

FAQ:

Zero Waste Resolutions & Covanta Trash Incinerator

1. What is Zero Waste?

The internationally accepted definition from Zero Waste International Alliance defines Zero Waste as:

"the conservation of all resources by means of responsible production, consumption, reuse, and recovery of products, packaging, and materials without burning and with no discharges to land, water, or air that threaten the environment or human health."¹

Zero Waste is accompanied by a Zero Waste Hierarchy, from highest to lowest priority, governed by seeking the highest and best use of materials:²

- Rethink/Redesign
- Reduce
- Reuse
- Recycle/Compost
- Material Recovery
- Biological Treatment
- Stabilized Landfilling

2. In general, why is a Zero Waste resolution important to adopt?

Having a municipality adopt a Zero Waste resolution is a critical early action and launch point. It generates awareness of how trash is currently being managed and the health and environmental implications of these methods. It changes the dialogue from *managing waste* to *eliminating waste*, and establishes waste reduction as a priority principle.

A resolution begins the process of implementing Zero Waste strategies and provides a framework for planning, funding and community development. The municipal system begins to change and model sustainable practices.

Resources:

- (1) *[Draft of Zero Waste Resolution for Delco Municipalities](#)*
- (2) *[Eco-cycle - Zero Waste Solutions](https://www.ecocyclesolutionshub.org/take-action/zero-waste-resolution-toolkit/)*
- (3) *[More links available at chesterresidents.org/zero-waste](http://chesterresidents.org/zero-waste)*

¹ <http://zwia.org/zero-waste-definition/>

² <http://zwia.org/zwh/>

3. In Delco, why is it so important that municipalities adopt these resolutions quickly?

Covanta contracts with Delaware County Solid Waste Authority (DCSWA) which oversees all the trash management in Delaware County. The 10-year contract is due to expire in 2022 and ***the contract renewal is up for consideration as early as May 2021.***

By having resolutions adopted in multiple municipalities, it demonstrates to Delaware County Council the political will and community drive to move towards Zero Waste and end the toxic incineration of the county's trash in Chester by switching to the less polluting and often less expensive option of landfilling.

Another important reason the Covanta contract is bad for the community and should not be renewed is the "put-or-pay" clause included in their contracts. The "put-or-pay" basically states that if DCSWA does not deliver to Covanta a certain tonnage of trash, it will need to pay regardless. It disincentivizes any efforts to reduce trash, recycle or compost.

Resources:

(1) *Covanta's waste contracts*

<https://www.chesterresidents.org/covanta/wastecontracts/>

(2) *Covanta contract with DCSWA*

<http://chesterresidents.org/pdf/wastecontract-delco.pdf>

4. Why is incineration harmful? Why is it worse than landfilling?

Incineration is the worst way to process trash and is the most polluting and expensive way to create energy. Incinerators release many air pollutants, including nitrogen oxides, sulfur dioxides, particulate matter, lead, mercury, dioxins and furans. These substances are known to have serious public health effects, from increased cancer risk to respiratory illness, cardiac disease and reproductive, developmental and neurological problems. According to recent figures from the waste industry, incinerator plants emit more sulfur dioxide, nitrogen oxides and carbon dioxide per unit of electricity generated than power plants burning natural gas.³

The Covanta incinerator in Chester is the largest trash incinerator in the United States, with the capacity to burn up to 3,500 tons of trash daily. It creates more air pollution and emits more particulate matter than any other such facility in the U.S and has the fewest pollution controls. It lacks any controls for nitrogen oxides or for highly toxic mercury and dioxins.⁴ Only 1.6% of the trash burned is from Chester, and a total of 29% is from Delaware County. The remaining is brought in by truck or rail from NYC, New Jersey and Philadelphia.

For every 100 tons burned, about 30 tons become toxic ash that must be landfilled, resulting in a smaller, but more toxic, landfill. The other 70 tons become air pollution, spread across Delaware County and beyond.

