

Incinerators and Landfills: Wasteful & Dangerous

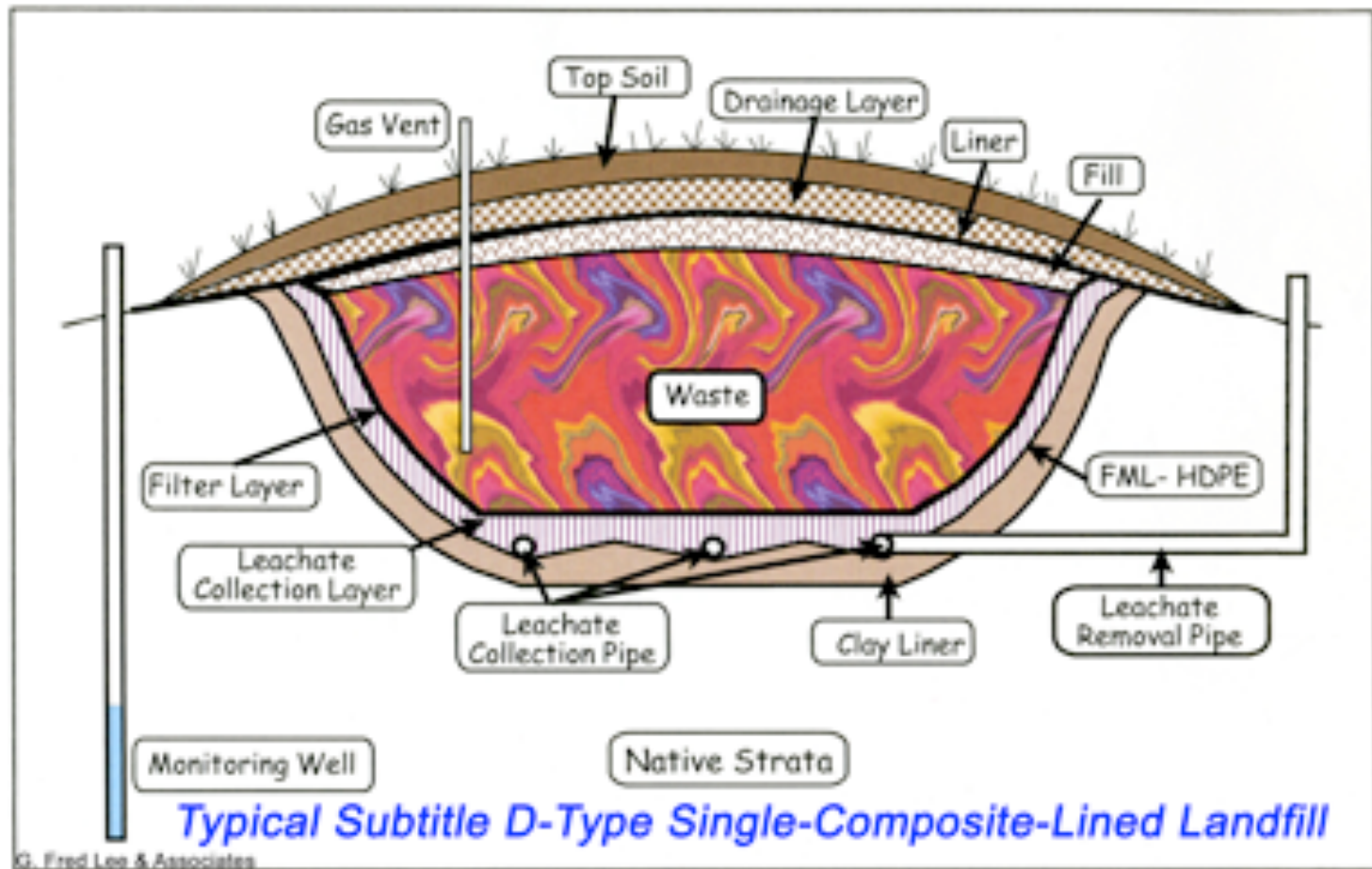
2016 Greening Our Community Series
