

www.EnergyJustice.net



Delco Environmental Justice

www.DelcoEJ.org

Philly Area's Burn Problem SASKATCHEWAN Edmonto AND LAB Calgary ONTARIO QUEBEC Winnipeg Vanc uver Seattle NORTH DAKOTA WASHINGTON Montrea SOUTH DAKOTA CONSIN MHIGAN OREGON IDAHO WYOMING Chicago **NEBRASKA** ILLINOIS OHIO **New York United States** NEVADA UTAH COLORADO San Francisco MISSOURI CALIFORNIA oLas Vegas NORTH OKLAHOMA CAROLINA Los Angeles ARKANSAS ARIZONA **NEW MEXICO** MISSISSIPPI San Diego Dallas CAROLINA ALABAMA GEORGIA TEXAS LOUISIANA Philad Phila San Antonio o Houston ∘ Lahaina Monterrey Gulf of HAWAII Kailua-Kona www.eimap.org

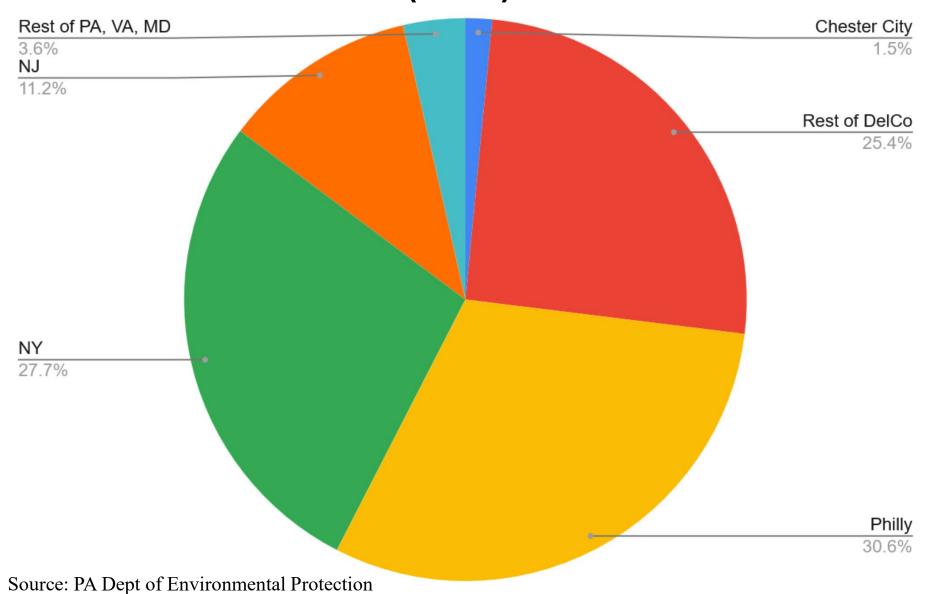
Where Philly's Trash Goes (2024)

Facility	County	Tons	%
Fairless Landfill	Bucks	687,681	54%
Reworld (Covanta) Delaware Valley	Delaware	355,139	28%
Modern Landfill	York	112,514	9%
Wheelabrator Falls	Bucks	73,208	6%
Reworld (Covanta) Plymouth	Montgomery	37,620	3%
York County Resource Recovery Center	York	6,073	0.5%
Pioneer Crossing Landfill	Berks	4,309	0.3%
Conestoga Landfill	Berks	3,552	0.3%
Western Berks Landfill	Berks	953	0.1%
LCSWMA Resource Facility	Lancaster	10	0.0%
Keystone Sanitary Landfill	Lackawanna	8	0.0%
Grand Central Sanitary Landfill	Northampton	1.6	0.0%
Commonwealth Environmental Systems Landfill	Schuylkill	0.4	0.0%

36% of Philly's waste is incinerated... mainly at Reworld Delaware Valley in Chester City.