³ <http://www.energyjustice.net/incineration/>

⁴ <http://www.ejnet.org/chester/pollutioncontrol.html>

A 2010 study found that 38.5% of children in Chester have asthma, which is 5x the national average, and 3x the state average. 25% of Chester adults have asthma.⁵

Covanta is also one of the worst lead polluters in the city. Lead poisoning can lead to cognitive delays, behavioral issues and seizures. Exposure to lead in childhood has been associated with increase in aggression, decreases in impulse control and IQ. Studies have found that communities exposed to air pollution are more likely to have violent crimes.⁶

A 2019 study published in the *International Journal of Environmental Research and Public Health* found evidence that people living in proximity to an incinerator have an increased risk of all types of cancer. Studies on incinerators in France and in Italy have suggested an increased risk of non-Hodgkin lymphoma, soft-tissue sarcoma, lung cancer, and neoplasia of the nervous system and liver. Other studies have reported increases in respiratory diseases or symptoms in populations residing near incinerators and in children. Other epidemiological studies on incinerators have shown an excess risk of cardiovascular diseases and urinary diseases.⁷

Other Resources:

(1) *Covanta Health Fact Sheet:*

<http://www.energyjustice.net/incineration/healthstudies.pdf>

(2) "Report: Waste Incineration: A Dirty Secret in How States Define Renewable Energy"

<https://ilsr.org/waste-incineration-renewable-energy/#:~:text=Incinerators%20generate%20harmful%20pollution%20posing,%5B27%5D%20and%20hazardous%20ash.>

5. Who is DCSWA and what is their role?

Delaware County Solid Waste Authority (DCSWA) is responsible for the processing of all Delaware County trash and contracts directly with Covanta. Municipalities are contracted to bring the Authority all of the trash collected from their towns to one of the transfer stations in Chester or Marple Townships. The trash is transferred to trailers where it is taken to Covanta in Chester City where it is burned.

A small percentage of County trash is taken to Waste Management's Fairless Landfill. The Authority also accepts and processes commercial waste from within the County. The Authority also owns and operates a landfill in Berks County, PA where they accept ash from Covanta and trash from other sources close to the site.

DCSWA operates as its own governing body with board members appointed by Delaware County Council. Each member is appointed for a specific term length when appointed by Council.

Excerpt from DCSWA website:

⁵ PA Department of Health, 2010. <http://www.ejnet.org/chester/asthma.html>

⁶ <http://www.ejnet.org/chester/pollutioncontrol.html>

⁷ <https://pubmed.ncbi.nlm.nih.gov/31405116/>

The Delaware County Solid Waste Authority is responsible for:

- *Issuance of permits for all commercial and residential vehicles to dispose of trash at the Transfer Stations;*
- *Monitoring of trash at the Transfer Stations and enforcement of County ordinances dealing with refuse collection, permitting, and disposal;*
- *Planning, developing, designing, and administering - in cooperation with other appropriate departments and agencies of government - the expansion and modification of facilities for which the Solid Waste Authority is responsible;*
- *Advising County Council on matters pertaining to the responsibilities of the Authority;*
- *Providing management through inspection, coordination, and approval of payments for the transferal of trash materials;*
- *Obtaining and administering state funding available for the enhancement of recycling and other programs for which the Authority is responsible.⁸*

Resources:

(1) 2019 Report – Financial Audit of DCSWA (see pg. 8 for financial overview)

<https://www.delcopa.gov/controller/pdf/2020/DELCOSolidWaste2019FS06.03.20.pdf>

6. If we succeed in stopping the Covanta contract renewal, where will the Delco trash go?

DCSWA owns a landfill in Berks County that currently accepts toxic ash from Covanta and trash sources from other communities. Toxic ash is extremely harmful and more toxic than landfilling waste. The debris can easily blow away and toxic chemicals are more easily leached into groundwater quicker than regular trash. For every 100 tons of trash burned, 30 tons become toxic ash that must be landfilled and the remaining 70% becomes air pollution.

Delaware County can switch to landfilling by utilizing the landfill already owned by the County, thus saving expenses in tipping fees. Additionally, PA is one of the biggest trash importers in the U.S. due to its glut of landfill space. PA is to landfills what Saudi Arabia is to oil. PA accepts trash from New York, New Jersey, and up and down the eastern seaboard.

There are sufficient landfill options in the surrounding area to accommodate a transition from incineration to landfill, and it can be done quickly. The excuse that there is not enough time or it will be too costly is false and inaccurate.

In recent years, each of these communities had to promptly switch due to an incinerator temporarily or permanently closing:

- (1) Hartford, CT
- (2) Fairfax, VA
- (3) Detroit, MI

7. What is Save as you Throw/Pay as you Throw (PAYT)?

⁸ <https://www.delcopa.gov/departments/swa.html>

Pay as you Throw (PAYT) or Save as you Throw (SAYT) are the same concept and sometimes referred to as “unit pricing.” PAYT is the most self-explanatory so this term is preferred.

