

# Update on Attleboro Landfill Closure Proposal

Attleboro City Council Meeting

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# Attleboro Landfill

## Site Description

- 55 acre parcel with 42 acres of waste area
  - 1940's-1975: City of Attleboro – Phase B
  - 1975-1995: Attleboro LF, Inc - Phase A
- 32 acre Phase A Capped and Closed 2002
- 10 acre Phase B areas Unlined & Uncapped
- Unilateral Order & Penalty 2005: Appealed

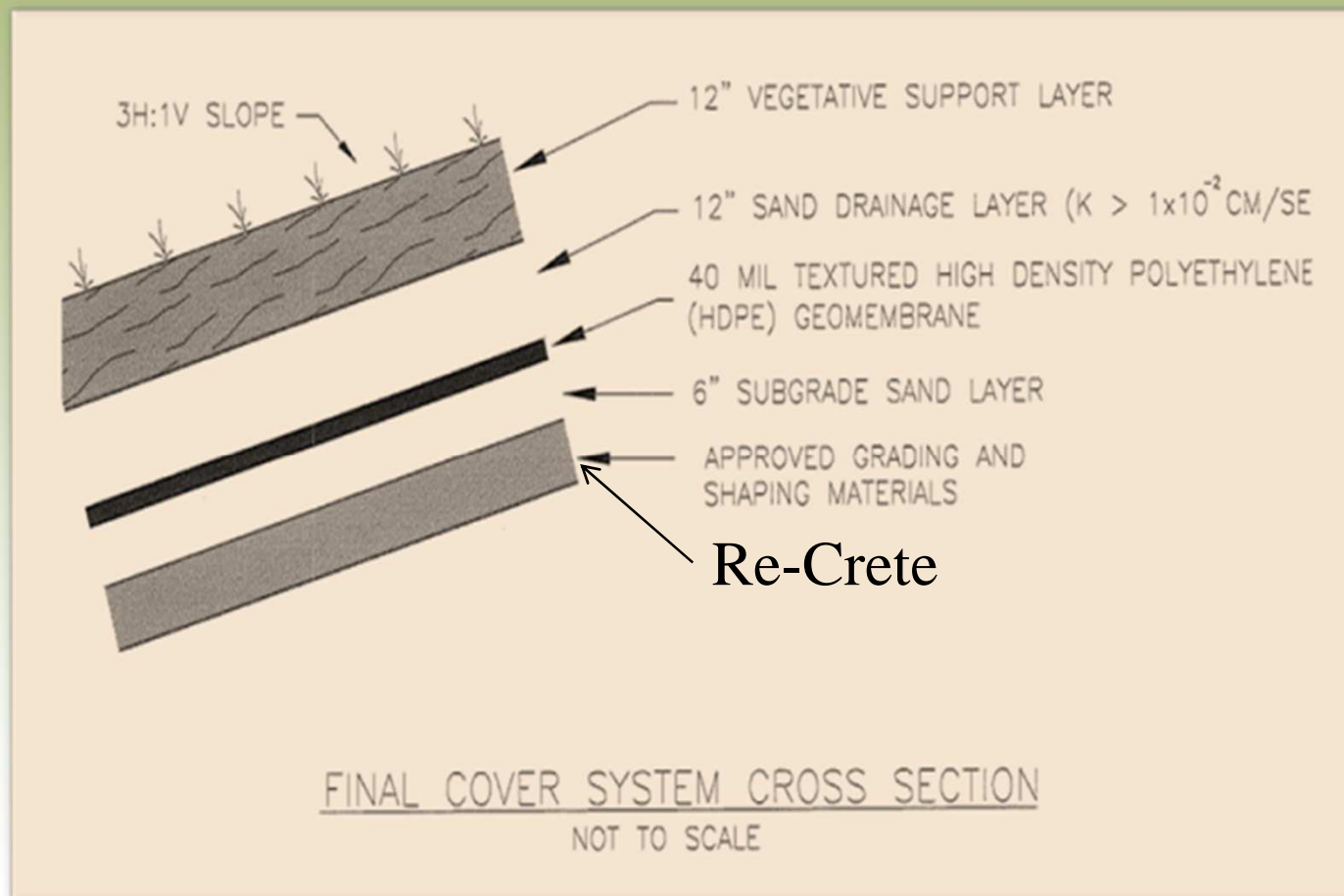


**MassDEP** Massachusetts Department of Environmental Protection





# Standard Final Cover System





# 2004 - 2012

## Landfill Closure Proposals

### Community Concerns:

- volume
- types of materials (i.e. C&D and approved soils)
- traffic
- compatibility with Shpack Closure