50% collected by city (residential up to six units)

Waste Burned at Reworld Incinerator in Chester (2024)



http://cedatareporting.pa.gov/reports/powerbi/Public/DEP/WM/PBI/Solid Waste Disposal Information



Trash Incineration & Environmental Racism

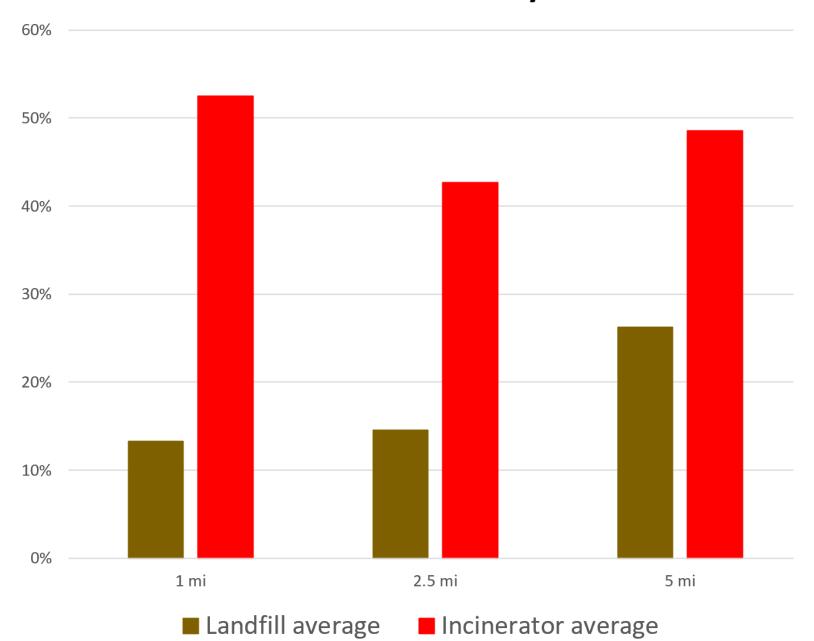


Trash Incineration & Environmental Racism

- 63% of the 62 commercial-scale trash incinerators still operating in the U.S. as of August 2025 sit in majority white communities, but...
- The largest incinerators are in more urban communities, causing the whole industry to be disproportionately impacting people of color
- 14 of 20 largest incinerators in BIPOC communities
- Black people most disproportionately impacted
- Trash incinerators in BIPOC communities are surrounded by 2.5 times as many people and are twice as large as those in white communities

www.energyjustice.net/incineration/ej

BIPOC Percentage Living near the landfills and incinerators Philly uses

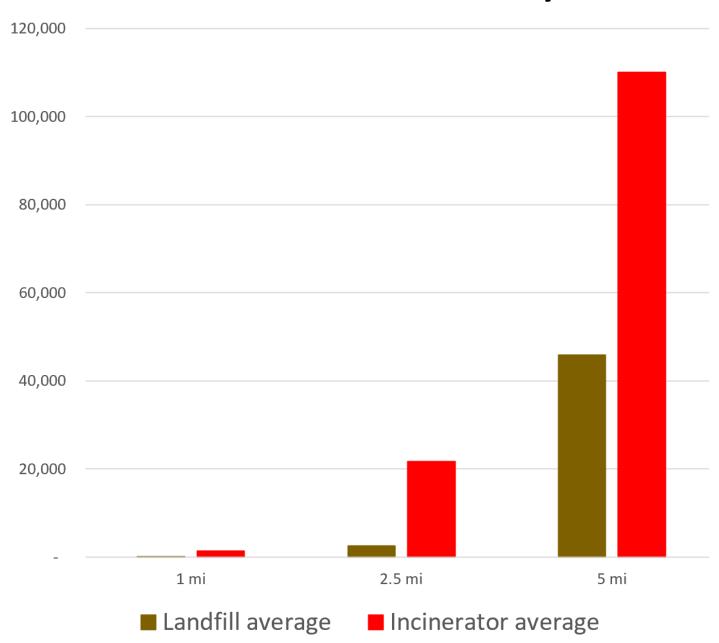


Median Household Income at Census tracts hosting Landfills & Incinerators Philly Uses

Incinerators: \$54,898

Landfills: \$95,870

How many people live near the landfills and incinerators Philly uses?



