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*...helping communities protect
themselves from polluting energy
and waste technologies*



Energy Justice Network

Map BETA

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People

Groups

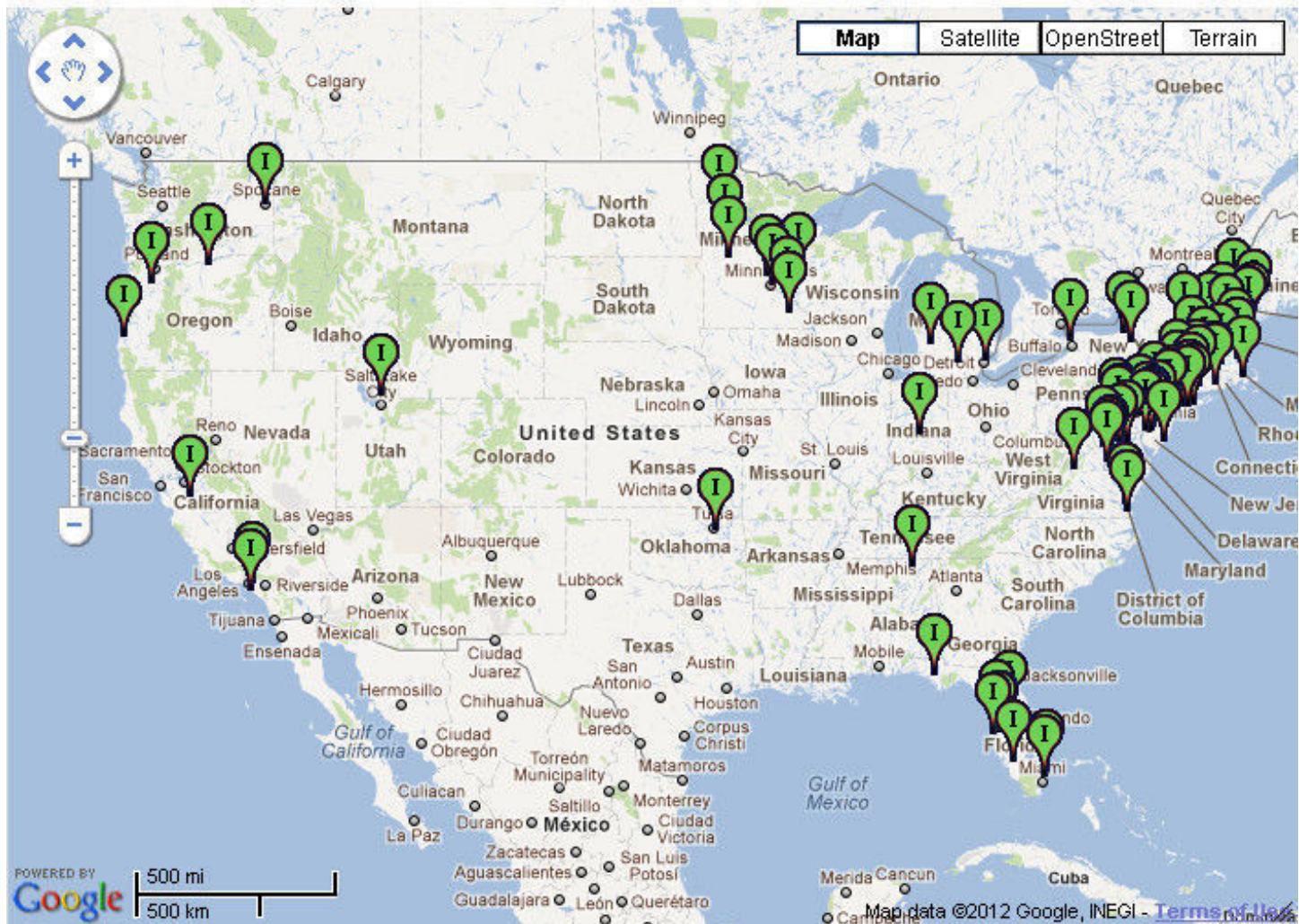
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National Map



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A Critical Look at the Harrisburg Incinerator Project Finances

November 5th, 2003

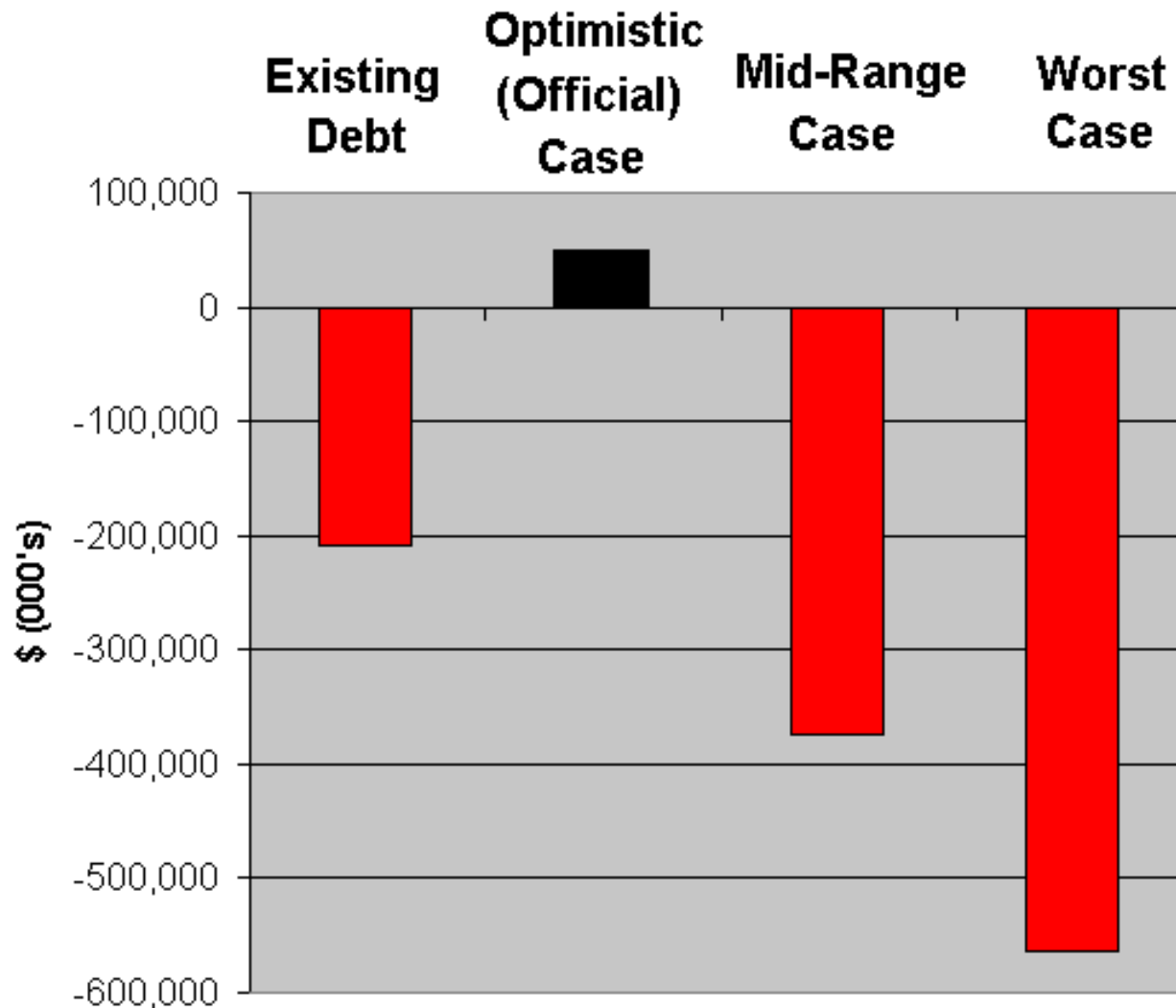
Coalition Against the Incinerator

www.StopTheBurn.com

This and next slide excerpted from Powerpoint warning Harrisburg that it faced bankruptcy if it rebuilt its incinerator.

For full presentation, see: www.stoptheburn.com/presentation.pdf

Existing Debt vs. Incinerator Project Possibilities



Recent Harrisburg Headlines

- “City of Harrisburg chapter 9 bankruptcy dismissed”
- “Harrisburg, Pennsylvania Bankruptcy Filing Rejected By Federal Judge”
- “Troubled Harrisburg now state's problem”
- “How A City Goes Broke”
- “Harrisburg Receiver Plans To Complete Transactions By June Reports”
- “Feds: Harrisburg incinerator audit ‘under review’”
- “Pa. Official: Corruption Led to Harrisburg's Money Woes”
- “Trying To Save A Broke City”
- “Harrisburg receiver says lawyers looking at incinerator audit”

Harrisburg financial collapse was predicted

Reported by: Chris Papst

CBS 21 TV News

September 30, 2011

With Harrisburg on the verge of financial collapse, and the state about to take over, CBS-21 has acquired audio of a city council meeting from eight years ago that many say caused this moment. **History is proving a lot of people right.**

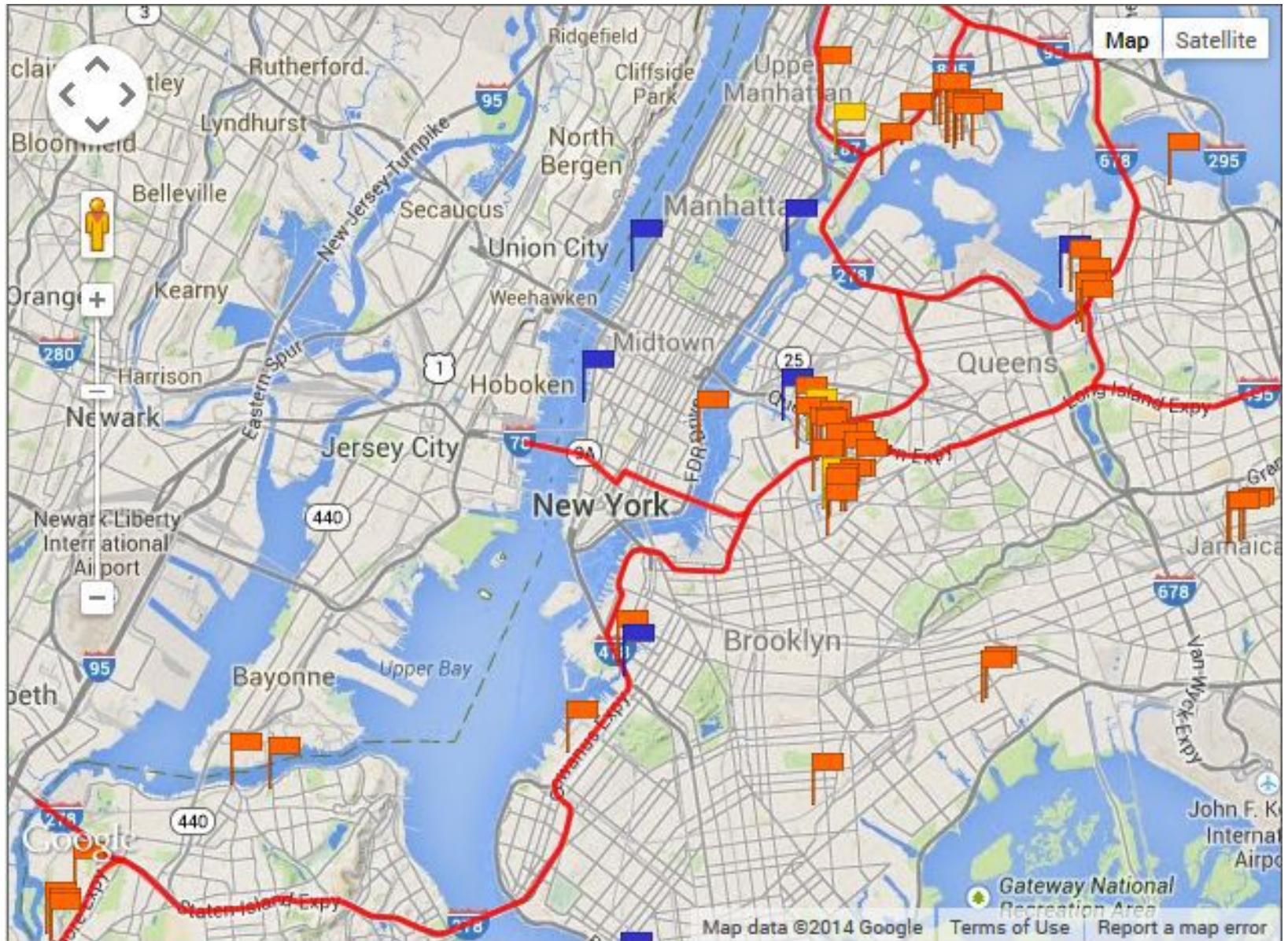
On November 5, 2003, Harrisburg City Council had a choice to make; do they guarantee a \$125 million loan and fix the city's ailing incinerator or not. Many say this was the vote that got Harrisburg to where it is today. We found the audio from that council meeting and listened to it to see what said. CBS-21 did cover this vote eight years ago. But, we obviously know more now than then. Here's what we found out.

"I'm telling you that this project will put the city into bankruptcy," said Mike Ewall, Coalition Against the Incinerator.

That was Mike Ewall, a Philadelphia resident who helped start a group called the Coalition Against the Incinerator. The night city council voted to retrofit that facility, Ewall spoke for 15 minutes to a packed room explaining how the numbers were wrong and why council should not accept the loan.

"Because the city and the authority don't have guaranteed waste steams; overestimate the potential power and steam sales, underestimate ash disposal and operating costs; and have no guarantee of an air pollution permit, this project will put the city into bankruptcy," Mike Ewall, Coalition Against the Incinerator said. "But who will go first, residents or city hall?"

How We Got Here: NYC Transfer Stations



Source: www.newtowncreekalliance.org/waste-transfer-stations/

How We Got Here: NYC Transfer Stations

In 2000, the EPA's National Environmental Justice Advisory Council noted that **waste transfer stations “are disproportionately clustered in low-income communities and communities of color.”**



How We Got Here: NYC Transfer Stations

In addition to nuisances like odors, “vectors” (seagulls, rats), and trucks (and their diesel exhaust), transfer stations are also a source of airborne mercury pollution from sources such as broken fluorescent bulbs.

