

Pennsylvania MSW Landfills and Climate Change Presented to SWAC January 22, 2016



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Environmental and Land Use Law

PA MSW Landfill Performance Profile

- Tied for second in country in beneficial use of landfill gas
 - 185 MW baseload electricity
 - 8 high BTU plants
 - 4 medium BTI plants
- US EPA LMOP Multiple Award Winners
 - At least 8 national awards, including PA DEP, industry, privately owned landfills, publically owned landfills, 3rd party developers
- Progressive Waste's IESI Blue Ridge Landfill
 - 2014 LMOP Project of the year award with its 2 partners
 - Case study in the White House Climate Change Strategy to Reduce Methane Emissions (March 2014)

Why is Performance High in PA

- Early adopters of beneficial use technologies
- Early action by PA DEP
 - Air emission requirements pre-date US EPA's
 - PA BAT Policy
- Economic development tool
 - Lanchester/Conestoga 20-mile pipeline serves 46 separate pieces of industrial combustion equipment
 - Reduces energy costs for PA manufacturers

What is current GHG Performance

- Statewide GHG emissions w/sinks: 253.12 MMCO₂e
- Waste disposal industry:
 - Landfills: -0.415 MMCO₂e
 - WTE emissions: 2.329 MMCO₂e
 - WWTP emissions: 1.726 MMCO₂e
 - TOTAL: 3.64 MMCO₂e = 1.44%
- Source: PA DEP's GHG Emission Inventory 2015, documenting 2012 emissions using US EPA's official State Inventory Tool

Continuing Development of Knowledge and Regulation

- Our understanding of GHG emissions has developed over last 5 years
 - Oxidation
 - Collection efficiency
 - Modeling
- Federal Mandatory GHG Reporting Rule and Update
- Proposed 40 CFR Part 60, Subpart XXX (and emission guideline Cf)
- 40 CFR Part 60, Subpart JJJJ; 40 CFR Part 60, Subpart ZZZZ; etc.

Higher Class of Renewable Energy

- Electricity produced from landfill gas is a Tier I resource under the Alternative Energy Portfolio Standard Act
- New LFGTE projects are encouraged by the Act and qualify for credits
- Baseload that does not rely on constant flow of waste
- As former DEP Secretary John Hanger famously said while discussing mercury emissions, “Landfills save lives”

Questions or Comments

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