Demographics around Reworld incinerator in Chester & Fairless Landfill

	People living within 2.5 miles		
Facility	Population	% BIPOC	
Reworld Delaware Valley incinerator	24,986	78%	
Fairless Landfill	105	16%	

Census data from <u>JusticeMap.org</u>



← Reworld
Delaware
Valley
trash
incinerator
in Chester

Fairless
Landfill in
Bucks
County →



Covanta (now "Reworld") is a Top Air Polluter

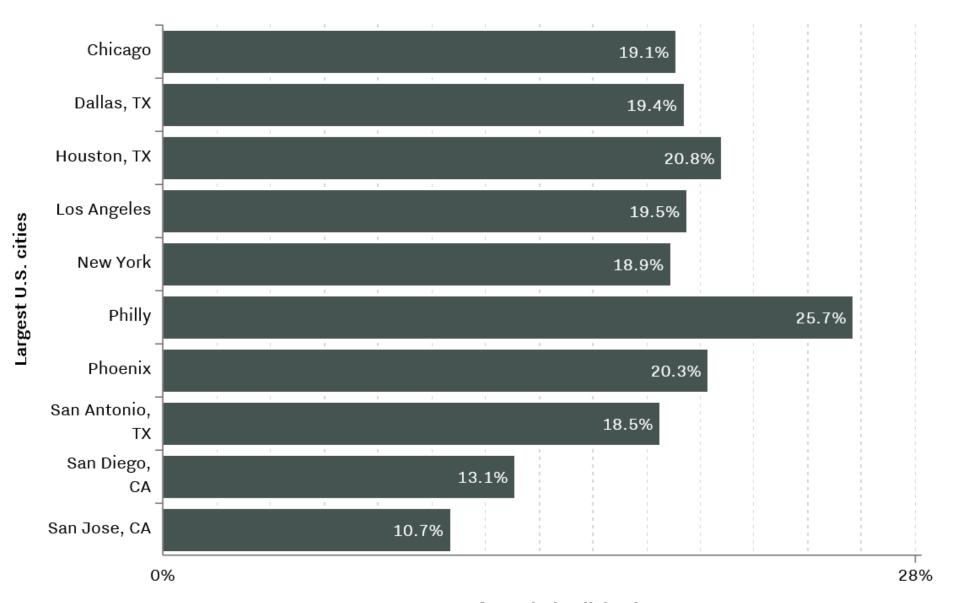
Their trash incinerator in Chester is the:

#1 industrial air polluter in Chester City, in Delaware County, and in the entire 7county region surrounding Philadelphia.

All five trash incinerators in this region are among the region's top seven industrial air polluters.



Poverty rates in major U.S. cities



Percentage of population living in poverty



The Most Challenging Places to Live with Asthma

Philadelphia Metro Area ranked...