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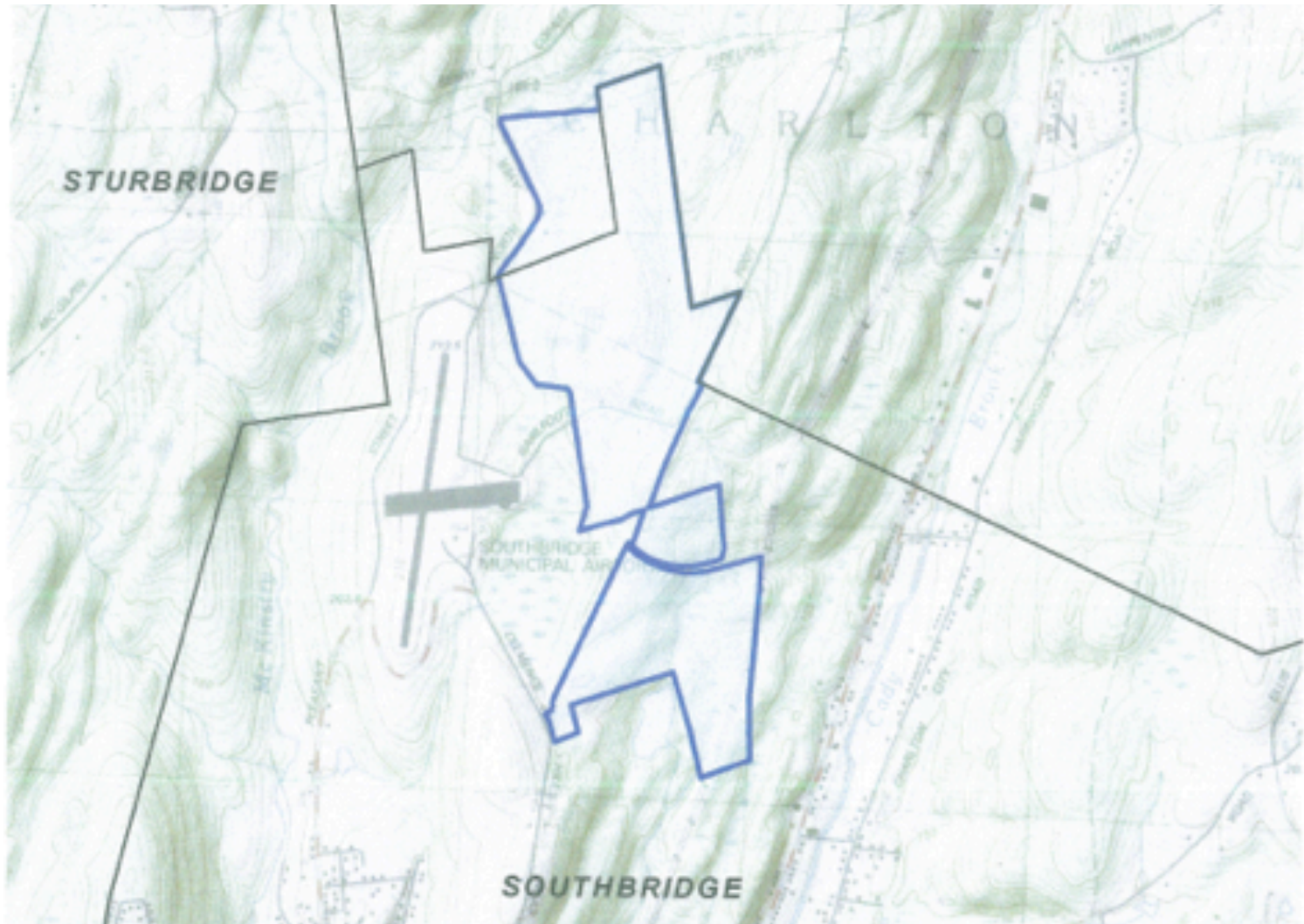
Subtitle D Requirements Do Not Ensure Protection