For utilities like electricity, water and gas, individuals pay by how much they use. In contrast, trash isn't managed based on individual consumption or personal demand - meaning your neighbor could put out ten bags of trash a week, and your household could put out one, and both households will pay the same amount. The system of “one size fits all” is failed, especially as those who generate the most waste are sometimes the least impacted by the pollution, and is not conducive to waste reduction strategies.

With programs like, Pay-as-you-Throw (PAYT), people pay per bag or per bin. This program is currently being utilized in over 7,000 communities in the U.S. and has been shown to be the most effective and cost-effective way to quickly and substantially reduce waste.

On average, communities using "Pay as you Throw" programs find a 44% reduction in waste disposal per person, and other studies have shown around a 28% decrease in total discards (waste plus recycling) due to people reducing and reusing more, which saves individuals and local governments money and resources, and improves environmental sustainability in waste management.⁹

Case Study of PAYT:

- *Concord, New Hampshire:*
<https://apnews.com/article/af1721651f5148c5af532d1435039d4e>

8. Why are the terms “waste-to-energy” and “trash-to-steam” inappropriate to describe trash incineration?

There is no such thing as waste-to-energy. "Waste-to-energy" is a public relations term used by incinerator promoters. Burning garbage to generate power is neither clean nor renewable, and it is the most expensive and polluting way to make energy.

Incinerator companies have done a great job green-washing their true impacts on communities by implying that so-called “waste-to-energy” facilities are good neighbors offering a safe process that eliminates waste, allows for robust recycling programs, and generates renewable energy. Nothing could be further from the truth. The reality is burning waste harms the health, environment, and economy of many communities.

Scientifically, there is no such thing as "waste-to-energy." Matter cannot be turned into energy without a nuclear reaction, and thankfully, that's not what happens with incinerators. What is actually happening is that waste is turned into toxic ash and toxic air emissions while a small fraction of the energy in the waste is recovered in the process¹⁰.

⁹ <https://archive.epa.gov/wastes/conserve/tools/payt/web/pdf/payt.pdf>

¹⁰ <http://www.energyjustice.net/incineration/waste-to-energy>

In the environmental advocacy community, we've come to call them "waste-OF-energy" facilities because we know that recycling and composting the same discarded materials saves 3-5 times as much energy as incinerators can recover.¹¹

Many state and local policies also define "renewable" energy in ways that make trash burning eligible for additional incentives, including tax breaks or economic development programs.

The perverse designation of incineration as "renewable" subsidizes a practice that wastes energy, kills jobs, and produces toxic pollution. Including incineration in legal definitions of renewable energy hampers investments in cleaner, more equitable sources of local energy and waste management alternatives.

Additionally, incineration creates the fewest amount of jobs when compared to landfilling or to Zero Waste strategies such as reuse, recycling and composting.

9. What will happen to Chester City if Delaware County stops burning trash at Covanta?

Covanta contributes roughly 5 million in annual revenue to the City of Chester, which is about 9% of the city budget. The county's contribution of waste to the incinerator is 28%, amounting to about \$1.4 million. It's important that if Delaware County stops burning trash in Chester, that the county makes Chester City whole by providing financial support to close any budget gap and make up for decades of pollution and harm to community health.

The long-term health and environmental impacts and external costs of operations are not considered in their contributions to the city budget. The health and well-being of the people should not be sacrificed for this source of income, when there are plenty of cleaner businesses that could replace Covanta and other polluting facilities on the waterfront.

A 2017 study from the New York University School of Medicine found that just one pollutant (fine particulate matter, or "PM2.5") from the Wheelabrator Baltimore trash incinerator is causing an estimated \$55 million in annual health costs to residents across several states, mostly from cutting people's lives short.¹²

Zero Waste solutions such as material reuse, recycling and composting can provide 5-10 times as many jobs and alternative sources of revenue to Chester City, without the harmful impacts of incinerator pollution.

Additionally, the incinerator has led to decreased property values in the neighboring area and a sharp decline in home ownership since it first opened in 1992. The community is

¹¹ "Recycling versus incineration: an energy conservation analysis" Journal of Hazardous Materials.