# December 2014 Conceptual Proposal for Public Comment

## Elements:

- 201,000 yd<sup>3</sup>
- 30 feet max., 5% grade or 20H/1V
- C&D mixed with concrete
- 9,136 truck trips, 1/5<sup>th</sup> 2012 Proposal
- 15 truck trips/day
- 2 yrs to fill – 6 days/week
- 6 months, 2900 truck trips
- On-Site Mixing of C&D, concrete, & water
- All traffic through Norton



# Communities Concerns: Air Quality

- ❑ Mixing of C&D fines at Landfill
  - ✓ Response: Mixing relocated to off-site MassDEP permitted C&D facility
- ❑ Dust generated from C&D materials transport
  - ✓ Response: C&D premixed, transported wet & covered

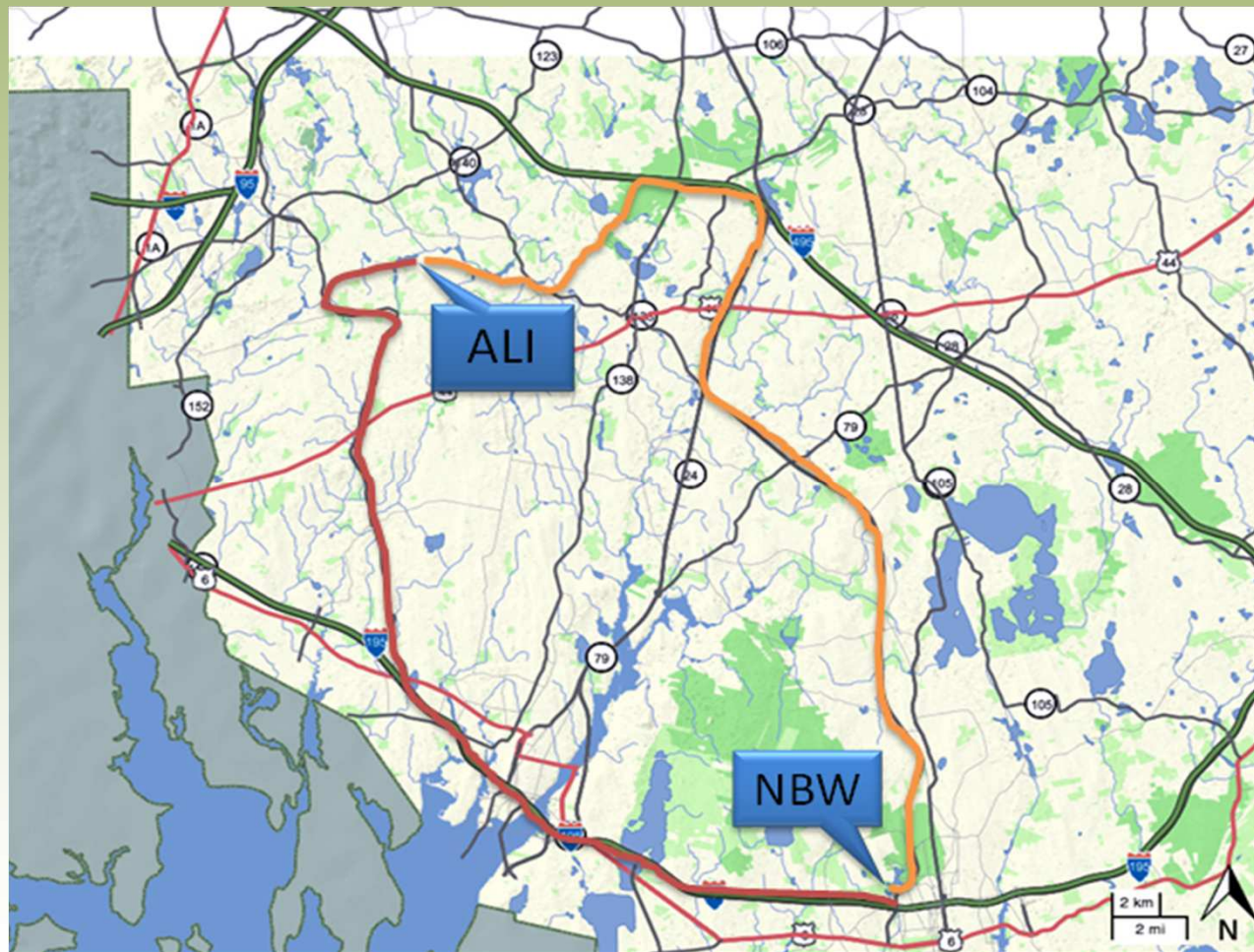


# Communities Concerns: Traffic

- ❑ Traffic Impacts (noise, dust, emissions, and safety)
  - ✓ Traffic minimum to achieve 5% grades – 6,571 truck trips
  - ✓ Less than standard cap with clean soil - 10,200 truck trips
  - ✓ 6,571 truck trips is 1/6<sup>th</sup> of 2012 Proposal 47,272 truck trips
  - ✓ 5 days per week, 2 years = 15-18 trucks/day
- ❑ Traffic distribution impacts not equitable - All thru Norton
  - ✓ Town and City joint committee traffic management plan
- ❑ Road integrity not okay - Union Road narrow & needs repair
  - ✓ Resurface Union Road before and reconstruct after project completion and add mitigation for Attleboro roads



# Project Area



Incoming Route



Outbound Route



## Communities Concerns: ReCrete Untested

- ❑ Re-Crete is an unproven final cover system/cap
- ✓ Re-Crete is for grading, beneath the cap, and not part of cap
- ✓ Standard Landfill Final Cover System part of plan
- ❑ Re-Crete not used at any other landfill
- ✓ Re-Crete = C&D fines mixed with concrete
- ✓ C&D fines are approved for reuse at lined and unlined landfills (e.g. Marion and Stoughton)
- ✓ Concrete (Re-Crete) to replace contaminated soils



## Communities Concerns: Hydrogen Sulfide Production

- ❑ C&D waste generates hydrogen sulfide ( $H_2S$ ) gas
- ✓ Re-Crete testing shows no  $H_2S$  gas
- ✓ Concrete & C&D do not provide microorganism environment to produce  $H_2S$
- ✓ Microorganisms need food (organic material), water, correct environmental conditions (i.e. pH range) to produce  $H_2S$