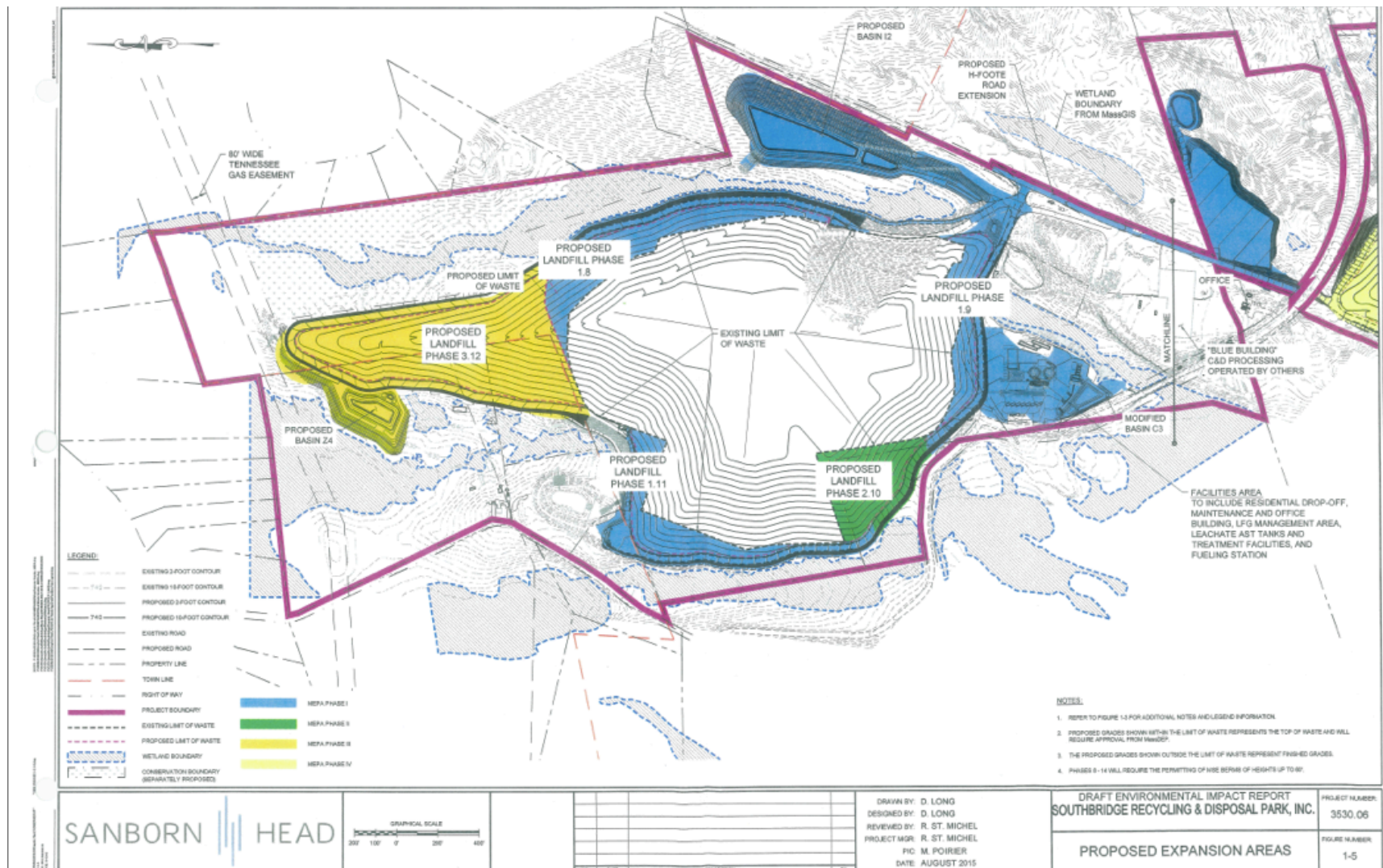
Landfills

- Landfills accept tens of thousands of dangerous chemicals.
- All landfills emit landfill gas – methane & other dangerous toxins.
- Collected leachate ends up in rivers.
- All liners eventually leak.

