Works Cited

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Incineration Stinks! COVANTA Marion's Dark Dealings and Anti-Incineration Activism

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Intro to Incinerators

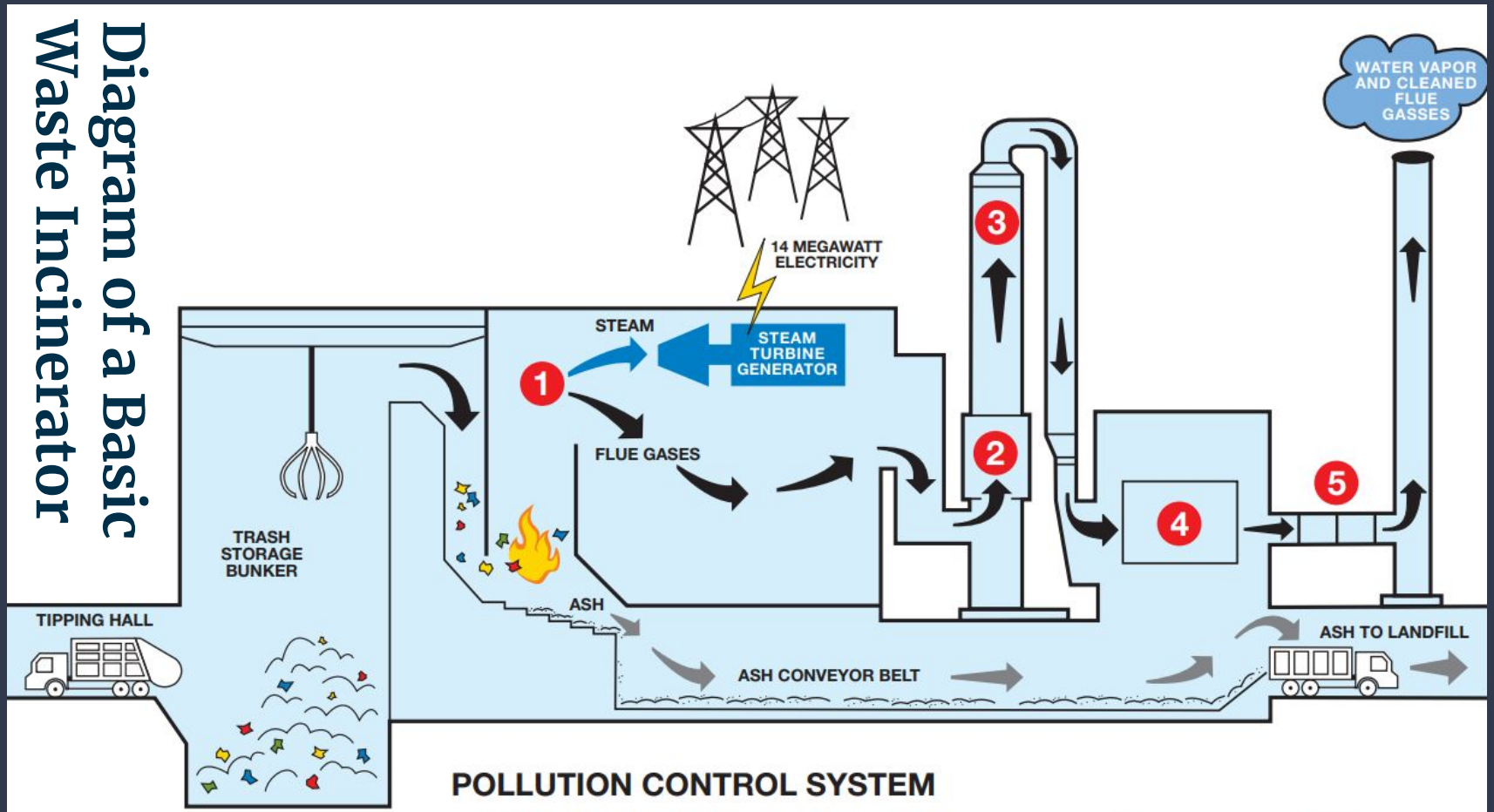
Waste incinerators have been used in America since the late 19th century, but it was not until the 1960s that we knew much about how environmentally harmful they are. With the passing of the Clean Air Act in 1970 and the EPA's MACT regulations in the 90s, incinerators were forced to either shut down or retrofit their facilities with pollution - preventing technologies.