TECHNICAL PAPER

ISSN 1047-3289 J. Air & Waste Manage. Assoc. 55:870–877

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Airborne Emissions of Mercury from Municipal Solid Waste. II: Potential Losses of Airborne Mercury before Landfill

George R. Southworth, Steve E. Lindberg, and Mary Anna Bogle

Environmental Sciences Division, Oak Ridge National Laboratory, Oak Ridge, TN

Hong Zhang and Todd Kuiken

Tennessee Technological University, Cookeville, TN

Jack Price

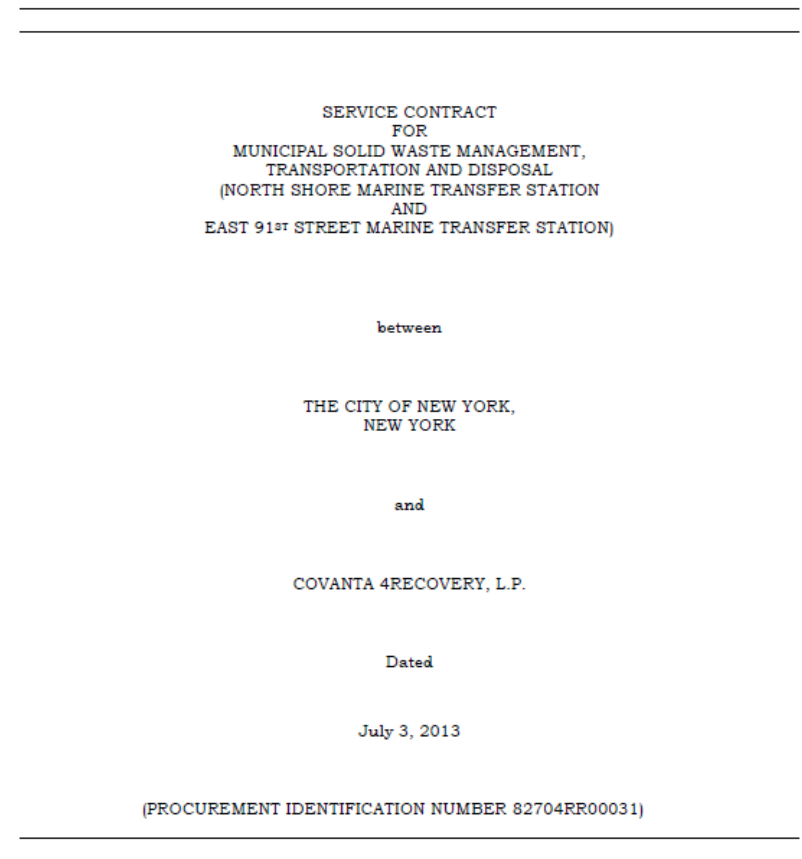
Florida Department of Environmental Protection, Tallahassee, FL

Debra Reinhart and Hala Sfeir

University of Central Florida, Orlando, FL

How We Got Here: NYC Transfer Stations

July 3, 2013 contract between New York City and Covanta would have 500,000 tons/year of NYC waste coming to Chester by train for the next 20-30 years. Same amount to Covanta's Niagara Falls incinerator.



How We Got Here: NYC Transfer Stations

HOME SEARCH

The New York Times

N.Y. / REGION

Fight Awaits de Blasio on Opening Upper East Side Trash Transfer Site

By KIA GREGORY FEB. 4, 2014

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Among the many pressing issues Mayor Bill de Blasio will contend with in the coming four years is one that will be waiting practically outside his door.

Since 2006, New York City has planned to revitalize an unused garbage transfer station on a bend in the East River, just three blocks north of Gracie Mansion on the Upper East Side. It would cut the amount of Manhattan's trash hauled to other boroughs for processing and use barges and reduce truck traffic in getting the waste to out-of-state landfills.

But opening the marine transfer station, at East 91st Street, has become a protracted issue involving race, class and geographic equity, with



Earliest it could open: 2016

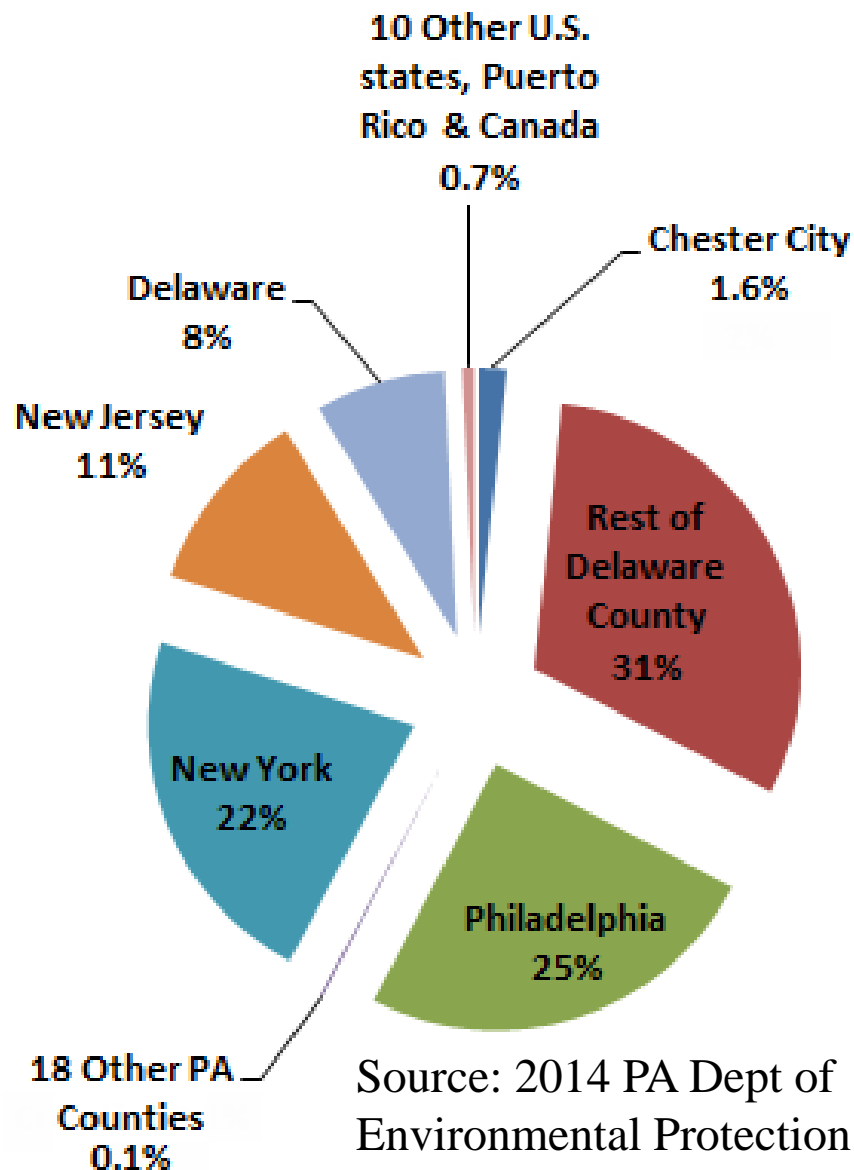
Largest Trash Incinerators in the U.S. (by size)

| <u>St</u> | <u>City</u> | <u>Name</u> | <u>Burners</u> | <u>Tons/Day</u> |
|-----------|----------------|--|----------------|-----------------|
| PA | Chester | Delaware Valley Resource Recovery Facility | 6 | 3,510 |
| MI | Detroit | Detroit Renewable Power (Greater Detroit Resource Recovery Facility) | 3 | 3,300 |
| FL | St. Petersburg | Pinellas County Resource Recovery Facility | 3 | 3,150 |
| VA | Lorton | I-95 Energy-Resource Recovery Facility (Fairfax) | 4 | 3,000 |
| HI | Honolulu | Honolulu Resource Recovery Venture—HPOWER | 3 | 3,000 |
| NJ | Newark | Essex County Resource Recovery Facility | 3 | 2,800 |
| MA | West Wareham | SEMASS Resource Recovery Facility | 3 | 2,700 |
| NY | Westbury | Hempstead Resource Recovery Facility | 3 | 2,671 |
| FL | Miami | Miami-Dade County Resource Recovery Facility | 4 | 2,592 |

Where the Waste Comes From

Since it started in 1991, about 1.5% of the waste burned has been from Chester.

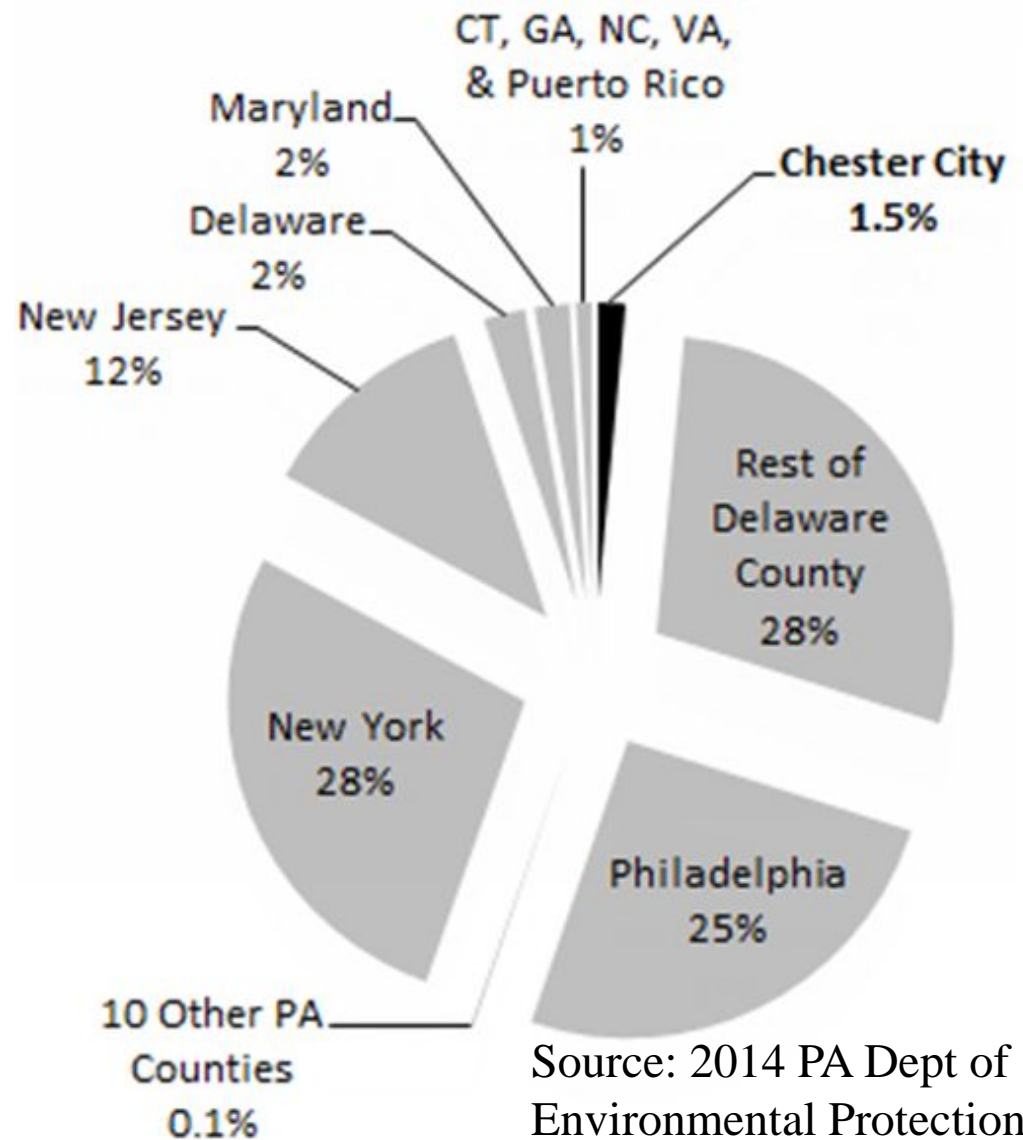
The rest of the waste burned has come from the rest of Delaware County, Philadelphia, 17 other Pennsylvania counties (as far as Pittsburgh), New York, New Jersey, Connecticut, Georgia, Indiana, Massachusetts, Maryland, North Carolina, Ohio, Oklahoma, Tennessee, Virginia, Puerto Rico and Canada.



Source: 2014 PA Dept of Environmental Protection – Data reported by Covanta

Sources of Waste Burned (Jan 2012 - March 2014)