#4 in 2018

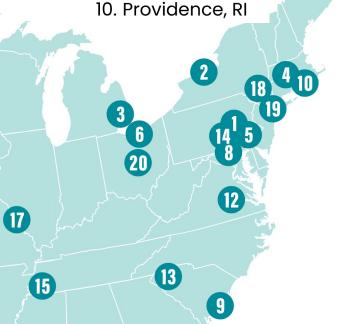
#4 in 2019

#7 in 2021

#9 in 2022

#8 in 2023

#5 in 2024



Map of the Top 20 Most Challenging Places to Live with Asthma in 2024

> 1. Allentown, PA 2. Rochester, NY

4. Springfield, MA

6. Cleveland, OH 7. Lakeland, FL

8. Baltimore, MD 9. Charleston, SC

5. Philadelphia, PA

3. Detroit, MI

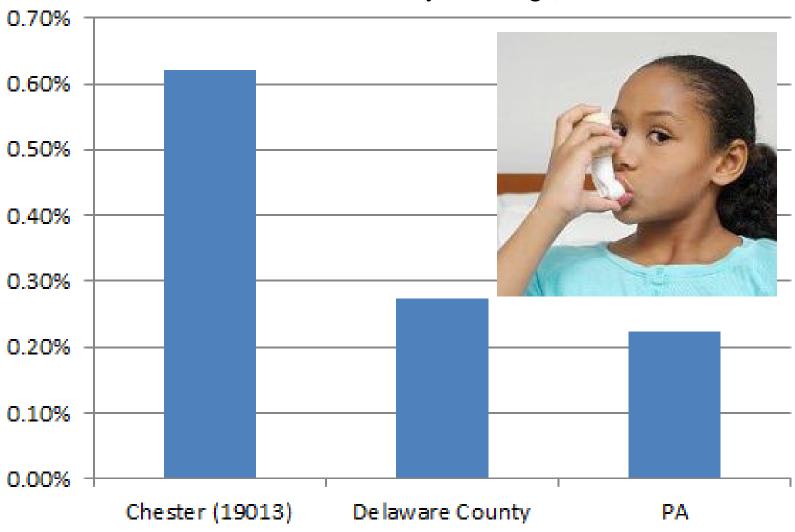


aaa Asthma and Allergy Foundation of America

www.aafa.org/asthma-capitals/

Childhood asthma hospitalization 3x PA rate

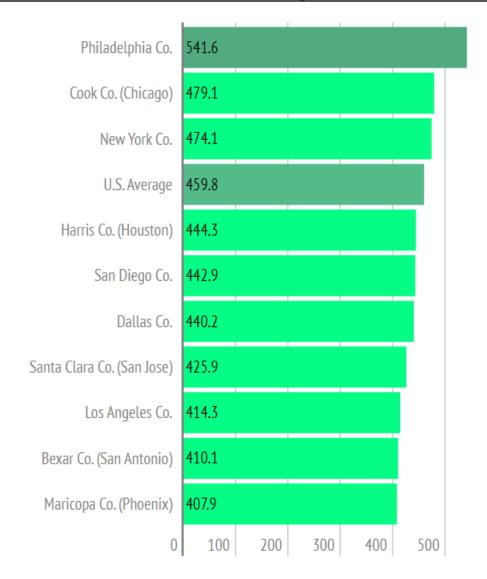
Data for those under 18 years of age, for 2010



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).

America's 10 largest cities by annual cancer rates per 100,000



Philly is now #2 in cancer incidence among the counties hosting the 10 largest U.S. Cities

Source: 2007-11 National Cancer Institute

Reworld Delaware Valley's Air Emissions						
Pollutant (in pounds except CO2e)	2022 Emissions*	Rank in DelCo	Health Effects			
Global Warming Pollution (in tons of CO ₂ equivalents)	914,738	4	Extreme weather, disease, crop damage, species extinction			
Nitrogen Oxides	2,320,920	1	Asthma attacks, chronic respiratory disease & stroke			
Carbon Monoxide	673,400	1	Headaches, dizziness; increases lifetime risk of heart disease			
Sulfur Dioxide	392,820	1	triggers asthma attacks; chronic respiratory and heart diseases; stroke			
Particulate Matter	126,080	4	heart attacks, stroke, irregular heartbeat, aggravated asthma, decreased lung function, difficulty breathing			
Hydrochloric Acid	37,740	1	irritates eyes, skin, and nose, damages lungs			
Fine Particulate Matter (PM2.5)	15,140	5	same as above, but worse, gets deep into lungs and into blood stream			
Volatile Organic Compounds	13,700	15	eye, nose and throat irritation, headaches, loss of coordination and nausea, liver, kidney and central nervous system damage, cancer			
Mercury	51	1	damage to nervous, digestive, & immune systems, lowers IQ			
	20	2	allergy, cardiovascular and kidney diseases, lung fibrosis,			

