

New Hampshire

Closed Solid Waste Landfills

Where We Are And
What Lies Ahead

Presentation Overview

- A Very Brief History
- Where We Are
- What Lies Ahead



A Very Brief History

≤1960s - Burn dumps and open dumps were common

1969-1972 - NH Solid Waste Laws & Regulations come into effect and open burning is banned, “sanitary” landfilling is required

1981 - NH Solid Waste Management Act passed

Late 1980s - State made it a priority to close unlined solid waste landfills and the NH legislature established a Grant Program

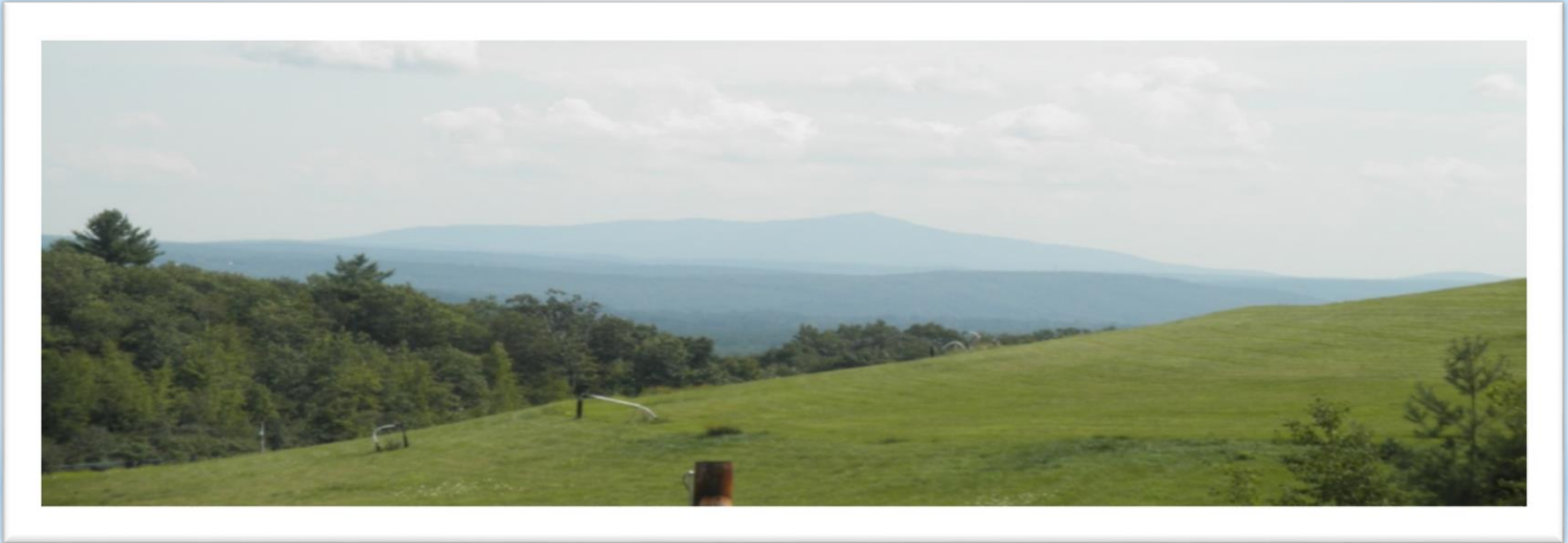


Where We Are

- Approximately 300 closed landfills
- Approximately 30% report annually
- Approximately 160 have a groundwater permit
- Approaching the 30 year closure milestone



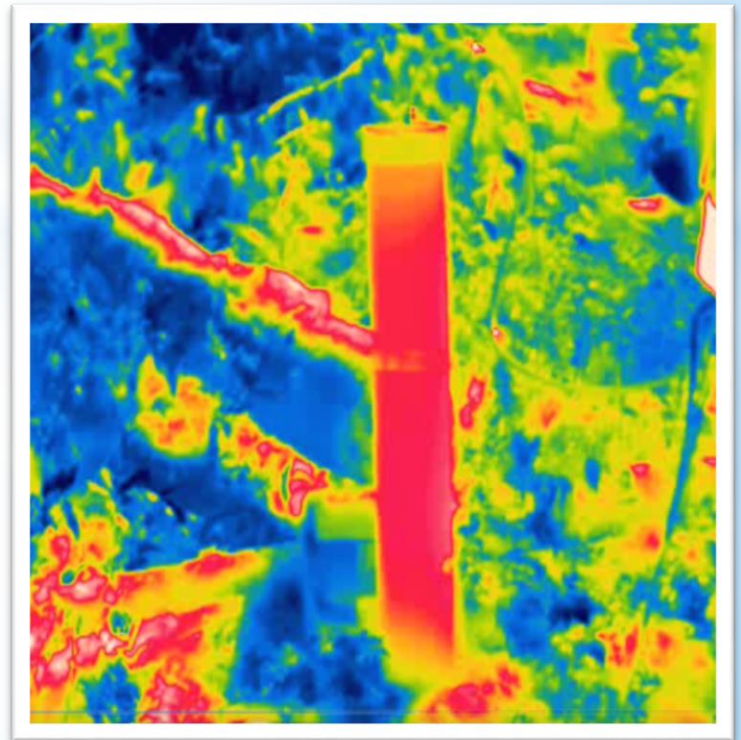
Where We Are



**NHDES conducted 16 closed
landfill inspections in 2016**

Methane Gas

- Reports of >50% LEL at the property line
- Solid Waste partnered with Air Resources
- Violation of the Solid Waste Rules
- Safety issue