**Only 1.5% of the
trash burned in
Chester, PA is
from the City of
Chester**

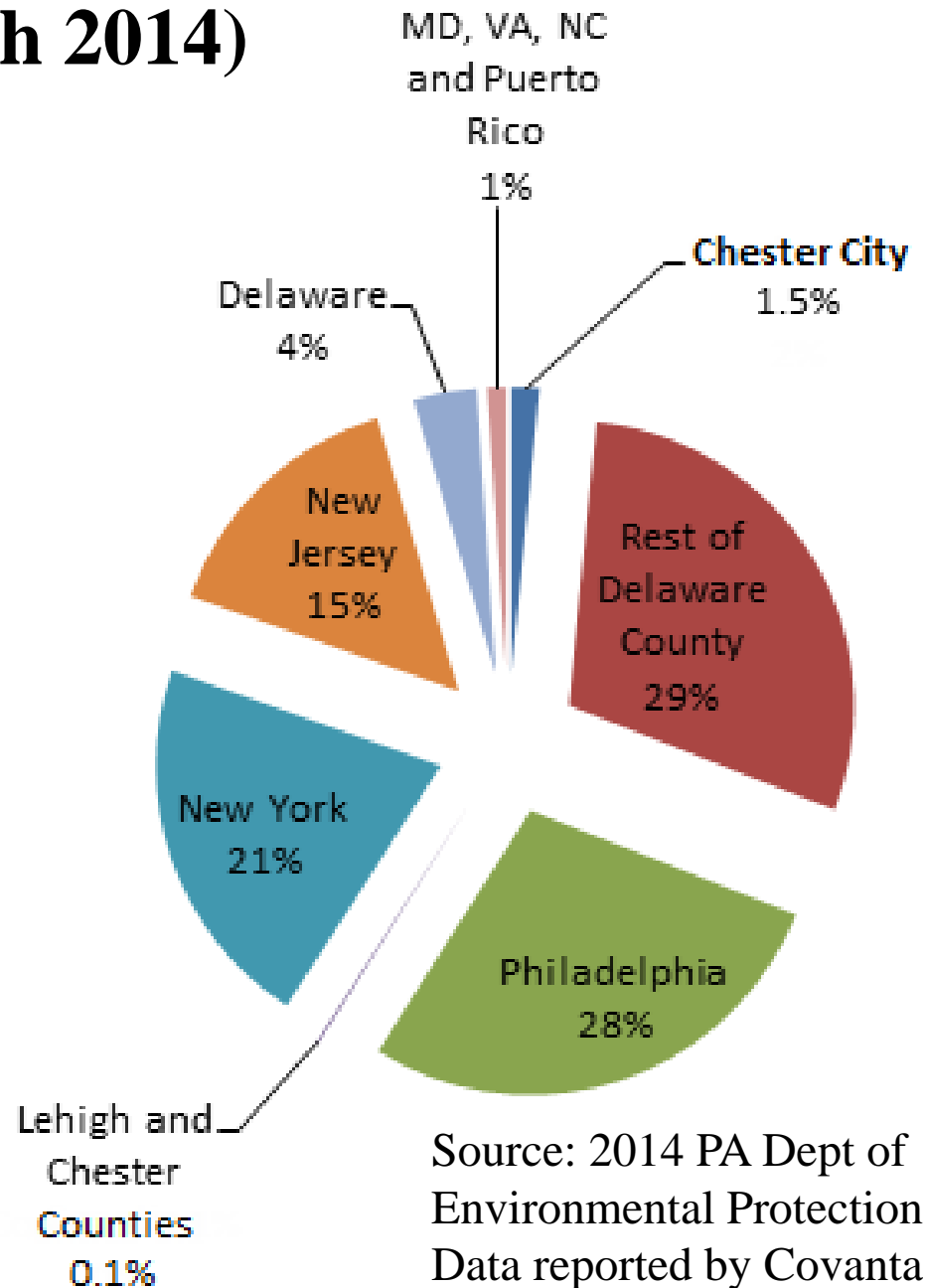


Source: 2014 PA Dept of
Environmental Protection –
Data reported by Covanta

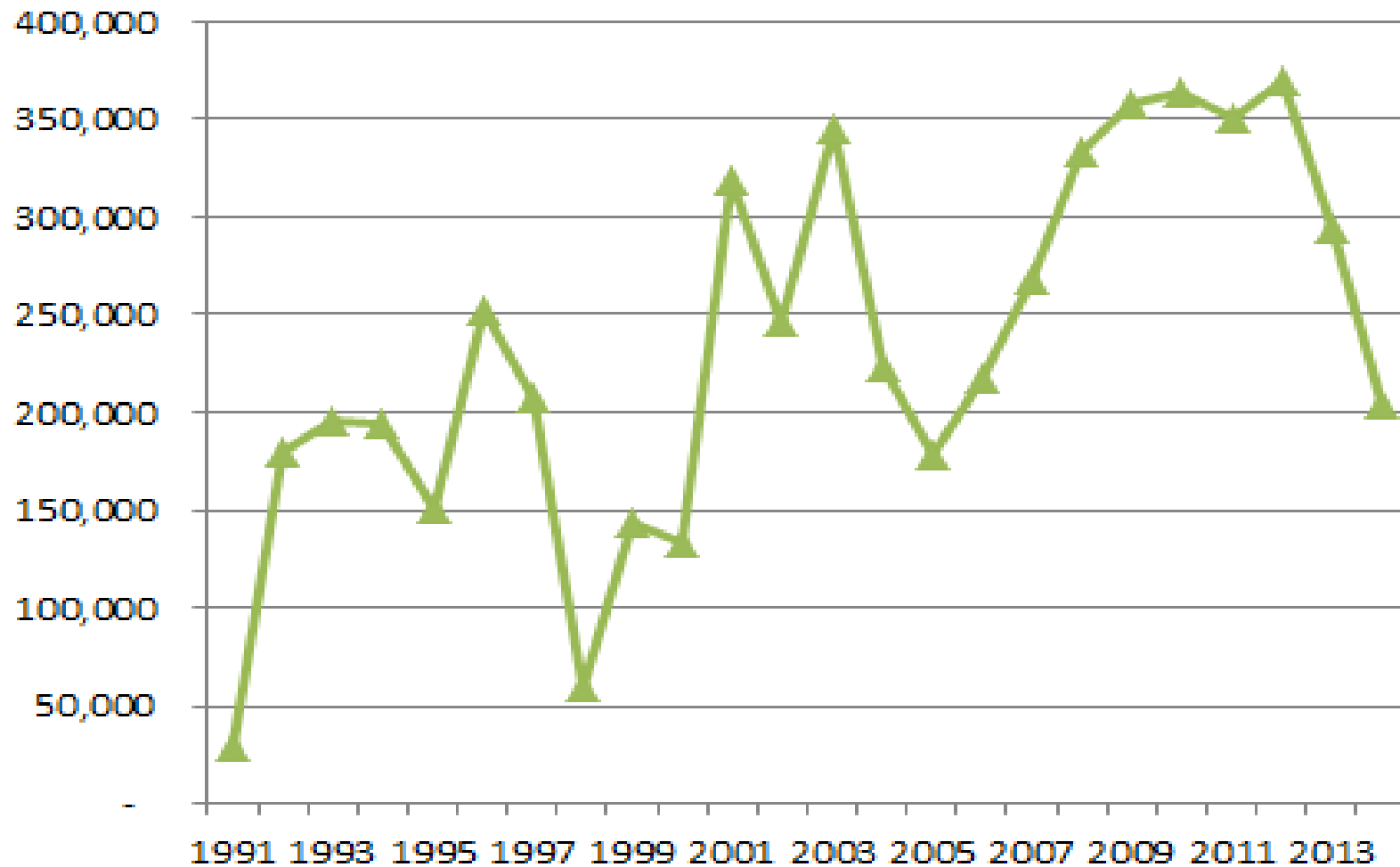
Sources of Waste Burned (Jan 2014 - March 2014)

In 2014 Q1, New York portion was down to 21%.

Overall waste burned is also way down – to 75% capacity.

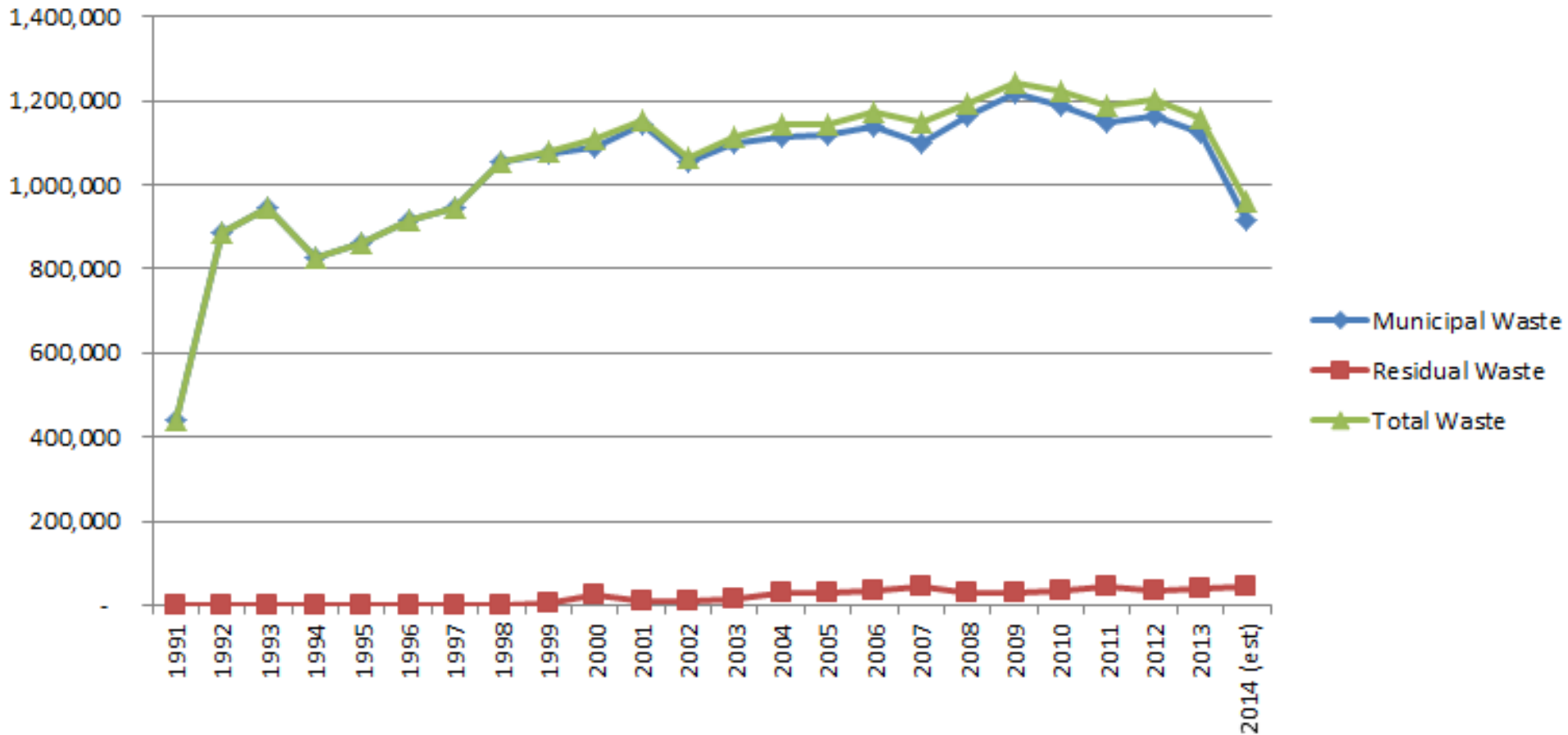


New York Waste Burned by Covanta in Chester (tons)



Source: 2014 PA Dept of
Environmental Protection –
Data reported by Covanta

2014 Q1 Waste Burned at Covanta is Down to 75% of their Capacity



Source: 2014 PA Dept of Environmental Protection – Data reported by Covanta

Incinerators: Names Used

- Trash incinerator
- Municipal Waste Combustor
- Trash-to-steam
- Waste-to-energy (WTE)
- Energy from Waste (EfW)



BURN *Baby* **BURN**

Incinerators are...

~~Trash-to-Steam~~

*Trash to toxic ash and toxic
air emissions*

Incinerators are...

~~Waste-to-Energy~~

Waste-OF-energy

(3-5 times more energy wasted by not recycling/composting the materials burned)

Source: Morris, Jeffrey, and Canzoneri, Diana, "Recycling Versus Incineration: An Energy Conservation Analysis," Sound Resource Management Group (SRMG) Seattle, Washington, September, 1992.

www.sciencedirect.com/science/article/pii/0304389495001166

Basic Lessons

- Garbage-in, Garbage-out.
- Nothing is 100%.
- Small amounts matter, especially if they're a small % of a BIG number.
- If incineration is the answer, someone asked the wrong question

Bigger Problems with Incinerators

- Destroys materials / net energy issues
 - “waste-OF-energy” – **4 times** more energy saved by recycling/composting
- Environmental racism
- Global warming contribution worse than zero waste solutions
- Makes the problem "invisible" rather than making it very visible so that unsustainably-produced products can be properly dealt with

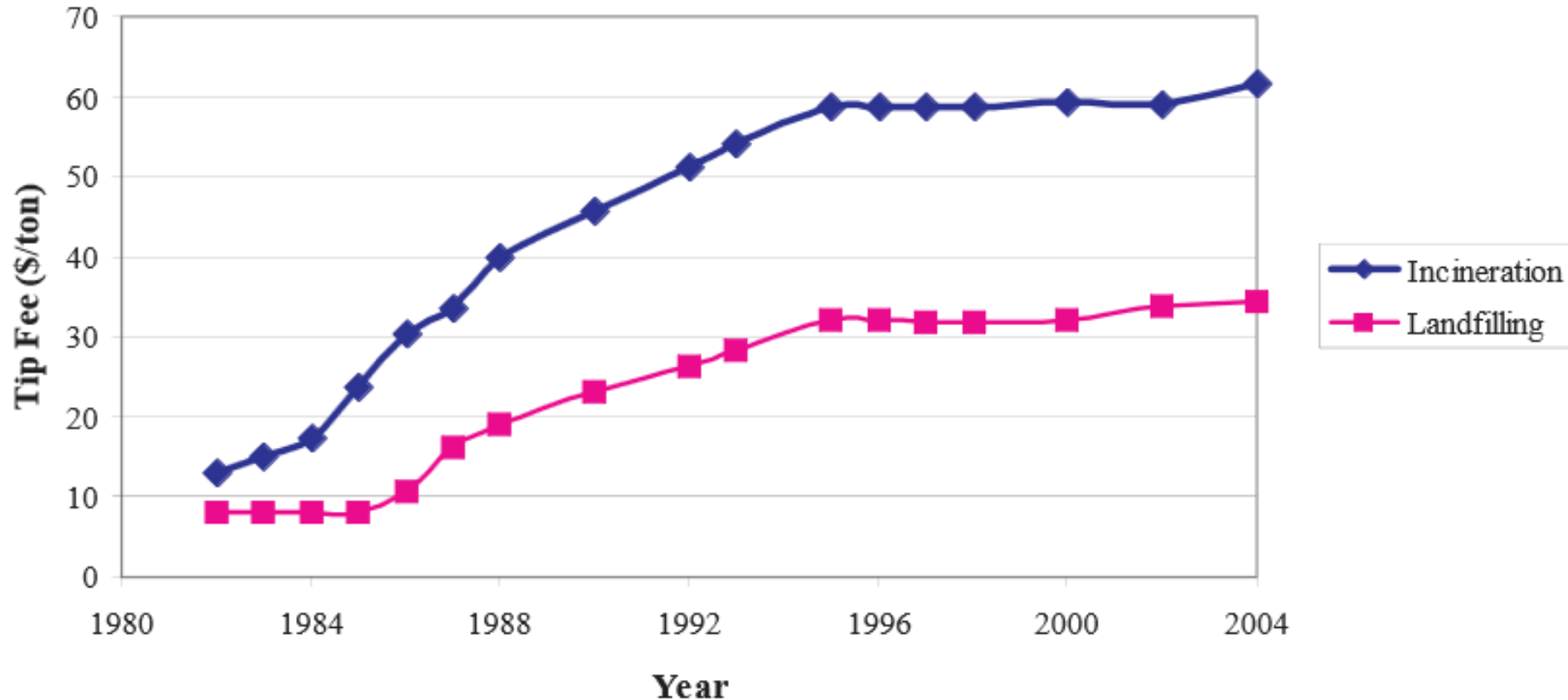
Most Expensive Way to Manage Waste

“Waste-to-energy is an additional capital cost. That is not in dispute, compared to a landfill... compared to a landfill, which is a less capital-intensive structure – it is more expensive. If you had a landfill next to a waste-to-energy facility, then almost in every case, you would think the landfill is going to be cheaper.”