Nickel

Lead

5 **Cadmium** kidney disease; lung cancer lung, skin, bladder, and liver cancers; irritation of skin and 4 Arsenic mucous membranes; affects brain and nervous system 4 Chromium (VI) lung cancer, shortness of breath, coughing, and wheezing All is 2022 data except cadmium, arsenic, and chromium (VI), which is 2016-2019 average for lack of 2022 data. Source: PA Department of

lung and nasal cancer

likelihood of antisocial behavior

damages nervous system and kidneys, lowers IQ, increases

20

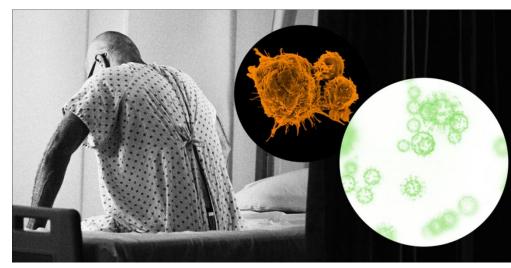
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Environmental Protection Air Emissions Report: http://cedatareporting.pa.gov/reports/powerbi/Public/DEP/AQ/PBI/Air Emissions Report

Health effects

People living near incinerators have an increased risk of...

- All types of cancer, including:
 - Stomach
 - Colorectal
 - Liver
 - Renal
 - Lung & pleural
 - Gallbladder
 - Bladder
 - Non-Hodgkin lymphoma
 - Leukemia
 - Soft-tissue sarcoma
- Respiratory diseases & symptoms
- Cardiovascular diseases
- Urinary diseases



Covanta: "incinerators have been studied comprehensively for health risk"

Fact: Not much in the U.S. and not comprehensively at all.

Source: www.energyjustice.net/incineration/healthstudies.pdf

Is incineration a problem in general?



<u>www.EnergyJustice.net/incineration/</u> ← find a ton more info here!

Landfilling vs. Incineration





...and Ash Landfilling

How to Compare?

- Human health impacts
 - Nitrogen Oxide emissions (asthma)
 - Particulate emissions
 - Toxic and Cancer-causing emissions
- Eutrophication
- Acidification (acid rain...)
- Ecosystem toxicity
- Ozone depletion
- Smog formation
- Global warming

Should also look at...

- Cost
- Jobs
- Population impacted
- Environmental justice



Delaware County's Path Toward Zero Waste



NPS/Michael Cuff

Delaware County, Pennsylvania Municipal Waste Management Plan 2023-2033 Non-Substantial Revision

Office of Sustainability March 2024





Delaware County, PA is home to the nation's largest waste incinerator, in the City of Chester. It is the largest industrial air polluter in the county, and the county is now moving away from incineration.

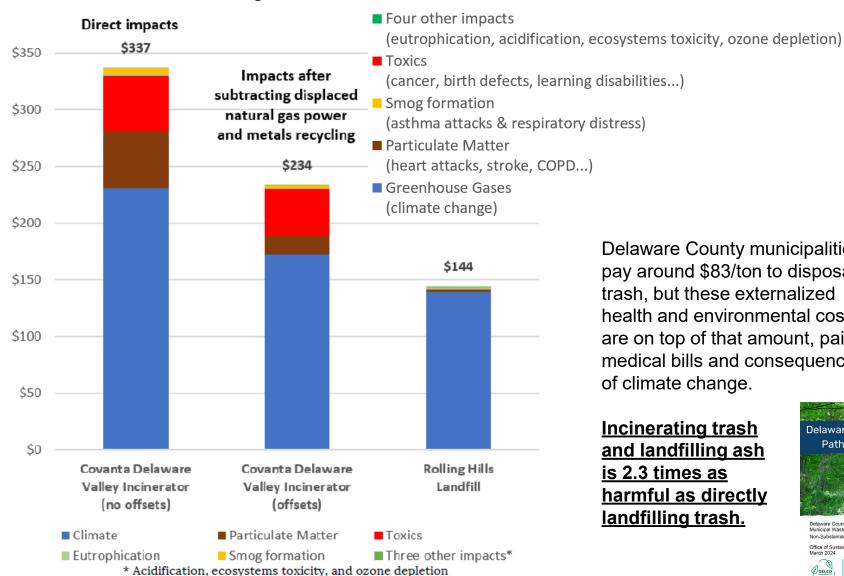
The county's Zero Waste Plan includes a comprehensive life cycle analysis (LCA) of incineration vs. landfilling vs. zero waste.