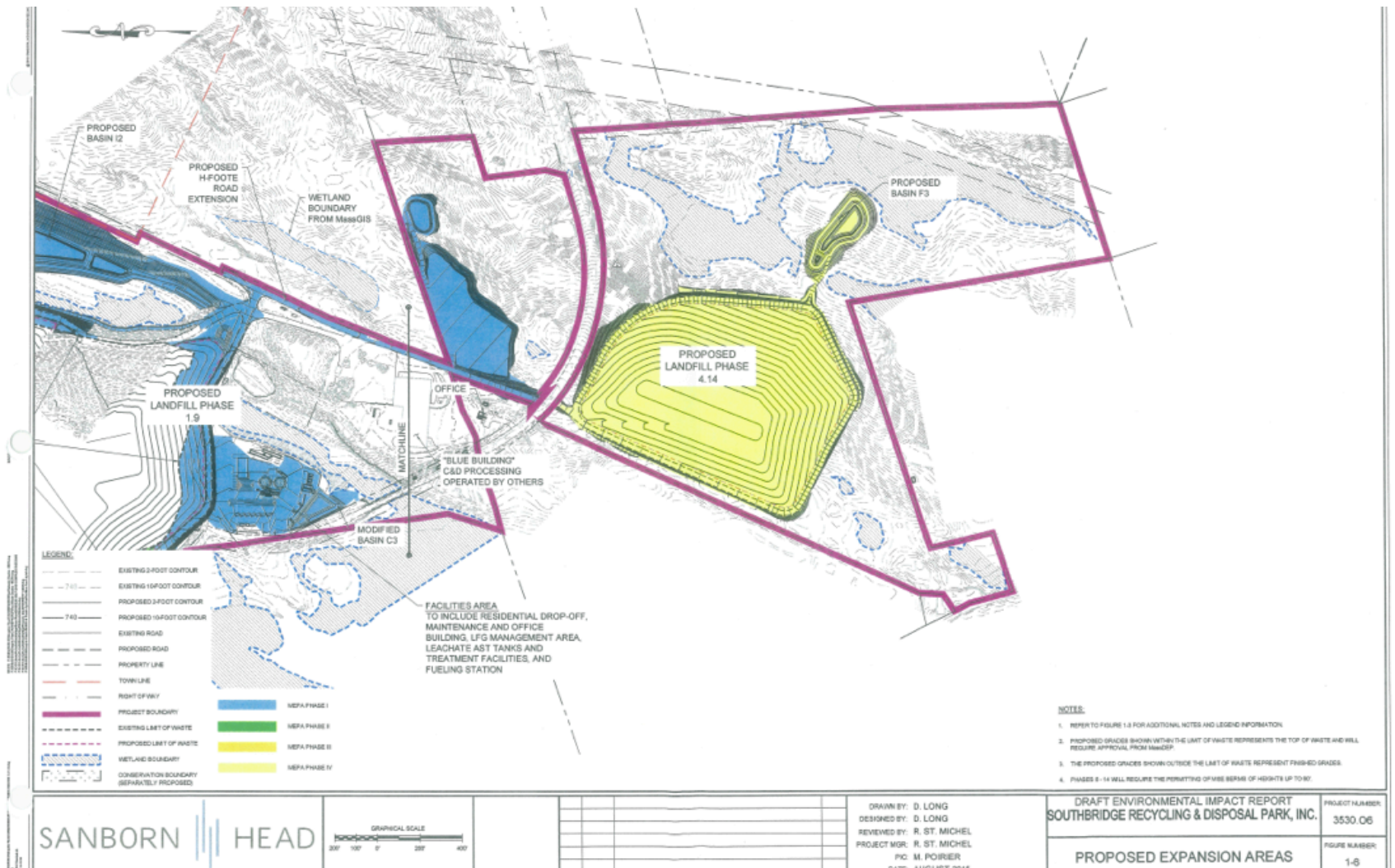
Location of Southbridge Landfill



Proposed Phases I-III

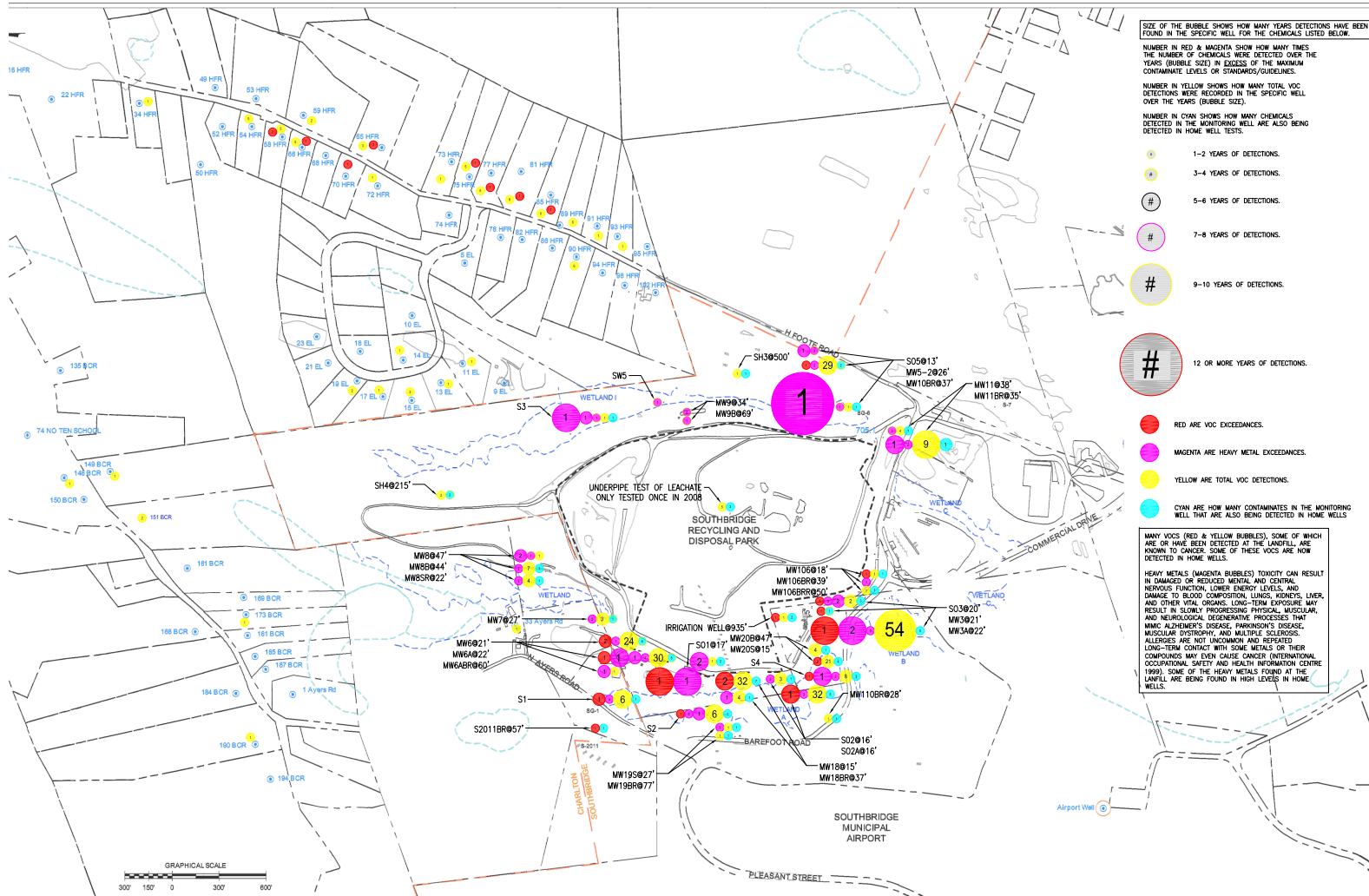


Proposed Phase IV



SIXTEEN YEARS OF CONTAMINATION AT THE SOUTHBRIDGE LANDFILL

FOURTEEN YEARS OF CONTAMINATION AT HOME WELLS



NOTES

ALL KNOWN HFOOT MONITORING WELL

HOME WELL CONTY THERE HAVE BEEN

HISTORY OF CONTY

1986 EARLIEST MONITOR

ONE WELL HFOOT & NO VOC DETECTION EXCEEDANCE, BUT

HFOOT ONE WELL TESTED

HEAVY METAL EXD

1988

FIRST VOC DETECT

(197) 80-11077 80C

HEAVY METAL EXD