Ted Michaels, President, Energy Recovery Council, March 18, 2013 testimony before Washington, DC City Council

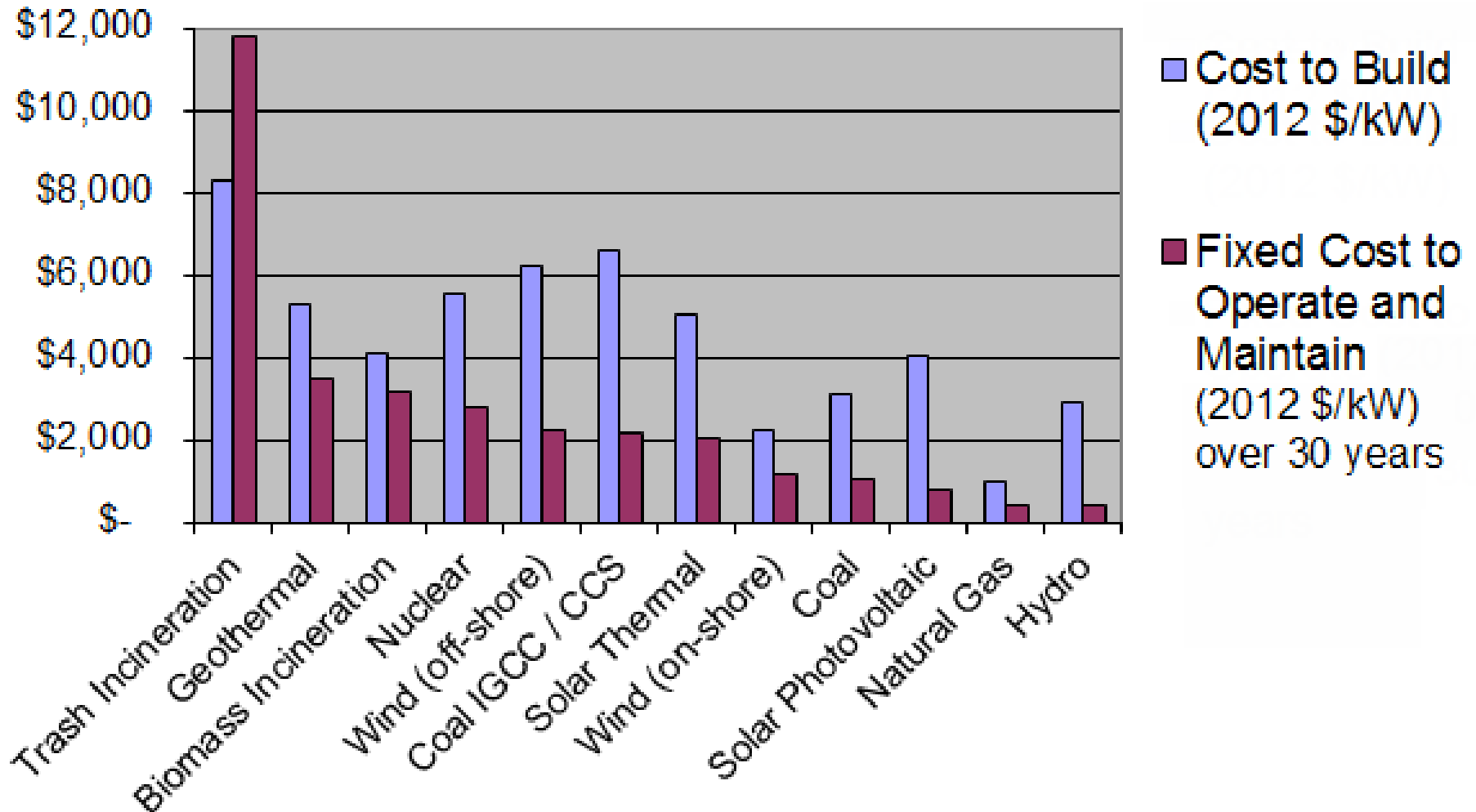
Most Expensive Way to Manage Waste

Figure 3. Landfill and Incinerator Tip Fees



Source: National Solid Waste Management Association 2005 Tip Fee Survey, p4.
www.environmentalistseveryday.org/docs/Tipping-Fee-Bulletin-2005.pdf

Most Expensive Way to Make Energy



Source: "Updated Capital Cost Estimates for Utility Scale Electricity Generating Plants," Energy Information Administration, April 2013, p.6, Table 1. Full report here: www.eia.gov/forecasts/capitalcost/pdf/updated_capcost.pdf

Problems with Incinerators: Economics

- Capital Intensive (Expensive)
- Requires long-term monopoly contracts "Put-or-Pay" contracts including "put or pay" clauses that punish local governments if they recycle / compost
- Competes with zero waste AND energy alternatives
 - Competes with wind and solar in Renewable Portfolio Standards*
- Economic incentives encourage burning more dangerous wastes (getting paid to take waste vs. paying for fuels)

* Currently, trash incineration is only in direct competition with wind and solar in Maryland's RPS law, but this affects many other states, and biomass incineration and landfill gas burning competes directly with wind and solar in most RPS laws.

Problems with Incinerators: Economics

Since incinerators are more expensive than landfills, they need to lock in waste supply, so that haulers must use them. Two ways:

- 1) Monopoly contracts
- 2) Controlling transfer stations

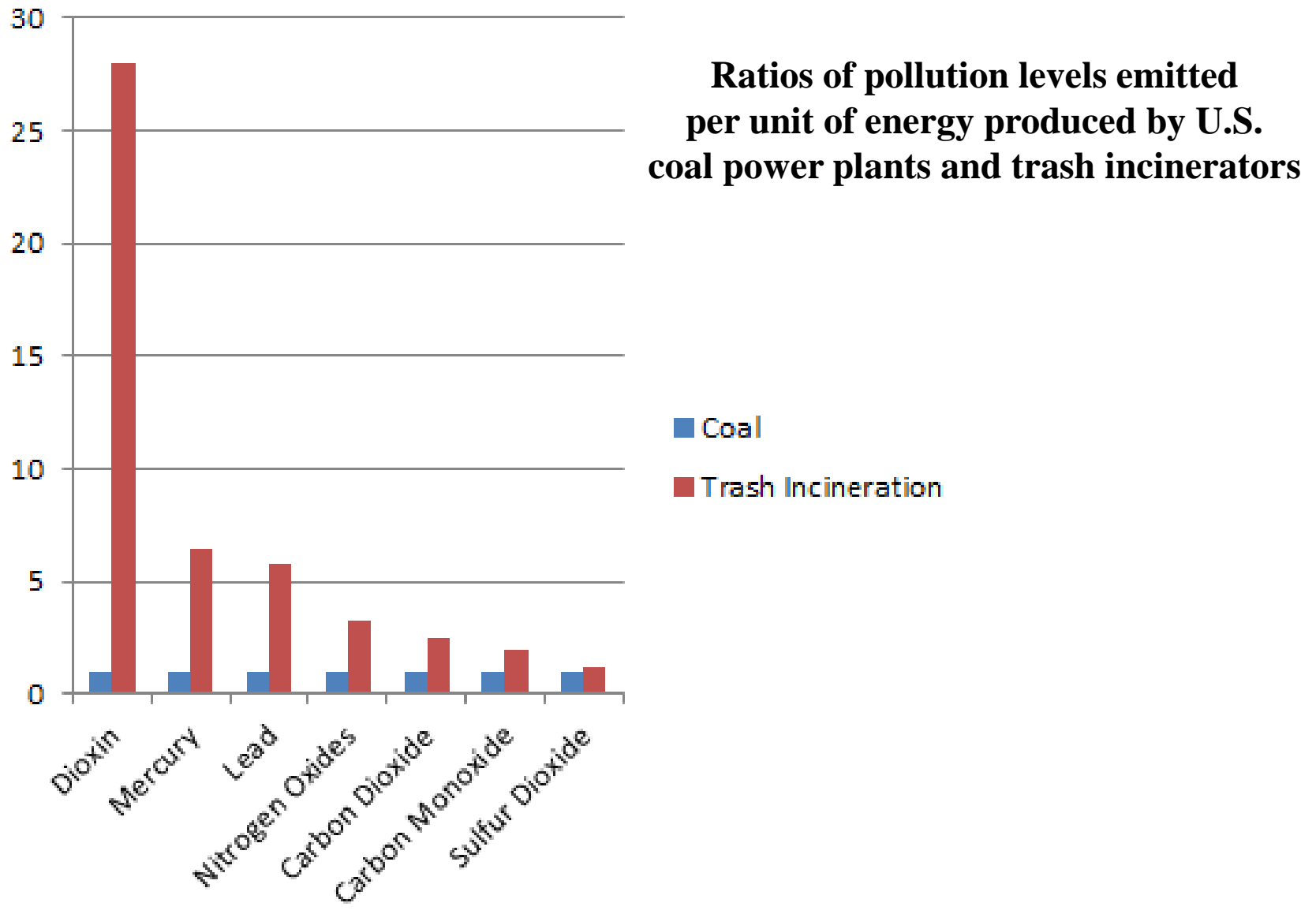


Incineration Worse than Coal

Toxic Air Emissions are...

- **Dioxins / furans** (28 times as much)
- **Mercury** (6-14 times as much)
- **Lead** (6 times as much)
- **Nitrogen Oxides (NO_x)** (3.2 times as much)
- **Carbon Monoxide (CO)** (1.9 times as much)
- **Sulfur Dioxide (SO₂)** (20% worse)
- **Carbon Dioxide (CO₂)** (2.5 times as much)

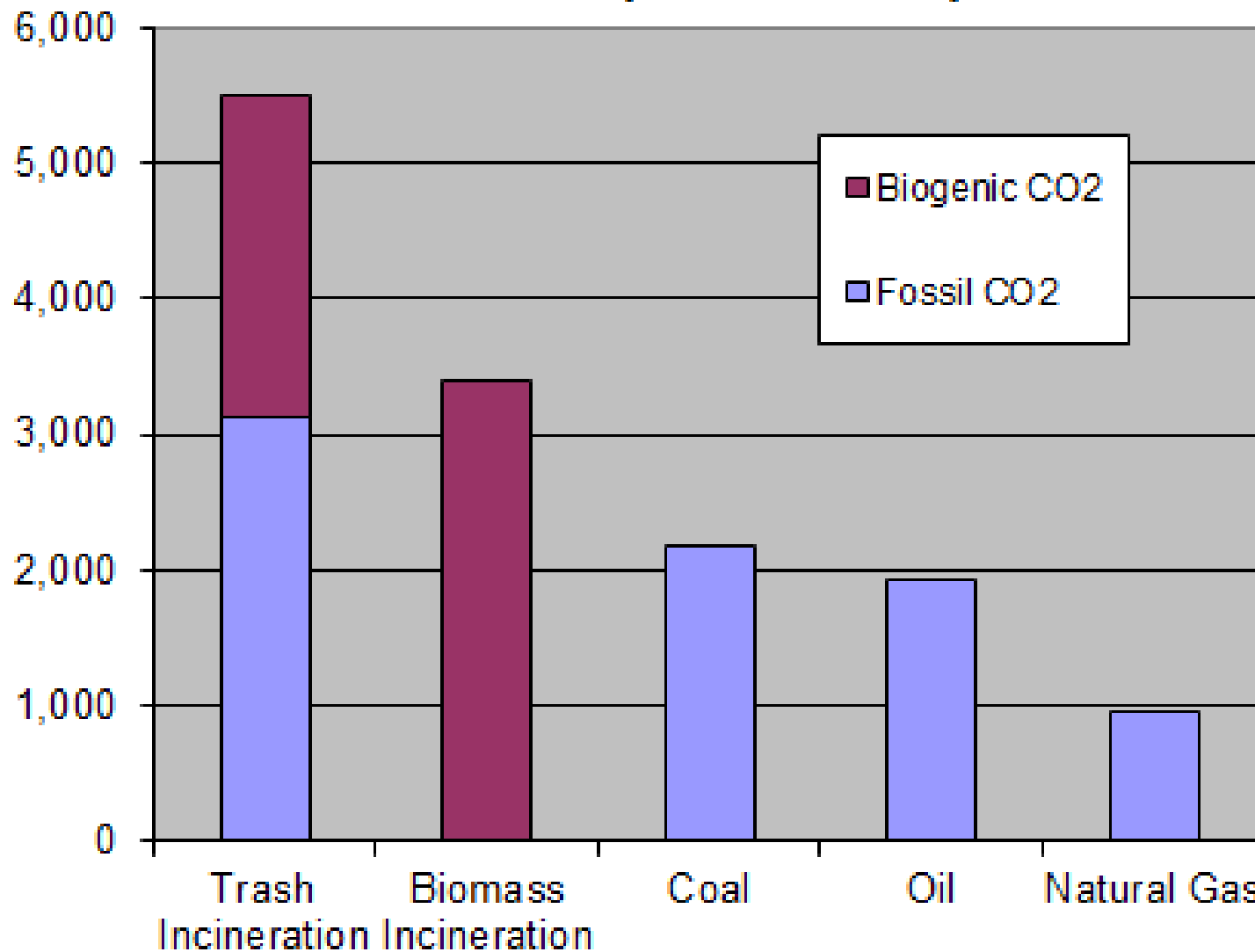
Incineration Worse than Coal



Global Warming Pollution

Smokestack CO2 Emissions from U.S. Power Plants

CO2 (lbs/MWh)



Data is in pounds of CO2 per unit of energy produced (lbs/MWh)

Source: U.S. EPA
Emissions &
Generation
Resource Integrated
Database (eGRID)
v.9, released
2/24/2014
(2010 data)

Continuous Emissions Monitors

- Only generally used for 3 pollutants: sulfur oxides (SO_x), nitrogen oxides (NO_x) and carbon monoxide (CO) plus opacity, oxygen and temperature
- Technology now exists to continuously monitor:

Ammonia (NH₄)

Carbon Dioxide (CO₂)

Hydrogen Sulfide (H₂S)

Acid Gases:

Sulfuric Acid (H₂SO₄)

Hydrofluoric Acid (HF)

Hydrochloric Acid (HCl)

Products of Incomplete Combustion (PICs):

Dioxins & Furans

Polycyclic Aromatic Hydrocarbons (PAHs)

Volatile Organic Compounds (VOCs)

Particulate Matter (PM)

Metals:

Antimony (Sb)

Arsenic (As)

Barium (Ba)

Cadmium (Cd)

Chromium (Cr)

Lead (Pb)

Manganese (Mn)

Mercury (Hg)

Silver (Ag)

Nickel (Ni)

Zinc (Zn)

...and more

www.ejnet.org/toxics/cems

Covanta Lacks Basic Pollution Controls

Covanta's incinerator in Chester uses the fewest pollution control devices of any incinerator in Pennsylvania and the fewest of any in their fleet of 39 incinerators.

LACKING:

- **Selective Non-Catalytic Reduction** to reduce the nitrogen oxides (NO_x) that cause asthma.
- **Carbon injection** to remove additional toxic metals and dioxins.

Out of 80 commercial trash incinerators in the U.S. operating as of 2014, 59 use carbon injection and 55 use some form of NO_x controls. Why does the nation's largest one lack these protections?

Covanta Lacks Basic Pollution Controls

Pennsylvania Incinerators:

| State | City | Facility Name | Tons/Day | # of Controls | Air Pollution Control Systems |
|-------|--------------|---|----------|---------------|-------------------------------|
| PA | Bainbridge | Lancaster County Resource Recovery Facility | 1,200 | 5 | SDA; FF; SNCR; CI; FSI |
| PA | Morrisville | Wheelabrator Falls Inc. | 1,500 | 4 | SDA; FF; SNCR; CI |
| PA | Conshohocken | Covanta Plymouth Renewable Energy | 1,216 | 4 | SDA; FF; SNCR; CI |
| PA | Harrisburg | Harrisburg Resource Recovery Facility | 800 | 4 | SDA; FF; SNCR; CI |
| PA | York | York Resource Recovery Center/Montenay York | 1,344 | 3 | SDA; FF, CI |
| PA | Chester | Delaware Valley Resource Recovery Facility | 3,510 | 2 | SDA; FF |

Source: Energy Recovery Council 2014 and 2010 Directories of Waste-to-Energy Plants
www.wte.org/userfiles/files/ERC_2014_Directory.pdf and www.wte.org/userfiles/file/ERC_2010_Directory.pdf

Covanta Lacks Basic Pollution Controls

Nearly all of Covanta's 39 incinerators have these pollution controls. Several have 5-6 pollution control devices. Chester's has just two.

No new incinerator could be built these days without these protections.