Find the draft plan <u>here</u> and the LCA summary and full writeup <u>here</u>.

Results on the next few slides.

Incineration vs. Landfilling

Health & Environmental Impacts per Ton of Waste Disposed at Covanta Delaware Valley Incinerator vs. Rolling Hills Landfill



Delaware County municipalities pay around \$83/ton to disposal of trash, but these externalized health and environmental costs are on top of that amount, paid in medical bills and consequences of climate change.

Incinerating trash and landfilling ash is 2.3 times as harmful as directly landfilling trash.

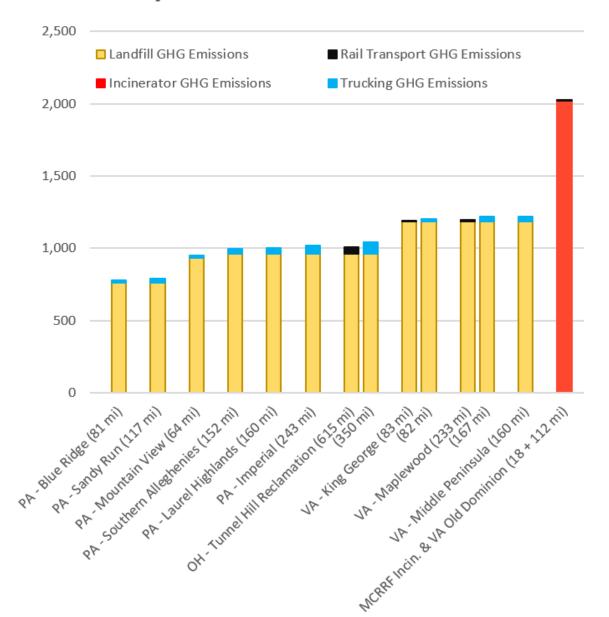


Delaware County, Pennsylvania Municipal Waste Management Plan 2023-2033



Transportation Impacts Insignificant

20-year CO₂e (lbs/ton of waste disposed)



Transportation climate impacts (blue/black) are minor compared to incineration (red) or landfilling (vellow), and no realistic transportation distance can justify incinerating in-county over hauling waste to distant landfills.

Source: Life Cycle Analysis (LCA) from 2021 report, "Beyond Incineration: Best Waste Management Strategies for Montgomery County, Maryland" www.energyjustice.net/md/moco

Beyond Incineration:

Best Waste Management Strategies for Montgomery County, Maryland

Prioritizing:

- Cost-effectiveness
- Human health & safety Climate protection
- Continuous waste reduction

Prepared for: County Executive Marc Elrich

By: Zero Waste Montgomery County

Underwritten by: Sugarloaf Citizens' Association www.sugarloafcitizens.org

Principal Author: Mike Ewall, Esq. **Energy Justice Network** 215-436-9511

Montgomery

County

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Scott Rockafellow, M.B.A. Neil Seldman, Ph.D.

Montgomery County resident Rail-haul Consultant Montgomery County resident Montgomery County resident Sound Resource Management Group

March 2021

www.energyjustice.net/md/beyond.pdf

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Where would Philly's waste go if we don't burn it?