Stormwater Management System

Woody vegetation and trees growing in drainage swales



Ponding water in drainage swales



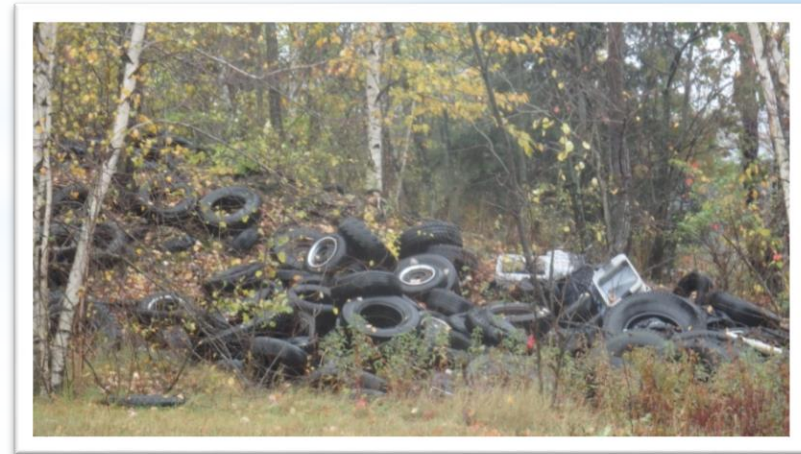
Landfill Cap

Trees and brush growing on the landfill cap



Observations at 16 in '16

1. Methane gas exceeding 50% LEL at the property line
2. Woody vegetation growing in drainage swales
3. Ponding of water in drainage swales and on the cap
4. Trees/brush growing on the cap
5. Erosion
6. Distressed vegetation
7. Landfill cap not mowed
8. Animals burrowing into the cap
9. Damaged fences
10. Unauthorized access/trespassing



Where We Are

- Different levels of care
- Disconnect between reports and NHDES observations
- Confusion regarding 30 year milestone



Where We Are

Achieve the “Performance Standards” in the Solid Waste Rules:

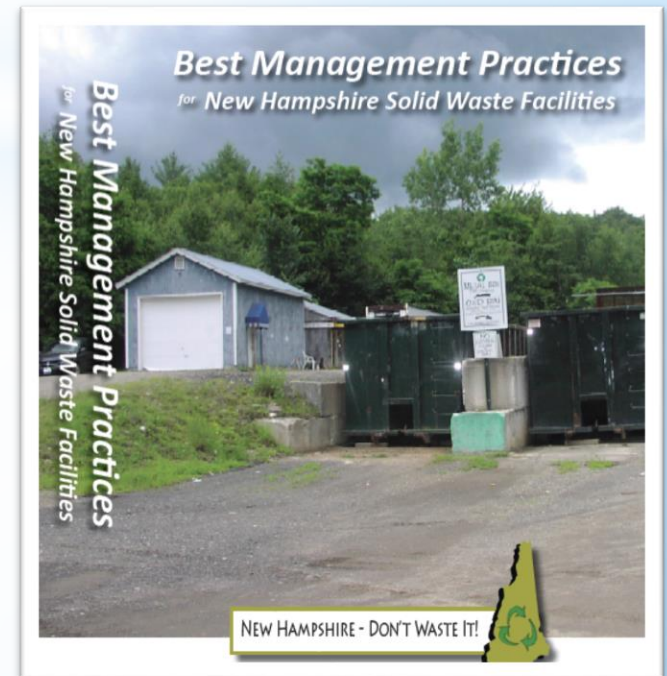
1. Cease generating leachate;
2. Cease generating decomposition gases like methane;
3. Achieve maximum settlement;
4. Have no adverse impact to air, groundwater, and surface water; &
5. Not pose a risk to human health and the environment.



What Lies Ahead

NHDES will:

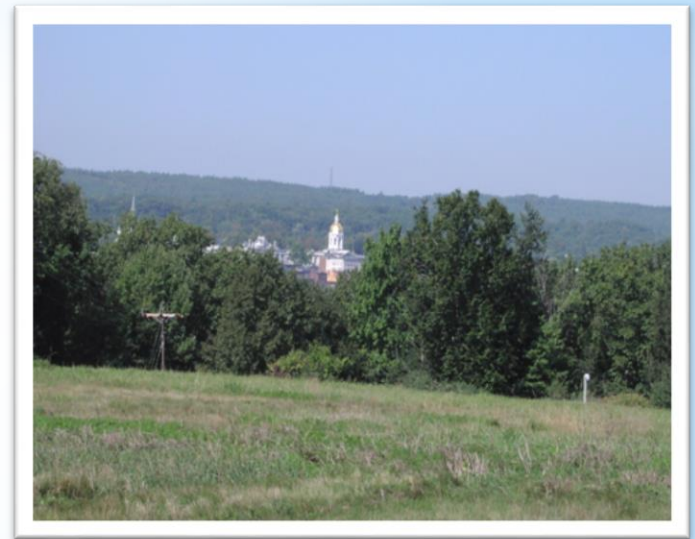
- Continue to conduct inspections
- Review and update, as needed, post closure care rules
- Perform education and outreach



What Lies Ahead

NHDES is seeking input regarding:

- What has worked well in your state?
- What has not worked well?
- Any suggestions you have regarding post closure care?





Questions or Suggestions?

Please let us know.

Linda R. Birmingham

Permit Engineer

Solid Waste Management Bureau

(603) 271-2936

linda.birmingham@des.nh.gov

Jaime M. Colby, P.E.

Permit Engineer

Solid Waste Management Bureau

(603) 271-5185

jaime.colby@des.nh.gov