LEAD, CHROMIUM,

1989

FIRST VOC EXCEED

THREE OTHER VOC

CHROMIUM, MANGANESE,

HEAVY METAL EXD

1990

VOC EXCEEDANCE

HEAVY METAL EXD

2001

TWO VOCs DETECT

EXCEEDANCES NO

2004

HEAVY METAL EXD

2005

NO DATA AVAILABLE

2006

HEAVY METAL EXD

SURFACE WATER TEST

SURFACE WATER V

2007

HEAVY METAL EXD

1 VOC DETECTION

WELLS HAS BEEN FC

2008

HEAVY METAL EXD

SURFACE WATER

14 ORGANIC TEST

DRINKING WATER S

11 VOC DETECTION

LEACHATE TEST (U

HFOOT WELLS

2009

VOC EXCEEDANCE

HEAVY METAL EXD

ARSENIC, SELENI

SURFACE WATER S

22 OTHER VOC DET

7 OTHER VOC DET

2010

VOC EXCEEDANCE

HEAVY METAL EXD

SURFACE WATER

19 OTHER VOC DET

2011

VOC EXCEEDANCE

HEAVY METAL EXD

SURFACE WATER

31 OTHER VOC DET

2012

VOC EXCEEDANCE

HEAVY METAL EXD

SURFACE WATER

40 OTHER VOC DET

2013

VOC EXCEEDANCE

HEAVY METAL EXD

SURFACE WATER

40 OTHER VOC DET

2014

FIRST EXCEEDANCE

(TWO ADDRESSES)

VOC EXCEEDANCE

0 WELLS

HEAVY METAL EXD

SURFACE WATER

40 OTHER VOC DET

2015

WELLS EXCEEDANCE

VOC EXCEEDANCE

HEAVY METAL EXD

SURFACE WATER

42 OTHER VOC DET

2016 (01 & 02)