- Pennsylvania has a problem with TOO MUCH landfill space, making the state a magnet for dumping.
- Pennsylvania has been the nation's #1 importer of trash since it was first studied in the early 1990s, accepting trash

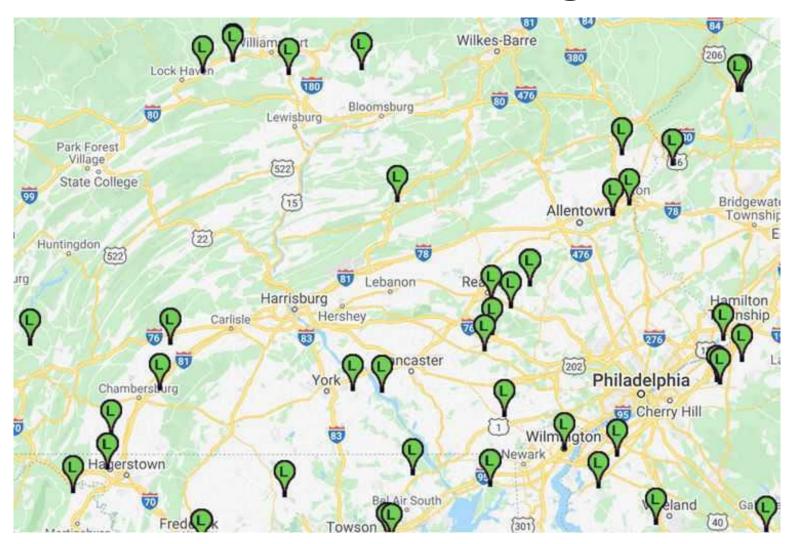
and Canada.

from 44 states, DC, Puerto Rico, the Virgin Islands, Bermuda,

States that have NOT dumped on PA:

Pennsylvania has 43 landfills and six trash incinerators.

Landfills in our Region



Sources: Energy Justice Communities Map: : http://www.energyjustice.net/map/jtiny=4782

PA Department of Environmental Protection, Municipal Waste Landfills and Resource Recovery Facilities:

 $\underline{\text{https://www.dep.pa.gov/Business/Land/Waste/SolidWaste/MunicipalWaste/MunicipalWastePermitting/Pages/MW-Landfills-and-pages/MW-Landf$

Resource-Recovery-Facilities.aspx

Philly's Waste Contracts

Summer 2019:

- Covanta $-1/3^{rd}$ of Philly's trash
- Waste Management 2/3rds of Philly's trash

Both contracts are 4 years plus three 1-year renewal options

Approximately the same price.

Contract expires 6/30/2026



City of Philadelphia

	BILL NO Introduced, 2025	
Council	lmember	
	Referred to the Committee on	
	AN ORDINANCE	

Amending Title 17 of The Philadelphia Code, entitled "Contracts and Procurement," by adding language to bar the City from contracting with companies that cause the city's municipal solid waste or recyclables to be incinerated; all under certain terms and conditions.

Waste Contracting for Clean Air Act

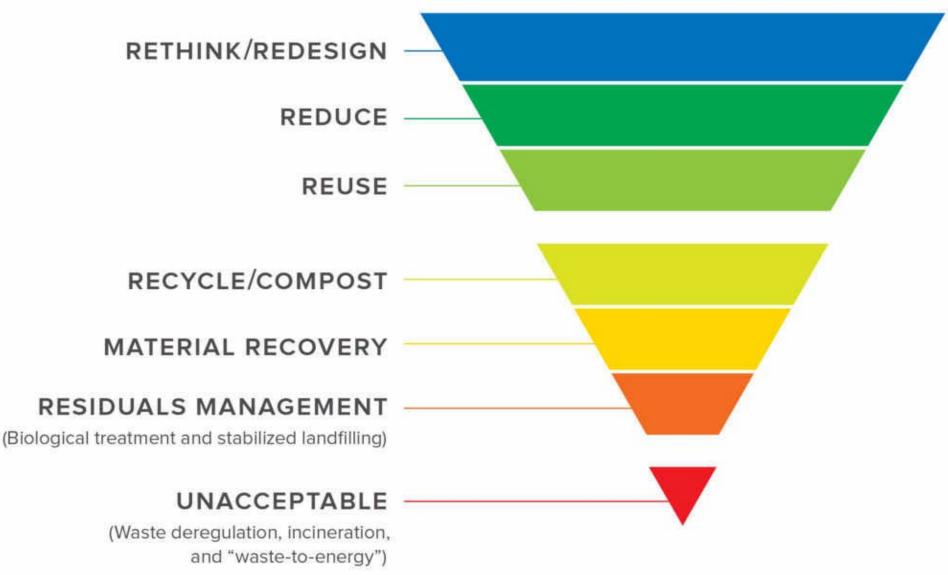
THE COUNCIL OF THE CITY OF PHILADELPHIA HEREBY ORDAINS:

