etc.	Potential for increased solubility due to landfill plume	Semi-Annual	✓	✓
Volatile Organic Substances	E.g.: petroleum VOCs, chlorinated solvents, etc.	Determine potential release of VOCs	Semi-Annual	✓	✓
Radionuclides	E.g.: Radium-226, Radium-228, Gross Alpha	Potential radioactive impact to leachate plume	Annual (Spring)	✓	✓

*samples collected on semi-annual basis from (nearby) residential wells, onsite overburden and bedrock wells, and onsite surface water locations

TIMELINE OF INVESTIGATIONS & REMEDIATION

- **1986**
 - The groundwater monitoring program for the Landfill began
- **1991**
 - In October, a portion of the Landfill mined for bulky waste was capped & landfill operations ceased
- **1992**
 - Landfill was capped as part of the landfill closure process. RCRA Hazardous Waste Management Unit investigated.
- **1996**
 - RCRA Hazardous Waste Management Unit was capped.
- **1997**
 - Post Closure Part B Permit Application for the Hazardous Waste Management Unit submitted to DEEP
- **2010**
 - A Post Closure Stewardship Permit was issued to the Town of Thompson on September 30th.
- **2011**
 - Post-closure care plan submitted to DEEP
- **2013**
 - An ecological risk evaluation was completed in the spring
- **2016**
 - A Remedial Action Plan was prepared and submitted to DEEP in July. Monitored Natural Attenuation (MNA) was determined to be the appropriate remedy.

ACTIONS REQUIRED IN STEWARDSHIP PERMIT

- **Retain Environmental Professional**
- **PFAS Baseline Sampling Plan**
- **Long Term Stewardship Plan (including monitoring plan)**
- **Update Cost Estimates; Demonstrate Financial Assurance**
- **Quality Assurance/Quality Control Plan**
- **Update Public Participation Plan**
- **Provide evidence of Landfill closure documentation on Property deed**

SUMMARY OF STEWARDSHIP PERMITS

Ensures public participation in on-going maintenance and monitoring

Documents the completion of closure & post-closure

Memorializes phases of completed remediation (i.e., closure, post-closure, & MNA)

Addresses financial assurance obligations

Spells out long-term obligations of permit holder

STEWARDSHIP PERMIT PUBLIC COMMENT PERIOD

Opportunity to Comment on Draft Permit

- **August 2, 2024-Draft permit available for public review**
 - Notice of tentative determination to issue a permit renewal was published, beginning the Public Comment period
 - Information published in [The Villager Newspaper](#)
 - Radio announcements on WINY
- **September 4, 2024 - Public Informational Meeting held in virtual format**
- **September 16, 2024-End of Public Comment period**
- **Next: CT DEEP will review comments, consider if changes to the permit area needed, then issue a final decision for the renewal to the Town of Thompson**

PUBLIC COMMENT PROCESS

All comments must be received by
September 16, 2024

Once all written comments are received, DEEP will review the comments received in writing and verbally at this meeting prior to finalizing the decision regarding the permit renewal.



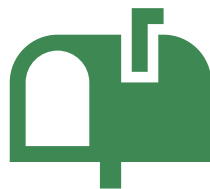
This presentation will be posted to the DEEP webpage:
[Proposed Individual Permits \(ct.gov\)](https://www.deep.ct.gov/Proposed-Individual-Permits)



Comments may be emailed to:

veronica.tanguay@ct.gov

With a copy to
DEEP.REMStewardship@ct.gov



Comments may be mailed to:

Veronica Tanguay, Environmental Analyst
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Bureau of Water Protection and Land
Reuse, 2nd Floor
CT Department of Energy and
Environmental Protection
79 Elm Street
Hartford CT, 06106-5127

QUESTIONS AND COMMENTS WELCOME!

- Please note that all or portions of the meeting may be recorded.
- If you wish to speak, please use the “Raise your hand” feature
- The moderator will call your name
- Unmute your phone / computer
- If possible, turn your camera on while making a comment
- State your name and address clearly
- When done, please place your phone / computer back on mute



Thank you!