Source: Energy Recovery Council 2014 and 2010 Directories of Waste-to-Energy Plants www.wte.org/userfiles/files/ERC_2014_Directory.pdf and www.wte.org/userfiles/file/ERC_2010_Directory.pdf

| State | City | Facility Name | Tons/Day | # of Controls | Air Pollution Control Systems |
|---|---------------|--|----------|---------------|---|
| NJ | Newark | Essex County Resource Recovery Facility | 2,800 | 6 | SDA; FF; ESP; SNCR; CI; CYC |
| OR | Brooks | Marion County Solid Waste-to-Energy Facility | 550 | 6 | SDA; FF; SNCR; CI; CYC; DSI |
| MA | West Wareham | SEMASS Resource Recovery Facility | 2,700 | 5 | SDA; ESP; COHPAC (Units 1 & 2) SDA; FF; SNCR (Unit 3) |
| NY | Niagara Falls | Niagara Falls Resource Recovery Facility | 2,250 | 5 | SDA; FF; SNCR; CI; ESP |
| FL | Fort Myers | Lee County Resource Recovery Facility | 1,836 | 5 | SDA; FF; SNCR; CI; FGR |
| MD | Dickerson | Montgomery County Resource Recovery Facility | 1,800 | 5 | FSI; SDA; FF; SNCR; CI |
| PA | Bainbridge | Lancaster County Resource Recovery Facility | 1,200 | 5 | SDA; FF; SNCR; CI; FSI |
| OK | Tulsa | Walter B. Hall Resource Recovery Facility | 1,125 | 5 | CI; CYC; FF; SNCR; SDA |
| MA | Agawam | Pioneer Valley Resource Recovery Facility | 408 | 5 | FGR; DSI; FF; CI; CYC |
| VA | Lorton | I-95 Energy-Resource Recovery Facility (Fairfax) | 3,000 | 4 | SDA; FF; SNCR; CI |
| NY | Westbury | Hempstead Resource Recovery Facility | 2,671 | 4 | SDA; FF; SNCR; CYC |
| FL | Miami | Miami-Dade County Resource Recovery Facility | 2,592 | 4 | SDA; FF; SNCR; CI |
| 26 other Covanta incinerators - nearly all have SNCR and Carbon Injection | | | | | |
| PA | Chester | Delaware Valley Resource Recovery Facility | 3,510 | 2 | SDA; FF |

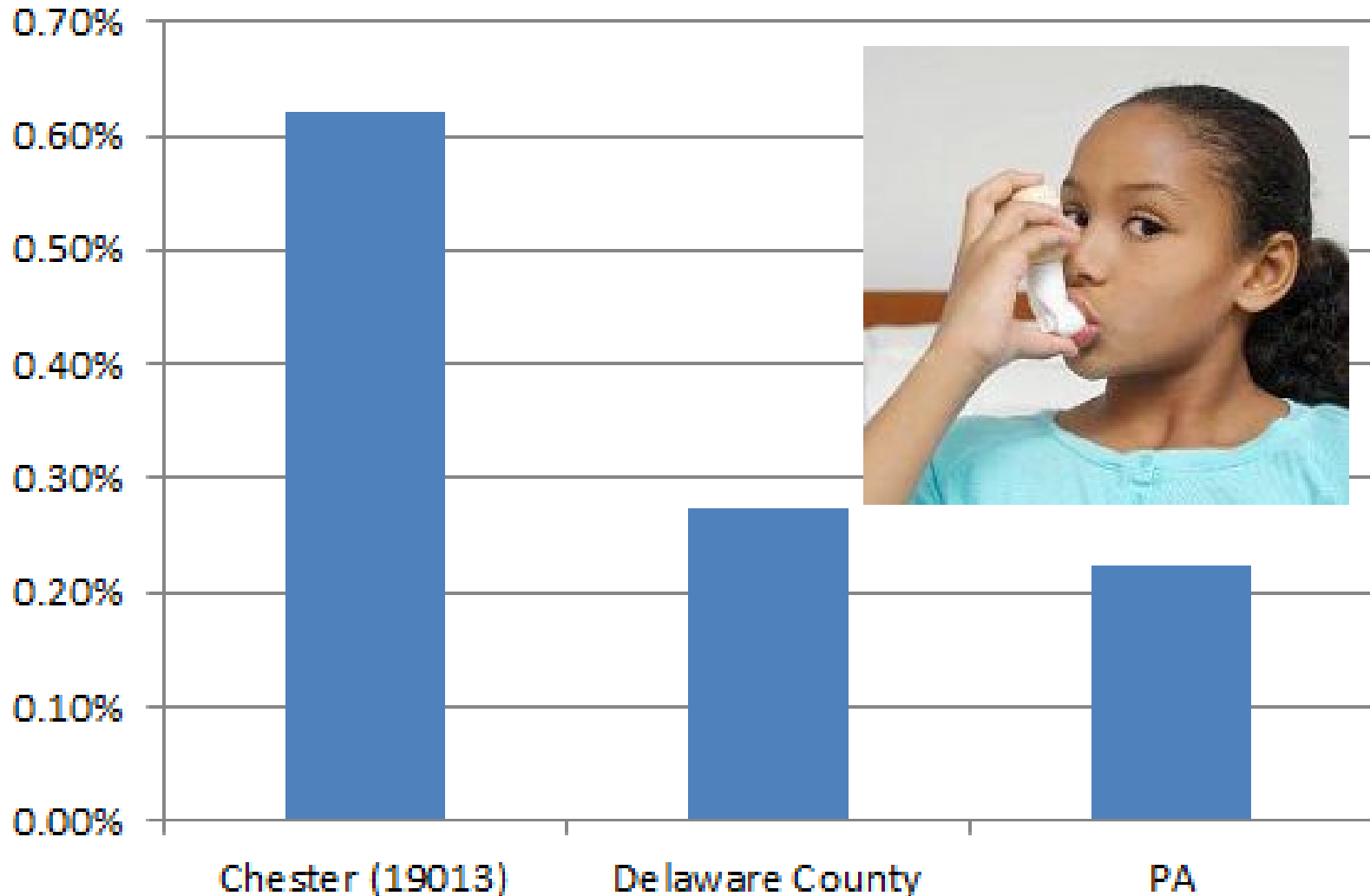
Covanta Lacks Basic Pollution Controls

In March 2009, when an EPA inspector (Ms. Horgan) asked Covanta's Gene Bonner why they don't have the pollution controls that their other plants have, Covanta responded that "it costs a lot of money" and would create "operational issues."

Ms. Horgan asked if there is any control equipment that would be practical to reduce emissions. Mr. Bonner stated that practical is a matter of money to business people. He stated that Covanta doesn't have a big issue for dioxins or mercury so a carbon system is not needed. Ms. Horgan asked about additional NO_x control. Ms. Horgan mentioned that NO_x emissions were 1119 tons in 2003 and 1257 tons in 2005. Ms. Horgan asked if there was a system to bring down these NO_x emissions. Mr. Bonner stated that putting in a urea system would; but, that it costs a lot of money and also introduces additional operational issues. He stated that the more equipment that is added, the more potential for operational issues at some time. He said that the NO_x emissions could be brought down; but, the equipment is not easily operated.

Childhood asthma hospitalization 3x PA rate

Data for those under 18 years of age, for 2010



Source: Analysis based on 2010 Census data and asthma data from The Asthma Program, PA Department of Health.
Data provided by Pennsylvania Health Care Cost Containment Council (PHC4).

Covanta's Chester, PA Trash Incinerator: One of the Largest Polluters in the Region

Nitrogen Oxide (NO_x) pollution is a major cause of asthma. Sulfur dioxide (SO₂) pollution causes breathing difficulties and pre-term births.

Covanta's trash incinerator in Chester, PA is the largest source of nitrogen oxide (NO_x) pollution in the City of Chester. In all of Delaware County, it's second only to the Philadelphia International Airport.

Of the 28 electric generating facilities in the 5-county Philadelphia area, Covanta is the largest NO_x and the largest SO₂ polluter, now that coal is no longer burned at the Exelon power plant in Eddystone.

Of all 82 electric generating facilities in the eastern half of Pennsylvania, Covanta was the 4th largest NO_x polluter in 2007, the 9th largest in 2009 and 2010 and the 6th largest in 2011. Four power plants closed or stopped burning coal since 2011, leaving only two coal plants and a paper mill as the only dirtier sources of NO_x pollution in all of eastern PA.

Once the Titus coal power plant in Berks County closes in April 2015, Covanta will be the 4th largest source of NO_x pollution and 6th largest source of sulfur dioxide pollution from any electric generating plant in eastern Pennsylvania.

Sources: EPA National Emissions Inventory (2011 data) (www.epa.gov/ttnchie1/trends/) and EPA eGRID v.9 Database (2010 data) (www.epa.gov/egrid/). Charts, ranks and closure data available at www.ejnet.org/chester/covantapollution.html.

Largest Nitrogen Oxide-polluting electric generators in eastern half of Pennsylvania (2010):

| Facility | County | Fuel | NOx 2010 | Status | Rank 4/2015+ |
|---|-----------------|--------------|--------------|---|-----------------|
| PPL Brunner Island | York | Coal | 16,800 | | 1 |
| PPL Montour | Montour | Coal | 6,817 | 1 of 3 units is considered expensive and ripe for retirement. | 2 |
| Exelon - Eddystone Generating Station | Delaware | Coal | 3,814 | Coal units closed in 2011-2012. | |
| Sunbury Generation LP | Snyder | Coal | 2,991 | Plant closed in June 2014. | |
| Portland | Northampton | Coal | 2,699 | Plant closed in June 2014. | |
| P. H. Glatfelter Paper Mill | York | Coal/Biomass | 2,303 | | 3 |
| Titus | Berks | Coal | 1,379 | Plant closing in April 2015. | |
| Exelon - Cromby Generating Station | Chester | Coal | 1,274 | Closed in 2011. | |
| Covanta - Delaware Valley Resource Recovery Facility | Delaware | Trash | 1,263 | | 4 |
| PPL Martins Creek | Northampton | Coal | 1,255 | | |
| York County Resource Recovery | York | Trash | 515 | | |
| UGI - Hunlock Power Station | Luzerne | Coal | 312 | Converted from coal to gas in 2010-2011. | |
| St Nicholas Cogen Project | Schuylkill | Waste Coal | 222 | Plant is considered expensive and ripe for retirement. | |
| Harrisburg Incinerator | Dauphin | Trash | 181 | | |

Trash Incinerator Health Impacts



Medical Professionals Oppose Incineration

National:

- American Academy of Family Physicians
- American Lung Association
- British Society for Ecological Medicine

State / regional:

- American Lung Association in Florida
- American Lung Association in Georgia
- American Lung Association in Massachusetts
- American Lung Association of New England
- Florida Medical Association
- Massachusetts Breast Cancer Coalition
- Massachusetts Medical Society
- North Carolina Academy of Family Physicians
- Washington State Medical Association

Local

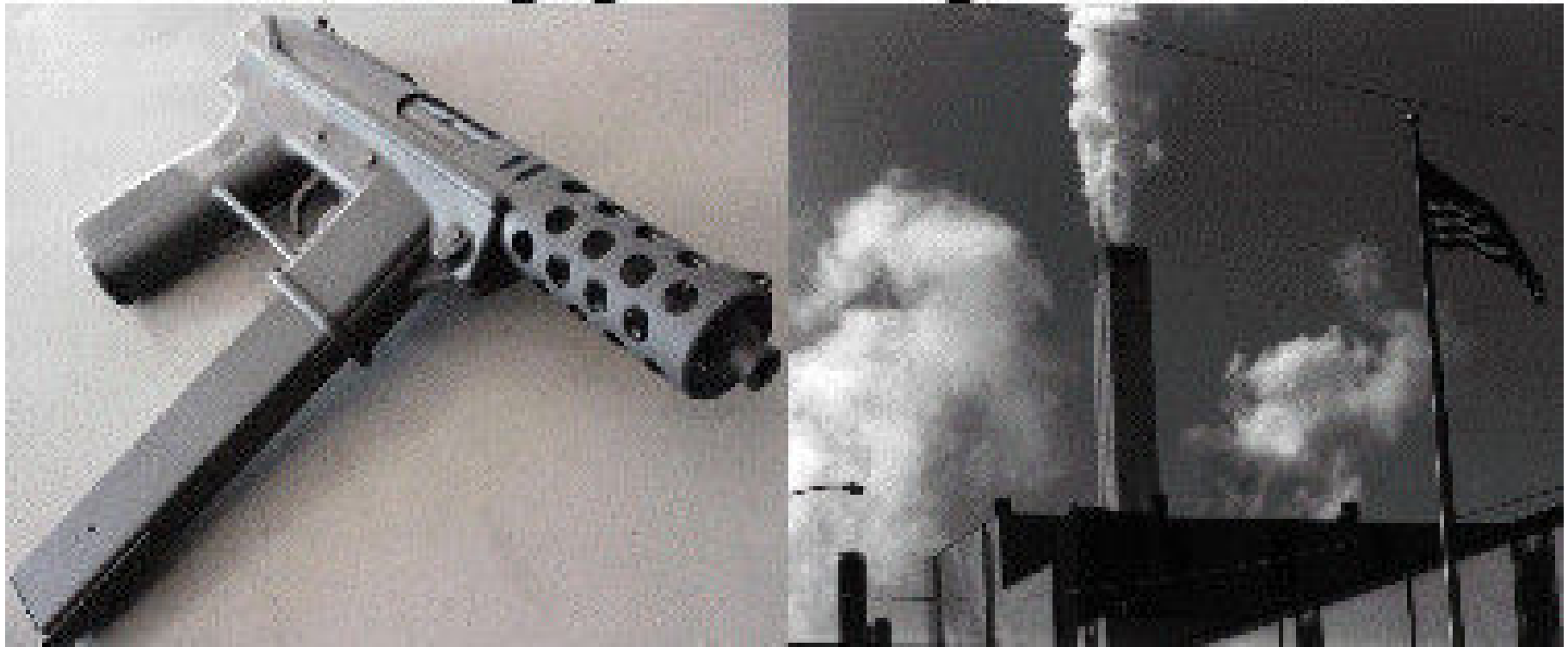
- Erie County Medical Society (Pennsylvania)
- Capital Medical Society (Tallahassee, Florida)
- Lane County Health Advisory Committee (Oregon)
- Physicians for Social Responsibility / Pioneer Valley (Massachusetts)

Copies of all of these groups' statements are available online at www.energyjustice.net/biomass/health/

Trash Incinerator Health Impacts

- Increased dioxins in blood of incinerator workers
- Increased cancers, especially:
 - laryngeal and lung cancers
 - childhood cancers
 - colorectal
 - liver
 - stomach
 - leukemia
 - soft-tissue sarcoma
 - non-Hodgkin's lymphoma
- Increases in babies born with spina bifida or heart defects
- Increases in pre-term births

**Murder is murder,
whether by gun or by chemical.**



Source: Shelia Hyland, Chester Resident

Incineration Worse than Landfills

- Incinerators still require landfills for their toxic ash
- Choice is NOT landfill vs. incinerator, but:

landfill

vs.

incinerator AND a smaller, more toxic landfill

Incineration Worse than Landfills

- Incinerators still require landfills for their toxic ash
- Choice is NOT landfill vs. incinerator, but:

landfill

vs.

incinerator AND a smaller, more toxic landfill

OR...

Zero Waste and minimal landfilling

Zero Waste Jobs



Deconstruction Crew, Second Chance, Baltimore, MD. Photo Credit: C. Seldman

What is Zero Waste?

“Zero Waste is a goal that is ethical, economical, efficient and visionary, to guide people in changing their lifestyles and practices to emulate sustainable natural cycles, where all discarded materials are designed to become resources for others to use.

Zero Waste means designing and managing products and processes to systematically avoid and eliminate the volume and toxicity of waste and materials, conserve and recover all resources, and not burn or bury them.

Implementing Zero Waste will eliminate all discharges to land, water or air that are a threat to planetary, human, animal or plant health.”