<https://www.sciencedirect.com/science/article/abs/pii/S0304389495001166>

¹² Written Report of George D. Thurston Regarding the Public Health Impacts of Air Emissions from the Wheelabrator Facility, Nov. 20, 2017. www.cleanairbmore.org/uploads/wheelabrator-health-impacts.pdf; see also the health and environmental costs of incineration in the Philadelphia area discussed in this letter to Philadelphia from the American Sustainable Business Council: www.asbcouncil.org/sites/main/files/file-attachments/waste_contract_asbi_business_letter.pdf

disproportionately impacted by the pollution generated from the facility, which is proving to be detrimental to residents, most considerably to asthma and lead poisoning among Chester youth.

Covanta stated in January 2021 that only six of their 105 salaried employees live in the City of Chester.

10. What is Chester's receivership status?

Receivership is the process in which the state appoints a manager with a degree of direct control over local finances to avoid bankruptcy. Chester first entered the Municipalities Financial Recovery Act, or Act 47, in 1995. In April 2020, Governor Wolf declared a Fiscal Emergency in Chester and appointed Michael T. Dowearry as the city's Receiver.

Mr. Dowearry and a team of advisers work with the city to restructure services and financial liabilities to avoid bankruptcy and harm to residents. Under Pennsylvania's Municipalities Financial Recovery Act, the goal is to get the city financially solvent and on a path toward economic recovery.

"The City of Chester has been subject to Commonwealth financial oversight under the Municipalities Financial Recovery Act (Act 47 of 1987) since 1995. While other communities have successfully exited oversight or made progress toward doing so, Chester continues to struggle with multi-million dollar deficits, past due obligations to its employee pension plans, and very marginal investments in the infrastructure that Chester residents and businesses use every day.

On April 13, 2020, following the onset of the novel coronavirus COVID-19, Governor Thomas Wolf declared a Fiscal Emergency in Chester. According to Act 47, the Governor may declare a fiscal emergency when a municipality is insolvent or projected to be insolvent within 180 days or when that municipality is unable to ensure the continued provision of vital and necessary services, such as police patrol, fire suppression and public works functions. The pandemic has had a deeply negative impact on Chester's fiscal condition, cutting City government's largest revenues and halting critical services¹³."

– [Receivers Recovery Report](#)

Resources:

(1) Chester Receiver Website: <https://www.chesterreceivership.com>

¹³ Receiver's Recovery Report: https://static1.squarespace.com/static/5f721f5325ced83982f1d194/t/5f7b580145b2d750b4c1debc/1601918983266/Chester-Receiver-Recovery-Plan_FINAL_20200820.pdf

11. If Delco stops sending trash to the incinerator, will Covanta just replace it with outside trash sources?

Delco currently sends about 78% of its trash to Covanta incinerator. Delco's trash makes up 29% of Covanta's daily burn. Here is where the rest of the trash is coming from:

Philadelphia – 33%
Delaware County – 29%
New Jersey – 17%
Delaware (rerouted NYC trash) – 16%
New York – 3%
Ocean City – 2%
[2019 data from PA DEP¹⁴]

29% is a large amount of trash to withdraw from Covanta, and it will be difficult for them to quickly replace this amount. In 2013, Covanta contracted with NYC to take 20-30 years of Manhattan trash by train. Prior to that contract, they were operating as low as 75% capacity, showing that waste doesn't magically materialize to fill a big gap without a major contract.

Philadelphia's contract with Covanta comes up for the first of three 1-year renewal options in the summer of 2023.

12. Will it cost more to switch to landfilling?

In general, incineration is the most expensive and polluting way to manage trash. Incineration may be cheaper in this area because the incinerator is the largest in the country and operates with the fewest pollution controls. Even if landfilling turns out to be slightly more expensive, exiting the incinerator contract allows for waste reduction efforts that can more than mitigate these costs.

Because the county owns their own landfill, there would be less concern over tipping fees. As the resolution states, the switch to landfilling is coupled with Zero Waste programs that will reduce the amount of waste through recycling, composting, resource recovery and other strategies.

Other communities that have adopted Zero Waste resolutions and programs have seen a drastic reduction in waste going to landfill. There are many benefits besides costs when switching from incineration to landfilling and Zero Waste.

If you have further questions and would like to learn more about the resolutions or CRCQL and the Environmental Justice movement, please reach out to us!

Visit www.chesterresidents.org
Email getinvolved@chesterresidents.org
Call 484-206-5180

¹⁴ http://cedatareporting.pa.gov/reports/powerbi/Public/DEP/MM/PBI/Solid_Waste_Disposal_Information