SECTION 1. Title 17 of The Philadelphia Code is hereby amended to read as follows:

TITLE 17. CONTRACTS AND PROCUREMENT.

* * *

THE ZERO WASTE HIERARCHY



Recent History of Philly's use of Trash Incineration:

- 2012: Philly signs 7-year contract to burn about 1/3rd of our trash 2019: Philly does it again, over the opposition of 41 groups
- <u>2023:</u> Issue surfaces in primary election mayoral debate with candidate Jeff Brown responding "Chester is Chester" re: burning waste there.
- Oct 2023: First city council hearing on Philly burning its trash; Philly residents oppose burning!
- 2025: Councilmember Gauthier pushing the city on it and brought it up in budget hearings. Department of Sanitation still pro-incinerator, but getting pressure from Office of Sustainability and Councilmember Gauthier. Sanitation saying they can ditch incineration if they can get Republic (2nd largest waste hauler) to the table. They claim they're willing to put in environmental criteria in the request for proposals (RFP) for new waste contracts, even if we have to pay a little more to not incinerate, but don't favor banning incineration from the RFP. Request for Information (RFI) in summer got great responses (like ours!) on zero waste, ending incineration, and interest from Republic.

www.PhillyZeroWaste.org/sign

Sign-on to End Philly Waste Incineration

July __, 2025

Re: Philadelphia Waste Contracts

Dear Mayor Parker:

Philadelphia's Sanitation Department is currently considering new contracts for where our city's trash will go for the next seven years. We write to urge you to instruct the Sanitation Department NOT to award any contracts for burning our trash.

Burning trash and landfilling toxic ash is the most expensive and polluting way to manage waste or to make energy. It's dirtier than coal power plants and is more polluting than landfilling our waste directly without burning it first. For every 100 tons burned, 30 tons end up as toxic ash that still is dumped in landfills, making landfills smaller, but more toxic. The other 70 tons come out of incinerator smokestacks, contributing to air pollution and related health problems.

Since 2019, under our current contracts with Covanta and Waste Management, 39% of the city's trash has been sent to incinerators; the rest to landfills. In 2024, it was just under 37%. All three Pennsylvania incinerators we use – in Delaware, Montgomery, and Bucks Counties – are among the top five industrial air polluters in the five-county Philadelphia area. The top air polluter is the one in Chester, which accepts the lion's share of the trash our city burns.

We are concerned about this incineration contract for several reasons:

Health: the three incinerators surrounding Philadelphia are among the region's four largest emitters of nitrogen oxide (NOx) pollution which triggers asthma attacks. Asthma is a leading cause of missed school and work days, and is a serious problem for our city.

Signers so far...

Mike Ewall, Esq. Executive Director, Energy Justice Network

B. Preston Lyles, Sr., M.S. Higher Ed. Leadership, M.Div. Organizer, Delco Environmental Justice

215 People's Alliance
Beyond Plastics
ECHO Systems
McKean County Green Party
Move Past Plastic
Philly Thrive
Physicians for Social Responsibility PA
Save our Susquehanna
Sierra Club Southeastern PA Group
Toxic Prisons Campaign of the Human Rights Coalition
Zero Waste USA

Learn more here...

www.PhillyZeroWaste.org/ContractFAQ.pdf

www.PhillyZeroWaste.org

www.DelcoEJ.org

www.EnergyJustice.net/incineration



www.EnergyJustice.net

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