If you're not for Zero Waste, how much waste are you for?

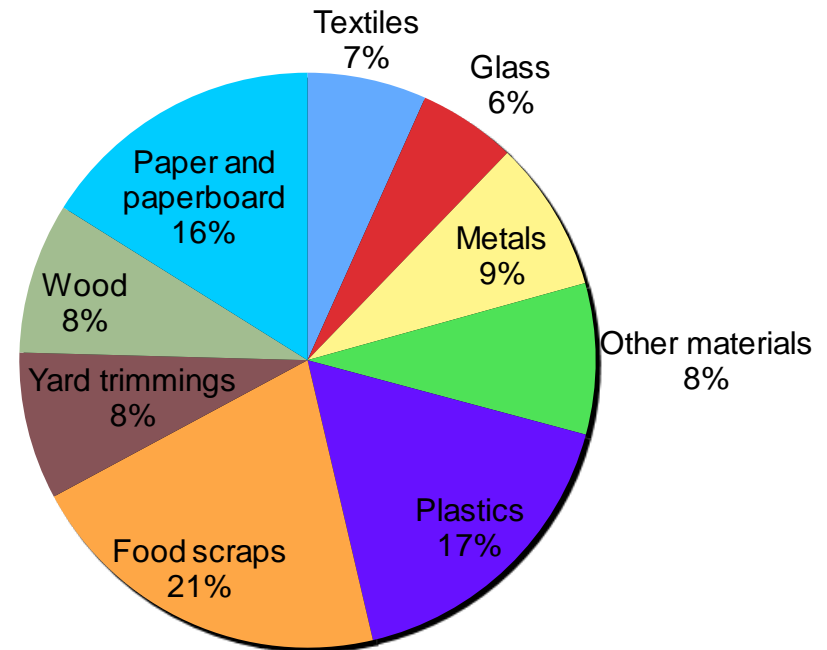
Zero waste is recognized as achieving 90% or greater diversion from landfills and incinerators.

The goal is to get as close to zero as possible, without getting caught up on the impossibility of actually hitting zero.

“Zero waste” is like “zero drug tolerance” or “zero accidents in the workplace” standards. Zero is the goal, and the right policies will get you as close as you can get.

Money Thrown Away

\$11.4 billion worth of recyclable packaging wasted (sent to landfills and incinerators) in 2010



Source: “Unfinished Business: The Case for Extended Producer Responsibility,” 2012 Report, www.asyou Sow.org/sustainability/eprreport.shtml



AUSTIN RESOURCE RECOVERY MASTER PLAN

DECEMBER 15, 2011



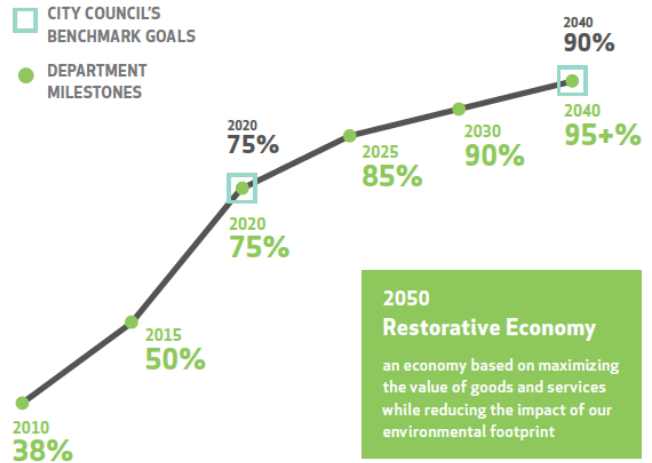
ZERO WASTE BY 2040

The Austin City Council established three benchmark goals for achieving Zero Waste:

- 1** Reducing by 20 percent the per capita solid waste disposed to landfills by 2012
- 2** Diverting 75 percent of solid waste from landfills and incinerators by 2020
- 3** Diverting 90 percent of solid waste from landfills and incinerators by 2040

DIVERSION GOALS

The Master Plan establishes more aggressive milestones to ensure the City Council's benchmark goals are achieved.



4

Table 1 - Projected Department Hauled Material Collection

| Department Hauled Collection | In Tons | | | | |
|--|------------------|---------|---------|---------|---------|
| | FY 2010 (Actual) | FY 2015 | FY 2020 | FY 2025 | FY 2030 |
| Total waste disposal | 138,757 | 115,000 | 68,000 | 49,000 | 37,000 |
| Total diversion: reuse, recycling, organics, HHW | 82,611 | 115,000 | 205,000 | 277,250 | 332,000 |
| Total waste generation | 221,368 | 230,000 | 273,000 | 326,250 | 369,000 |
| Diversion rate | 38% | 50% | 75% | 85% | 90% |

Zero Waste Hierarchy

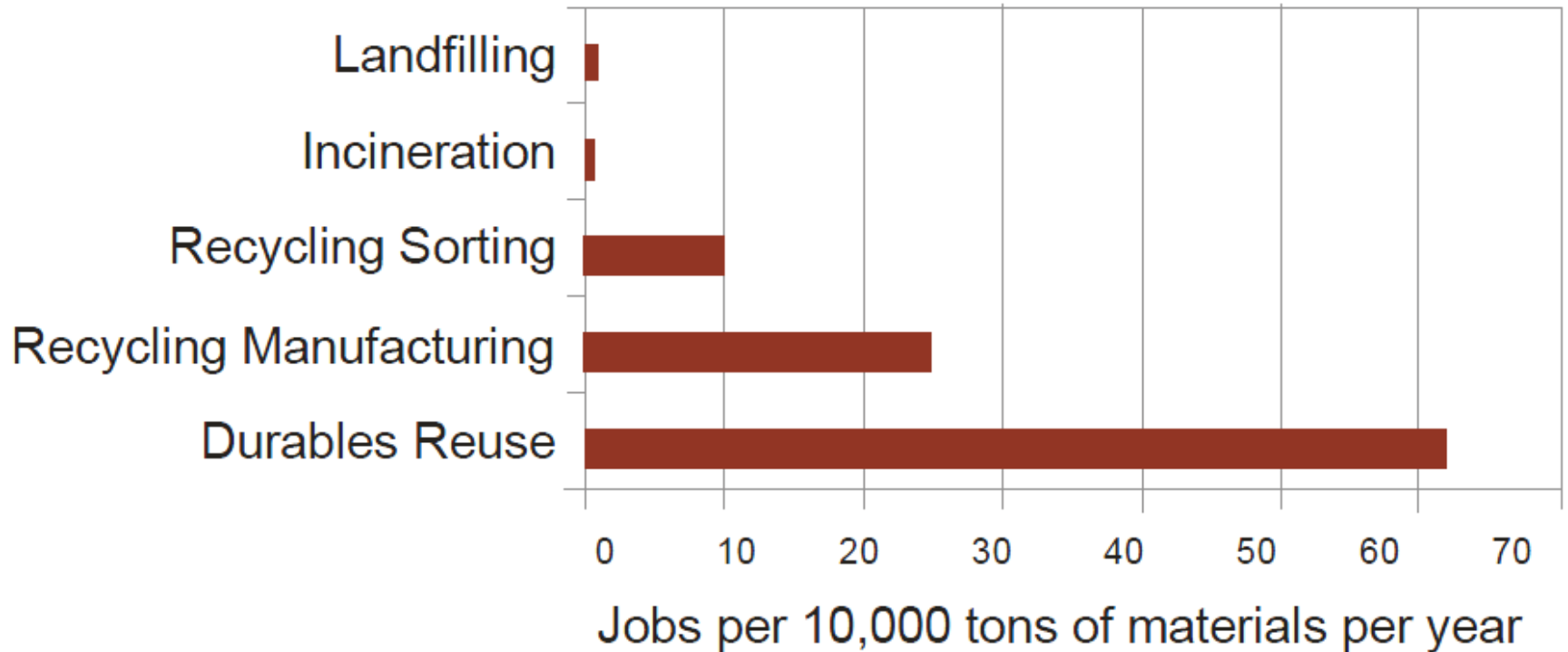
- Rethink / Redesign
- Reduce
- Reuse
- Recycle
- Compost
- Research
- Stabilize (digest) / Monofill and manage properly

Incineration Competes with Recycling

- **Needs paper and plastics (and wood and tires) to burn effectively**
- **Must be fed enough waste**
- **Waste contracts are designed to punish recycling**

Worst Way to Create Jobs

Job Creation: Reuse & Recycling vs Disposal

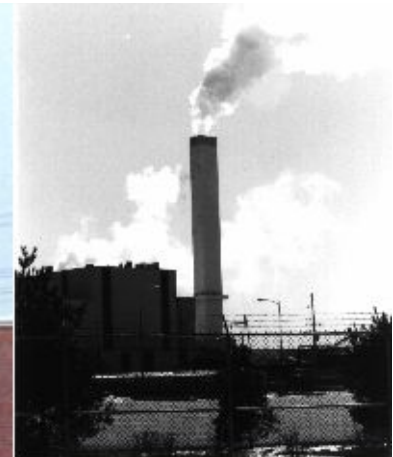


Source: Institute for Local Self Reliance

Job Creation: Reuse & Recycling Versus Disposal in the United States

| Type of Operation | Jobs Per 10,000 Tons per Year |
|--|-------------------------------|
| Product Reuse | |
| Computer Reuse | 296 |
| Textile Reclamation | 85 |
| Misc. Durables Reuse | 62 |
| Wooden Pallet Repair | 28 |
| Recycling-Based Manufacturers | 25 |
| Paper Mills | 18 |
| Glass Product Manufacturers | 26 |
| Plastic Product Manufacturers | 93 |
| Conventional MRFs¹⁰¹ | 10 |
| Composting | 4 |
| Incineration | 1 |
| Landfilling | 1 |

Covanta's Rail Project



Covanta's Rail Project

CURRENT SITUATION:

200,000 tons/year of New York waste by truck

PROPOSAL:

500,000 tons/year of New York City waste plus other New York waste

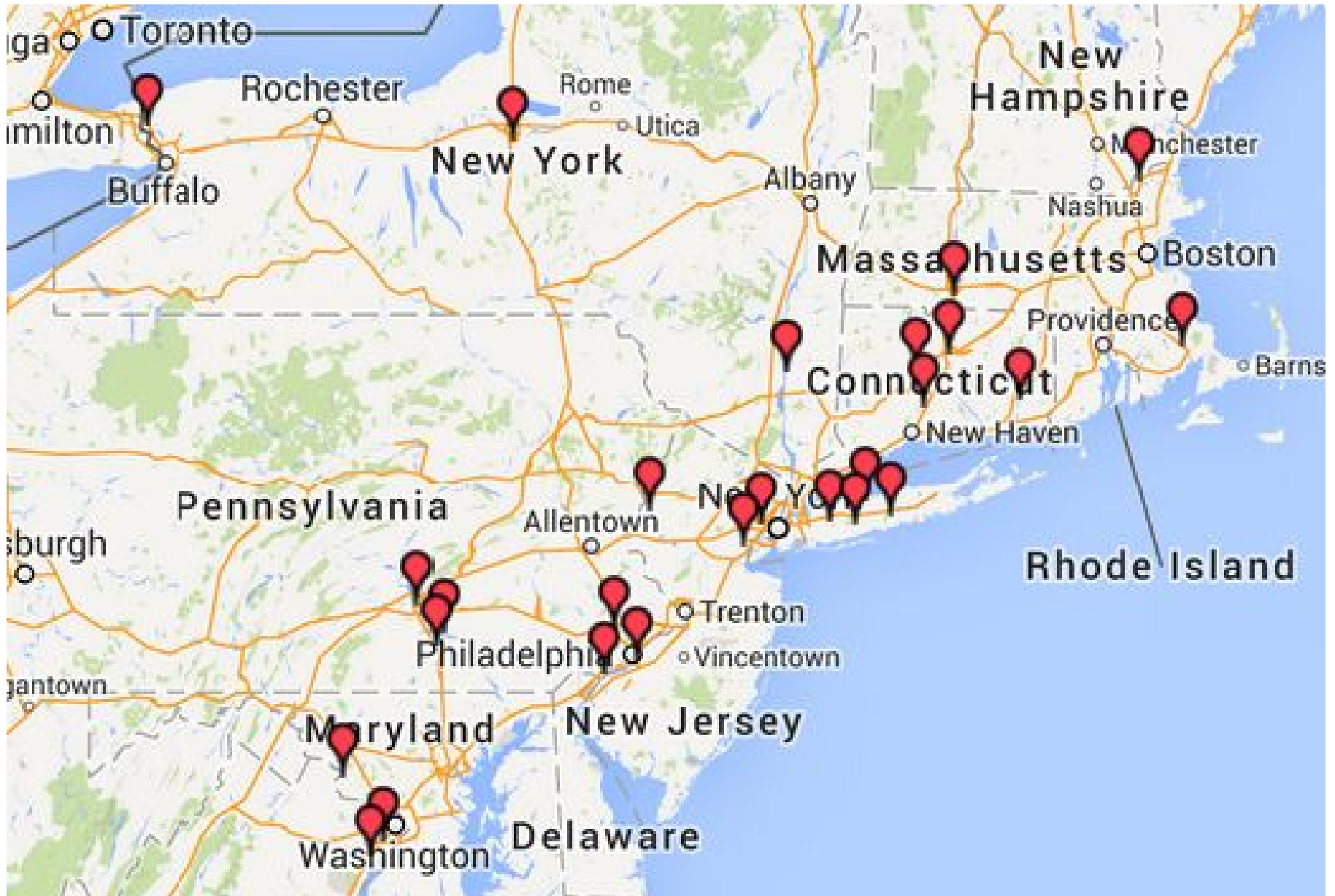
- Once rail box building is built:
 - Trash trains come through Chester by rail to Wilmington, THEN
 - Trash trucks come into Chester from Wilmington in rail boxes
(5 more trucks per day than currently)

[traffic is worse; waste volumes increase as high as Covanta's capacity]

- Once rail spur is later built:
 - Trash trains come straight from New York

[NYC waste traffic just by rail now, but waste volumes could increase further, beyond Covanta's capacity if used as transfer facility; waste locked in for 30+ years]