HFOOT EXCEEDANCE

ADDRESS: 11 D

VOC EXCEEDANCE

(TWO WELLS) TEST

HEAVY METAL EXD

SURFACE WATER

40 OTHER VOC DET

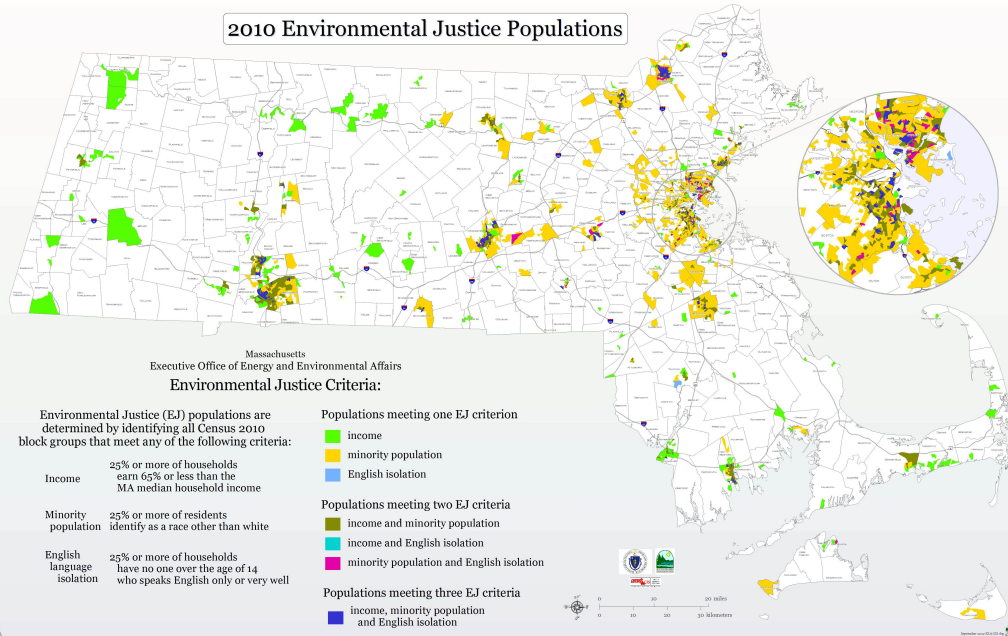
Incinerators

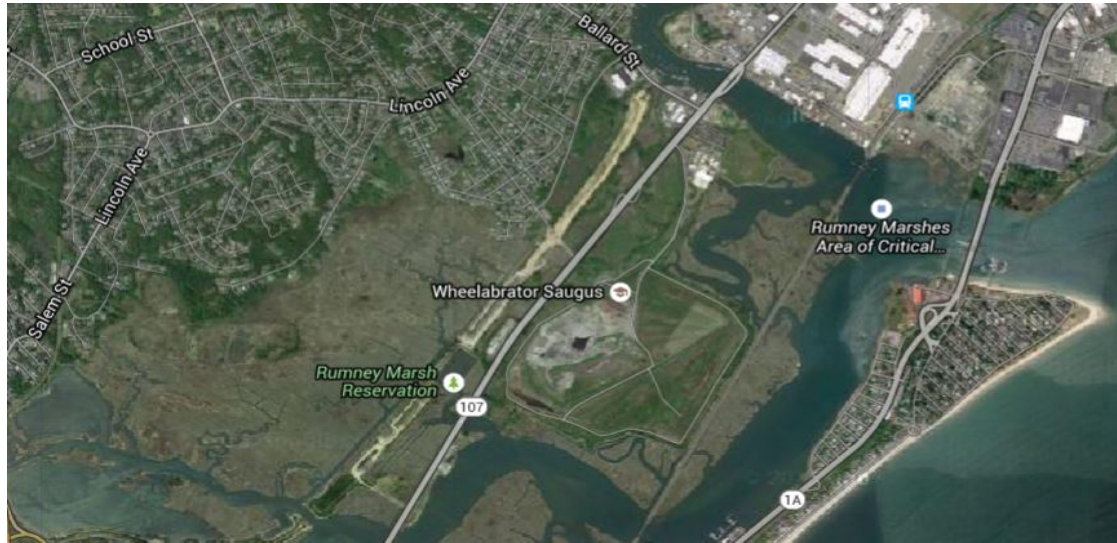
- Very expensive.
- Create few jobs compared to Zero Waste programs.
- Waste energy.
- Very toxic emissions-- Tens of thousands of chemicals in waste, which end up in the air or ash.
- Still need landfills -- For every 400 tons of waste, have to dispose of 100 tons of ash in a landfill.
- In the USA, the fly ash is not treated like hazardous waste, despite the fact that it is hazardous waste.