- ✓ MassDEP will require contingency plan for active landfill gas production system coupled with Financial Assurance Mechanism



# Communities Concerns:

## Landfill Not Immediate Threat

- ❑ Phase B monitoring did not detect immediate threat
  - ✓ Not an immediate threat, Landfill not in compliance with state laws for proper closure
  - ✓ Risk with unlined Landfills include: leachate, stormwater into surface water and wetlands, exposure to waste
  
- ❑ Project increases risk from site that does not pose a risk
  - ✓ Approved shaping & grading materials evaluated using very conservative Risk Assessment and Risk Management process
  - ✓ The project will provide a FAM for future maintenance and monitoring for Phase A in addition to Phase B (long term stewardship)



# Summary: Revised Conceptual Proposal – After Public Comments

## Revisions:

1. Off-Site Mixing of C&D fines, concrete, & water
2. Routes thru Both Towns
3. Additional 30,000 yd<sup>3</sup> of C&D fines mixed with concrete – solely for mitigation
4. Truck traffic reduced to 5 days per week, 2 years = 15-18 trucks/day
5. 6,571 total truck trips, 1/6th of 2012 Proposal
6. 36 feet max. height and approx. 5% slope



# Landfill Closure Project Mitigation Summary

## General Mitigation Fund

- \$1.00 per ton or \$230,000 divided between City and Town - \$115,000 each

## Roadway Repair Fund

- City of Attleboro \$300,000 - Funds for repaving 8,500 linear feet of Bishop Street & Pike to Peckham Street
- Town of Norton \$125,000 - Funds for repaving of 4000 feet of Union Road



# Next Steps

- Post Response to Comments and Traffic Plan on MassDEP's website
- Execute Administrative Consent Order with schedule for permitting and closure
  1. Issue Site Assessment Scope of Work Permit decision
  2. Issue Corrective Action Design (CAD) Permit decision (21 day public comment period)
  3. Issue Final CAD decision



# Contact Information

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## **Resources:**

- MassDEP's webpage for Attleboro Capping Project  
<https://www.mass.gov/service-details/attleboro-landfill-inc-capping-project>
- Revised Guidelines for Determining Closure Activities at Inactive Unlined Landfill Sites  
<https://www.mass.gov/files/documents/2016/08/mw/cdguid.pdf>