Covanta's Incinerators in the Region



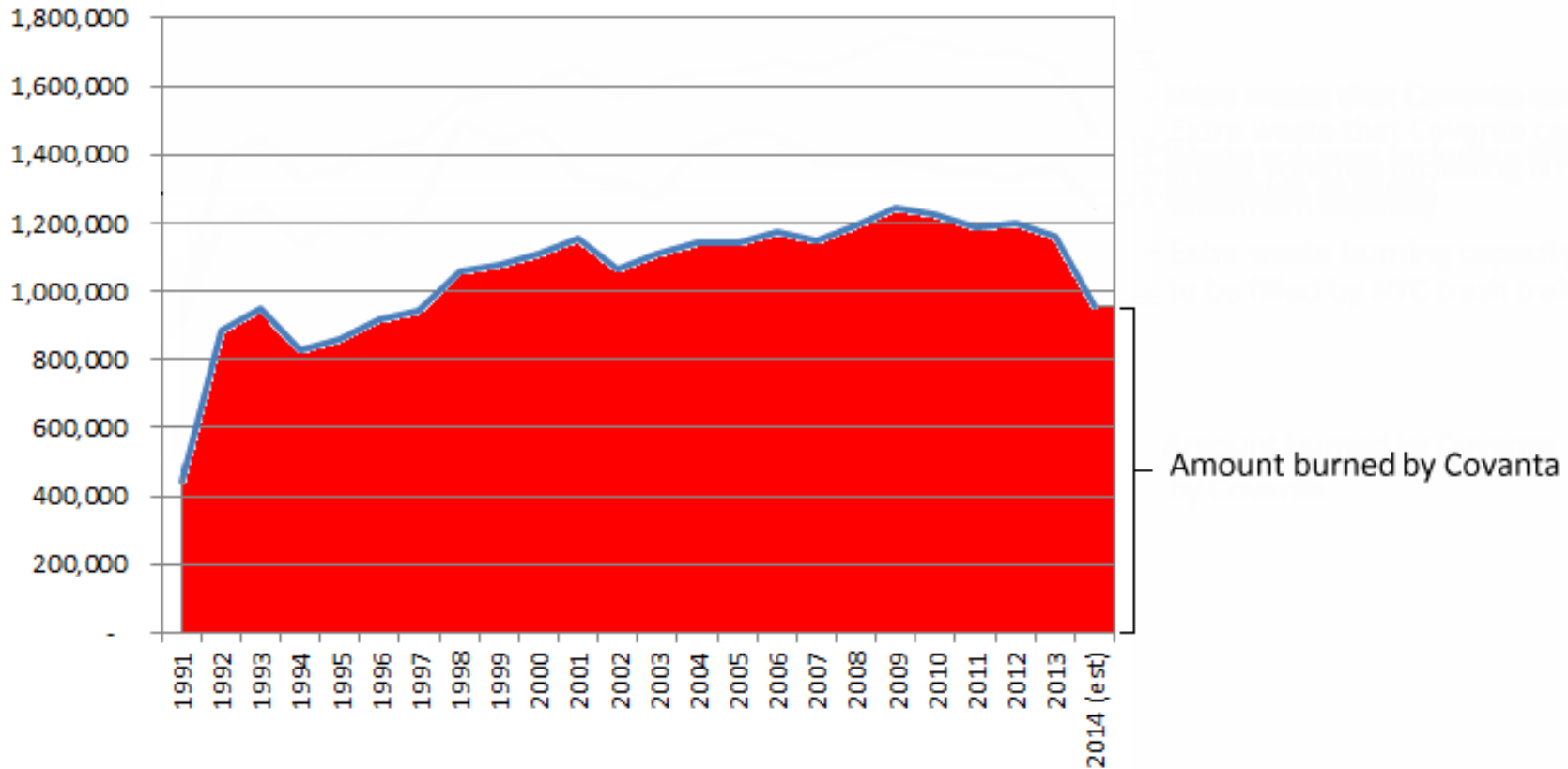
Covanta's Rail Project

- **Rail box building paves the way for a rail spur proposal, like Covanta is seeking in Niagara Falls, NY.**
- **In Niagara Falls, NY, Covanta sought and was approved for SIX TIMES the rail spur capacity they need for the NYC contract. WHY??**
- **Some Chester residents' homes would likely be taken for rail project.**

Covanta's Rail Project

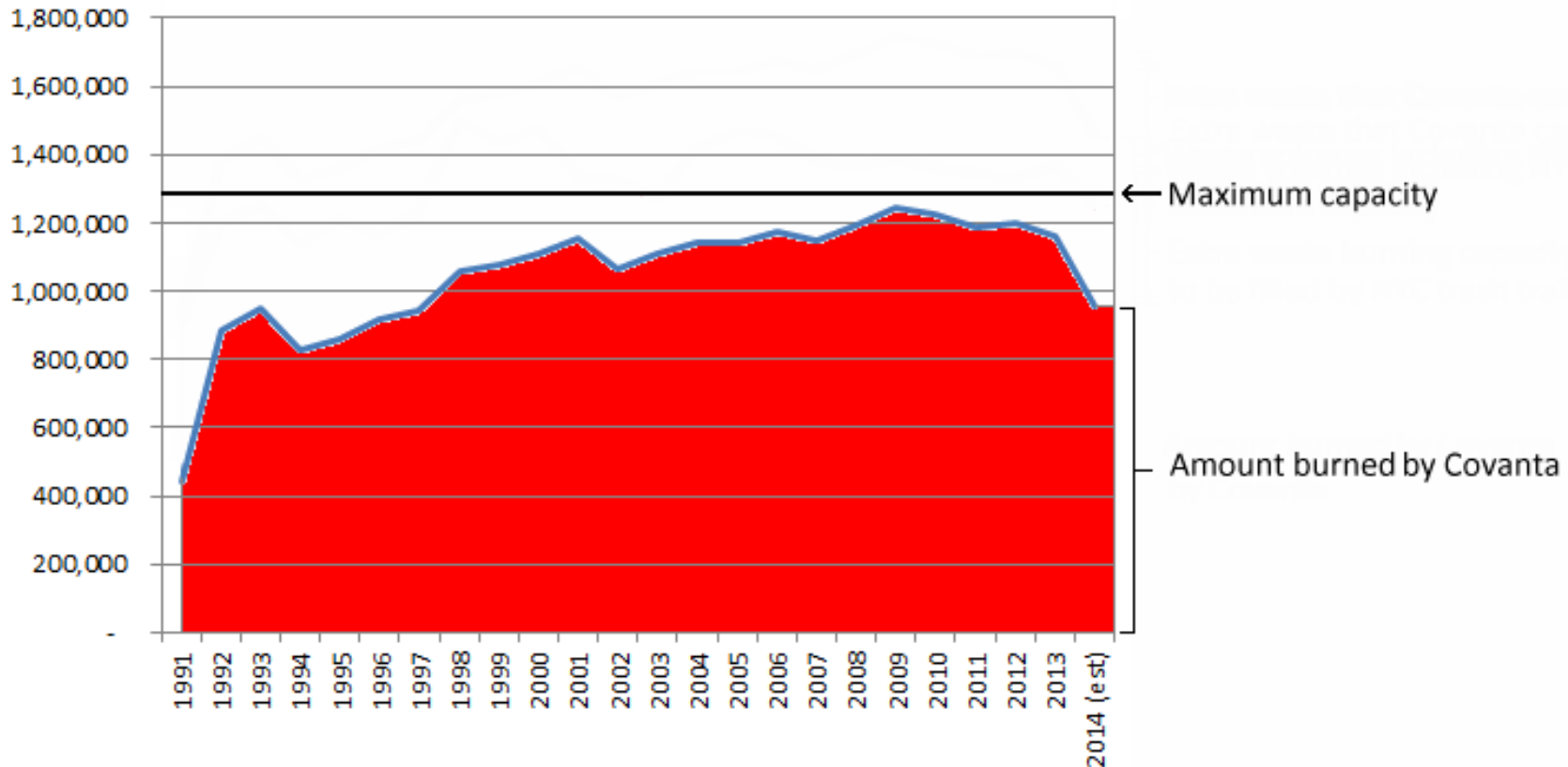
- Rail infrastructure enables transfer station potential – essentially a new waste facility
- Rail spur is permanent infrastructure that can outlive the incinerator
- Transfer stations are an emerging Covanta priority, especially in the Philadelphia area
- Covanta 2012 10K filing: **“Our growth opportunities include... businesses ancillary to our existing business, such as additional waste transfer, transportation...”**
- Can easily get permit increase: in 1998, Covanta got a violation for taking more than their daily limit of 4,350 tons/day, but in 2008, their new permit for 2009-2019 permit increases their daily limit to 5,700 tons on weekdays

Covanta's Rail Project: Increasing Waste in Chester



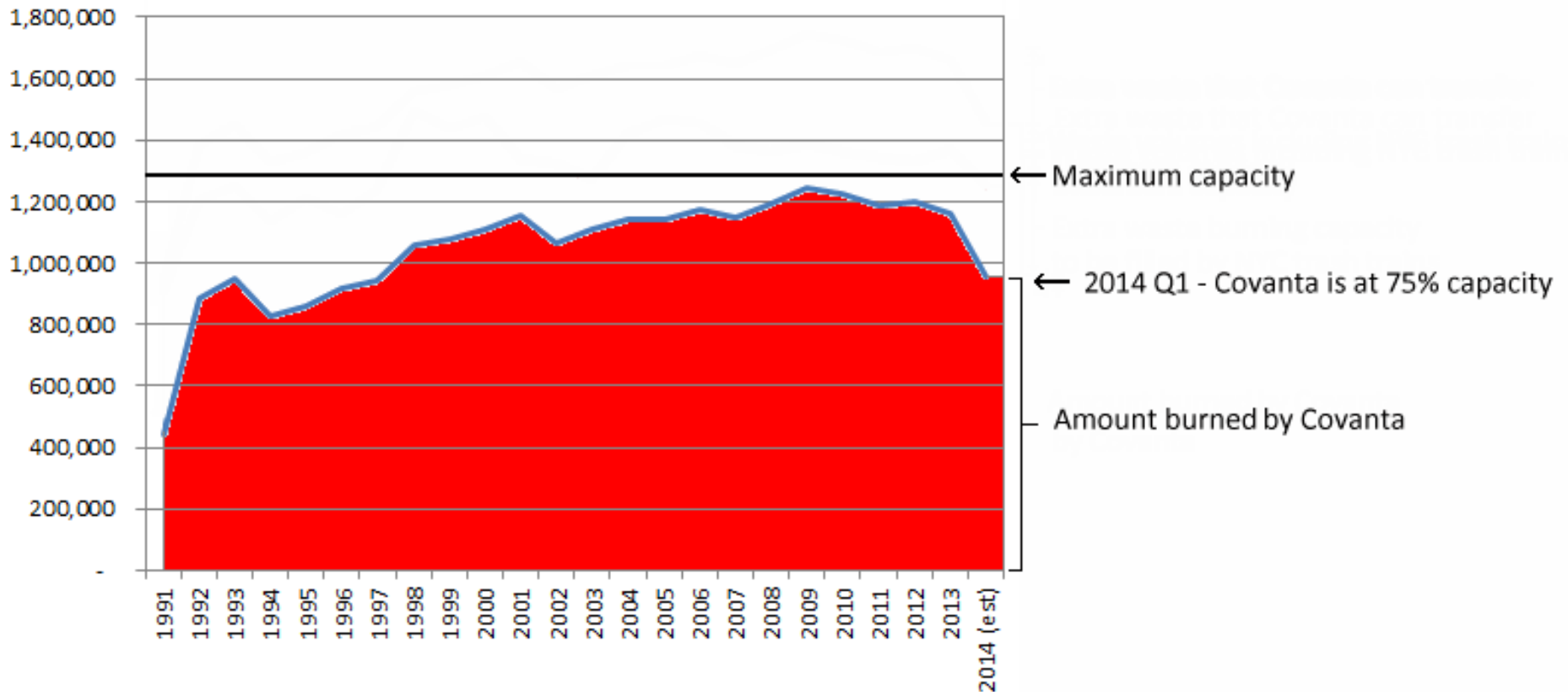
Source: PA Department of
Environmental Protection –
Data reported by Covanta

Covanta's Rail Project: Increasing Waste in Chester



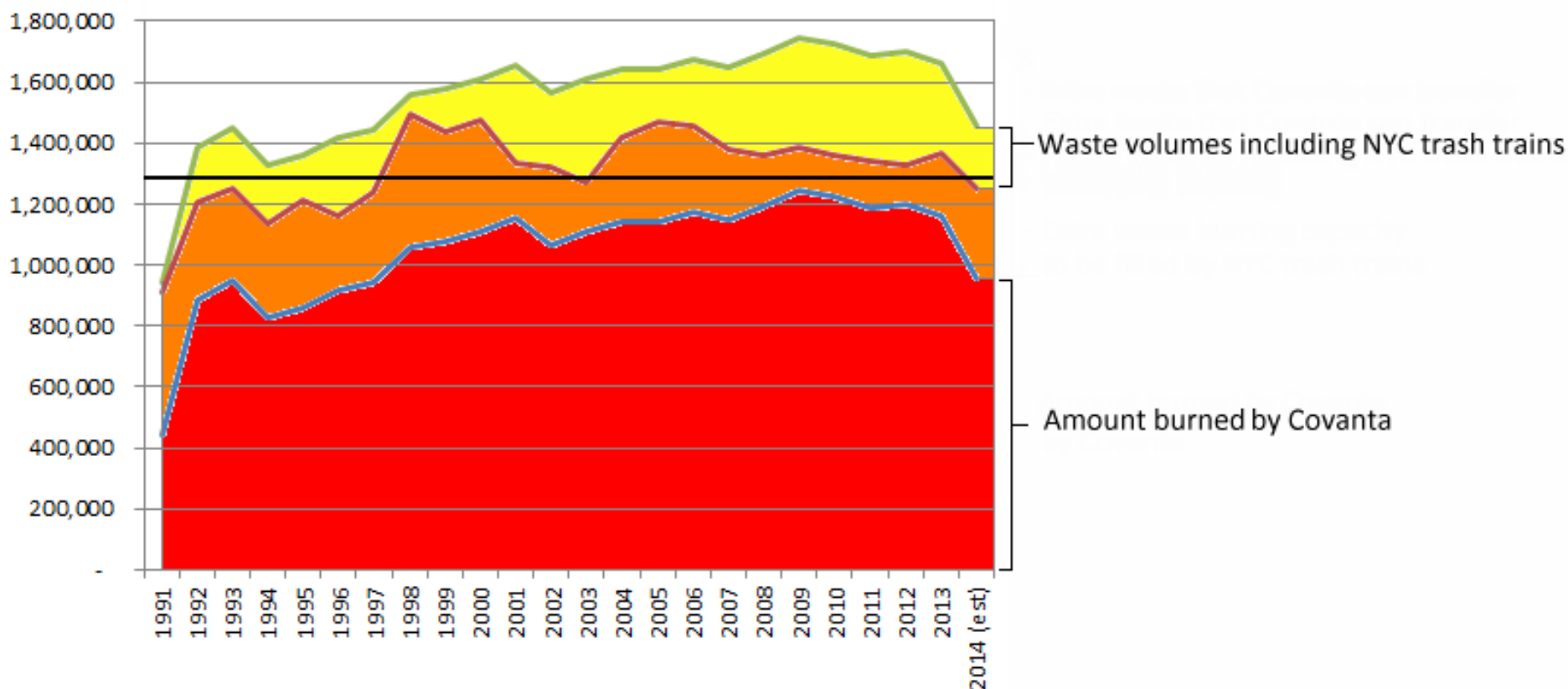
Source: PA Department of
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Covanta's Rail Project: Increasing Waste in Chester