Incinerators

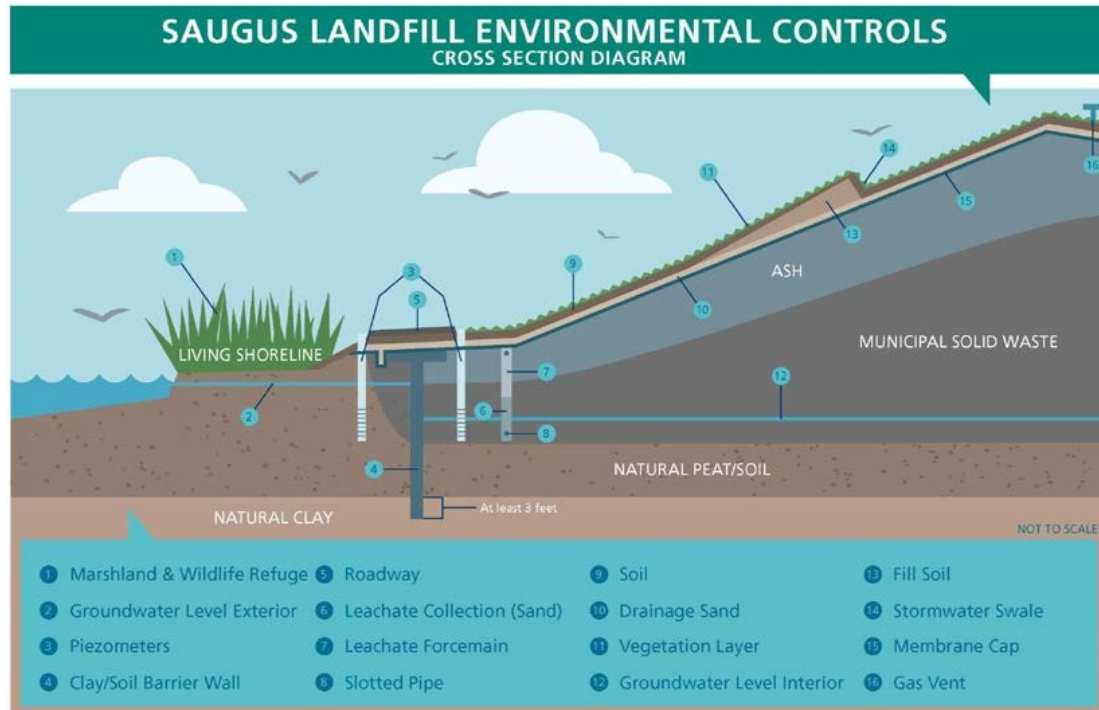
- Release very toxic nanoparticles.
- 4.25 M tons of waste incinerated in MA every year
- Six of the seven incinerators in MA are in EJ communities.

2010 Environmental Justice Populations





Wheelabrator Saugus incinerator and ash landfill are adjacent to the Saugus / Pines River estuary and surrounded by the extensive salt marshes of the Rumney Marshes ACEC.



Source: Wheelabrator Presentation, June 20, 2016

Zero Waste and Climate

“From a lifecycle environmental emissions and energy perspective, source reduction, recycling and composting are the most advantageous management options for all (recyclable/compostable) materials in the waste stream.”

Assessment of Materials Management Options for the Mass Solid Waste Master Plan Review

Climate Impact Examples

- Virgin paper has 100x higher impact on climate than recycled paper.
- Extracting and processing petroleum into common plastic containers, PET and HDPE, takes 4 to 8 times more energy than making plastics from recycled plastics.
- For every ton of aluminum produced, 97% of greenhouse gas emissions take place before aluminum ingot casting, which is the point at which scrap aluminum would enter the process.

Massachusetts Disposal Numbers

- 2008 6.5 million tons of disposal. The MassDEP committed to disposing of only 4.5 million tons in landfills and incinerators by 2020.
- 2014 MassDEP said that 40% of what goes into LFs and incinerators are waste banned items that should be being recycled.
- 2014 numbers (latest ones) 5.56 million tons were disposed of in 2014, 2.22 M tons of which banned items, not including food waste.

Massachusetts Waste Bans

- Asphalt Pavement, Brick & Concrete
- Cathode Ray Tubes
- Clean Gypsum Wallboard
- Commercial Food Waste (Effective October 1, 2014)
- Ferrous & Non-Ferrous Metals
- Glass & Metal Containers
- Lead Acid Batteries
- Leaves & Yard Waste
- Recyclable Paper, Cardboard & Paperboard
- Single Resin Narrow-Necked Plastics
- Treated & Untreated Wood & Wood Waste (Banned from Landfills Only)
- White Goods (Large Appliances)
- Whole Tires (Banned from Landfills Only; Shredded Tires Acceptable)

MassDEP Waste Composition Chart