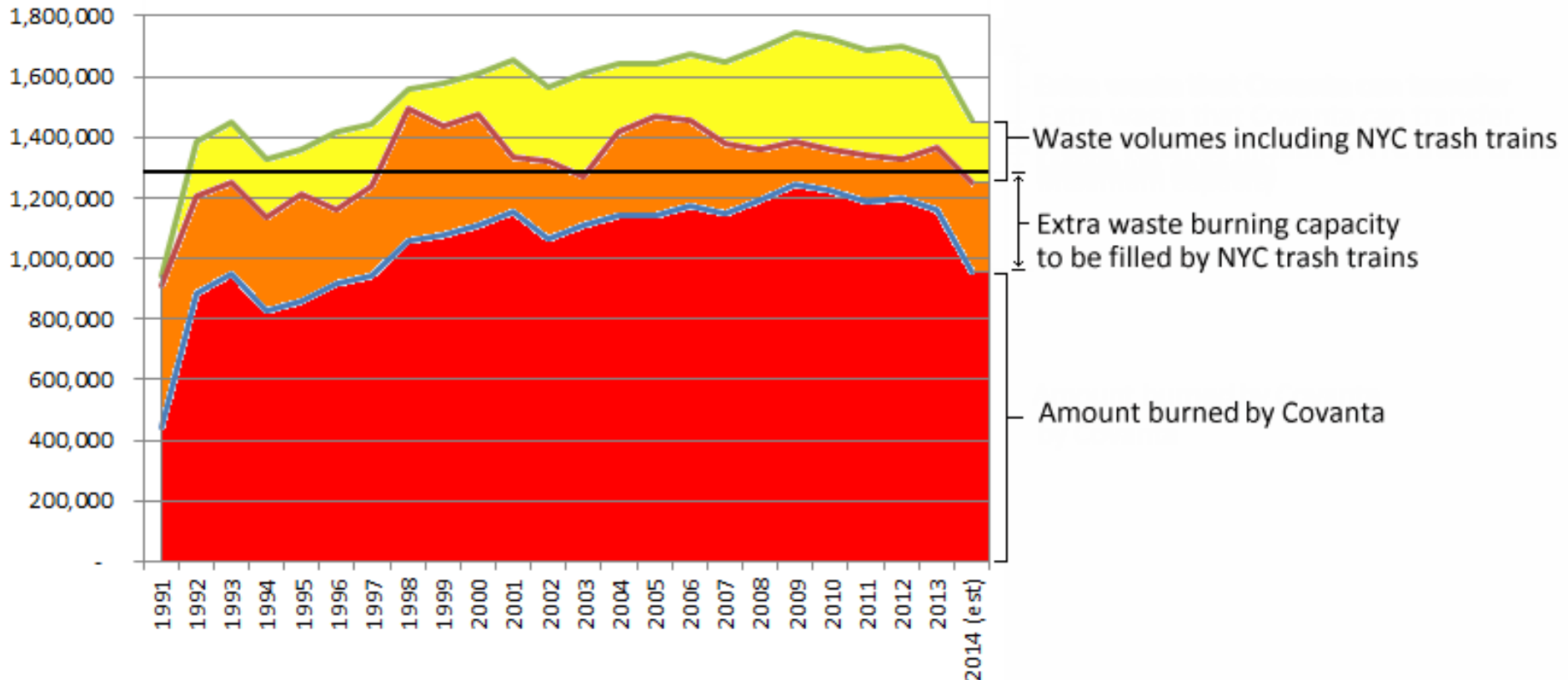
Source: PA Department of
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Covanta's Rail Project: Increasing Waste in Chester



Source: PA Department of
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Data reported by Covanta

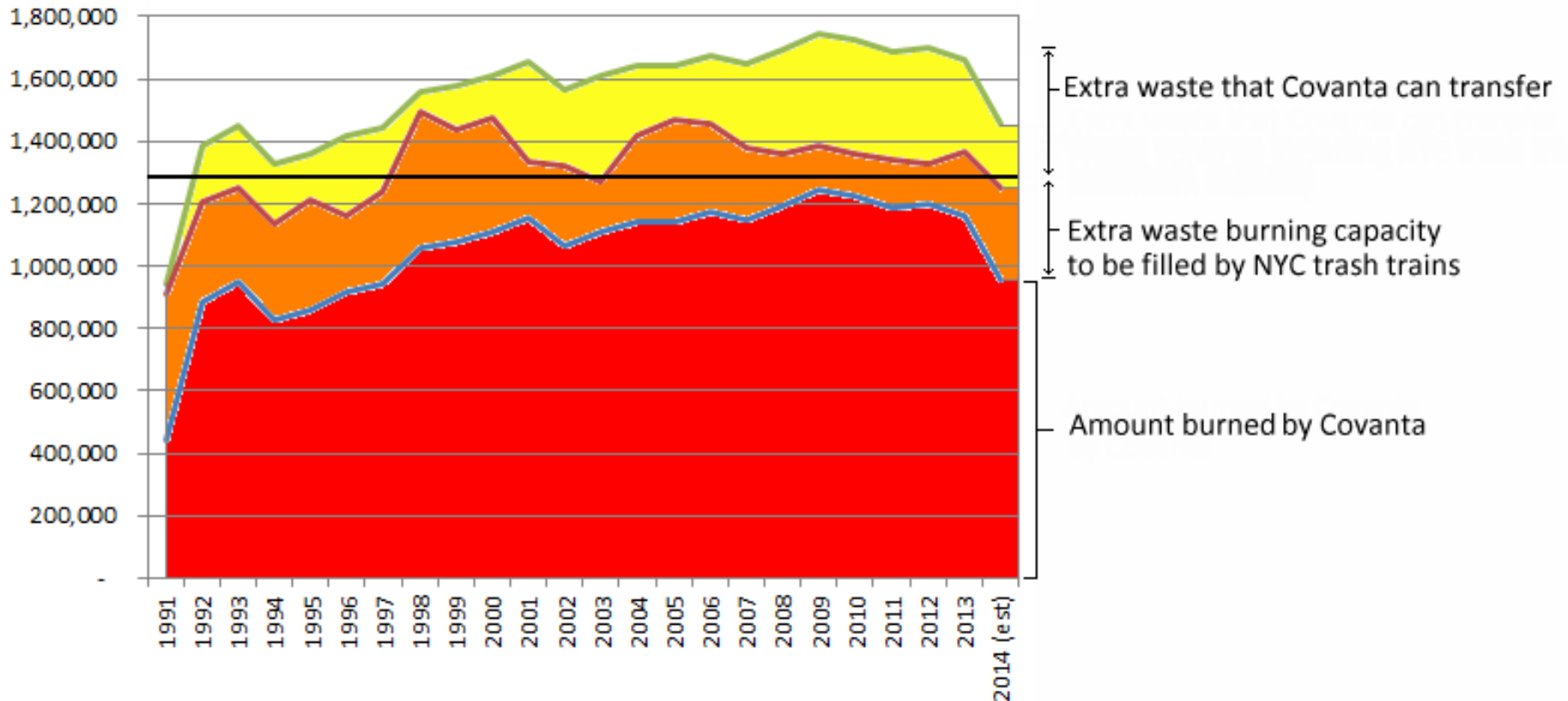
Covanta's Rail Project: Increasing Waste in Chester



**NYC trash trains enable Covanta
to go from 75% to 98% capacity,
burning an extra 300,000 tons/year.**

Source: PA Department of
Environmental Protection –
Data reported by Covanta

Covanta's Rail Project: Increasing Waste in Chester



Source: PA Department of
Environmental Protection –
Data reported by Covanta

Covanta's Incinerator is NOT Forever

New regulations on mercury, dioxins, carbon dioxide and other pollutants have been causing larger polluters to clean up or close. Most choose to close because cleaning up is rather expensive.

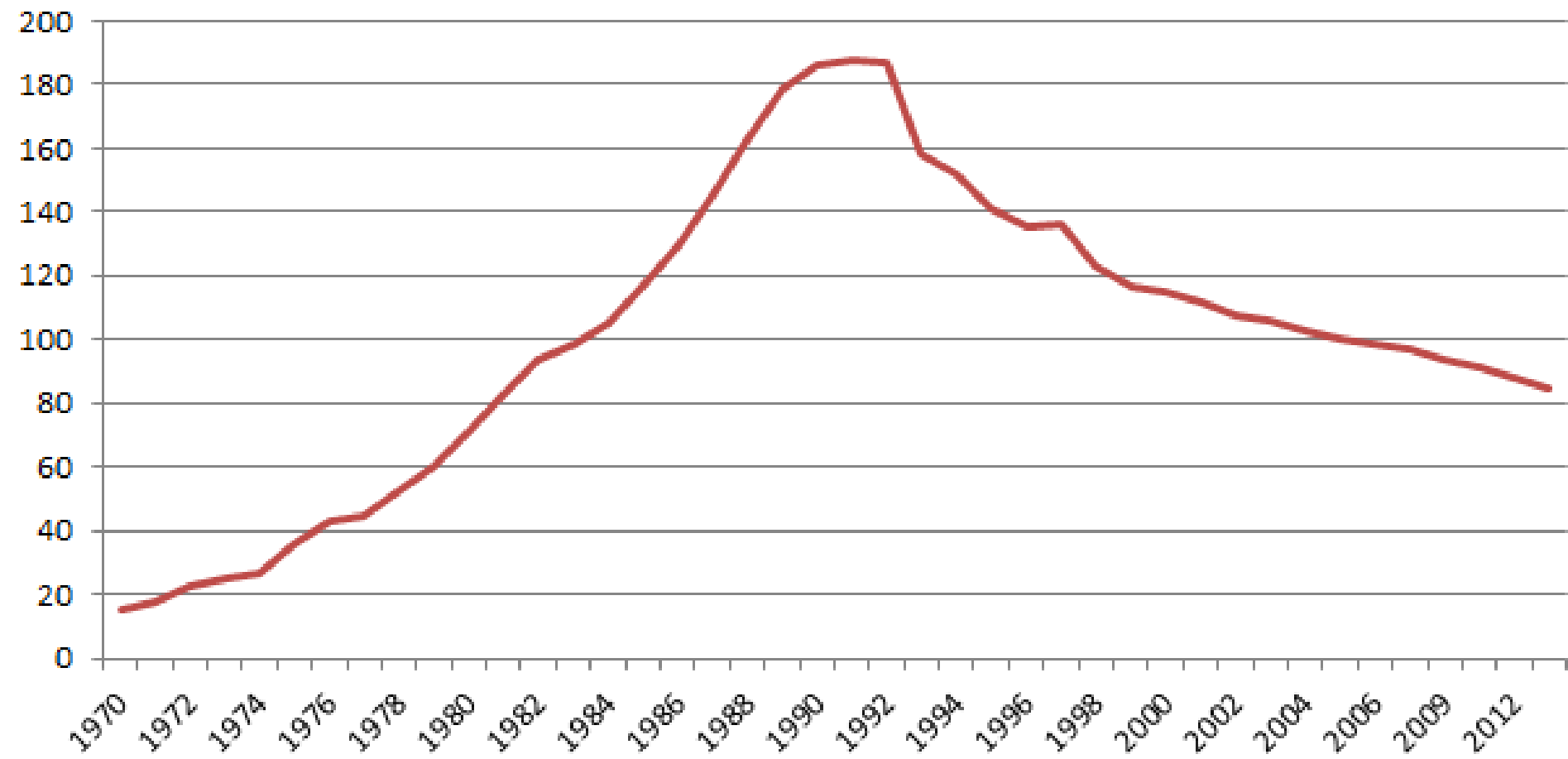
Covanta is one of the largest polluters in all of eastern Pennsylvania.

- 5th largest carbon dioxide (CO₂) polluter among electric generators in eastern PA
- 3rd largest mercury polluter among electric generators in eastern PA
- 2nd largest lead polluter in Delaware County in EPA's Toxic Release Inventory database

There were 118 trash incinerators operating in the U.S. in 2000. Now there are 80. Is it reasonable to lock in Covanta for 30 more years?

Coal plants are closing all over, including in Eddystone and throughout Pennsylvania

Number of Commercial Trash Incinerators Operating in the U.S.



Plan for a Better Future

It's Your Duty to Protect our Right to Clean Air

Article 1, Sec 27 of PA Constitution:

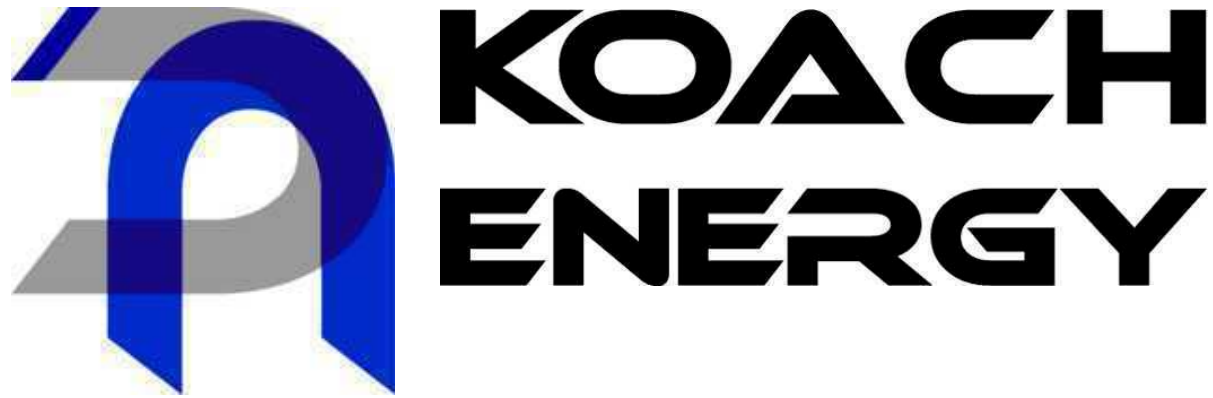
The people have a right to clean air, pure water... As trustee of these resources, the Commonwealth shall conserve and maintain them for the benefit of all the people.

December 2013 PA Supreme Court Ruling:

City (as part of “the Commonwealth”) has a duty to protect the people’s right to clean air.

- There is no such duty to ensure that the city's largest polluter is operating at full capacity.
- Detroit has the second largest incinerator in the nation, and it's operating at 2/3rds capacity at best.





“Environmentally Friendly Tire
recycling to Petroleum”

...would have been the world’s largest tire
incinerator, using a pyrolysis / gasification
system to process 1,200 – 2,400 tons of
tires/day



Mayor Butler Statement on Koach Energy:

Feb 4th, 2008: “[I]t is clear to me that Koach Energy is not the type of business that is consistent with the city's current or future development efforts. They very well may be an attractive addition to some other municipality's business base, but the City of Chester and my administration have fought for far too long in our efforts to transform our local economic base away from this type of industry. ...we are not interested and would not support bringing in businesses that would further feed into the perception that potentially polluting industries are welcome in the City of Chester. In the past, that may have been acceptable to some but my interest is in the future and my focus will continue to be centered on how we move this city forward with new and exciting developments that build upon the momentum we have generated. Now is not the time to take a step backwards and focus on drawing in industries that interestingly always seem to think the City of Chester needs them more than they need us.

As Mayor, I feel it is my duty to clearly state that Koach Energy, regardless of their job creation claims and their alleged charitable benefits, is not aligned with the future direction of the City of Chester. I will not support businesses that will directly harm the city's current positive economic trend which further reinforces the perceptions that some apparently have had that Chester should be the home for potentially polluting industries.

For more info...

Incineration: www.EnergyJustice.net/incineration/

Zero Waste: www.EnergyJustice.net/zerowaste

Niagara Falls, NY: www.StopBurningTheFalls.com

Chester Environmental Justice:
www.ejnet.org/chester/





www.EnergyJustice.net

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