Incinerators are industrial plants that burn the waste we throw away. This waste is not just erased off the face of the earth, however. It is converted to ash and smoke. The solid waste is converted into ash, which weighs around 15-25% what it did before combustion. Ash forms from the burning of the waste as well as from the smoke. The ash that forms from the smoke is called fly ash, and it is **extremely toxic.** This ash is present in the smoke released from incinerators, especially when it is not filtered well. Ash that is collected at the bottom of the incinerator is then disposed of in a landfill. When 100 tons of waste is burned, it yields 30 tons of toxic ash that is then disposed of in landfills, and 70 tons of air pollution. Due to the air and groundwater pollution, incinerators are a worse option for waste management than all of their alternatives.

Small incinerators require at least $100 million up front to build, with large plants needing up to triple that. Building and operating a new factory increases traffic pollution on top of the pollution from the plant itself. Recycling plants are more economically beneficial and produce more jobs in the long run.

Diagram of incinerator found on pg. 2

Diagram of a Basic Waste Incinerator



POLLUTION CONTROL SYSTEM

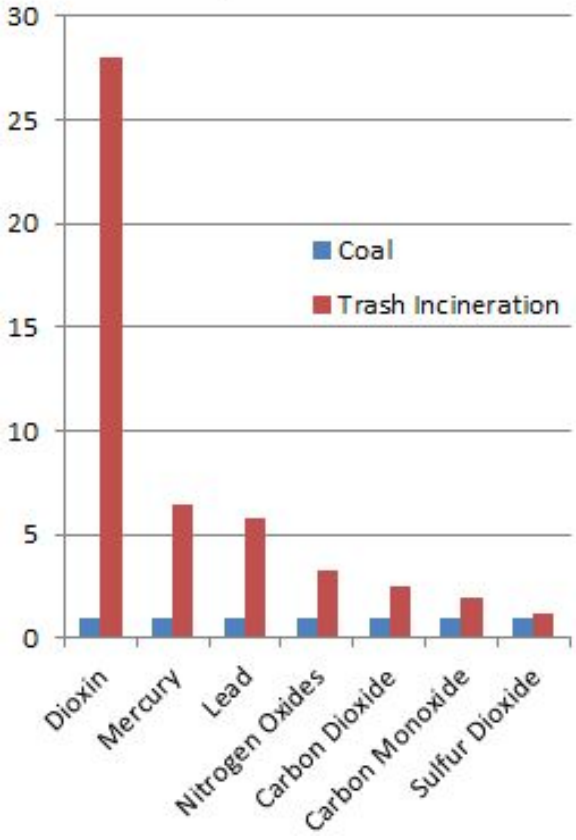
1. NITROGEN OXIDE REMOVAL SYSTEM
2. MERCURY & DIOXIN REMOVAL SYSTEM
3. ACID GAS REMOVAL SYSTEM
4. PARTICULATE REMOVAL SYSTEM
5. POLLUTION CONTROL TESTS

Harmful Effects

Garbage incinerators release pollutants and toxins into the air and ground through smoke and ash. While incinerators are required to have pollution-control measures in place, like air filtration, they still release more pollution than is released during the production of one unit of energy at a coal plant.

Dioxins, mercury, and lead are all released in significant amounts from even the most modern waste incinerators. In New York, a 2009 analysis found that the state's incinerators were even releasing more mercury than their coal plants were in total. Not only do these toxins **harm the environment** and support climate change, they have **harmful effects on the human body and brain.**

Number of times more polluting trash incineration is per unit of energy compared to coal



Harmful Effects

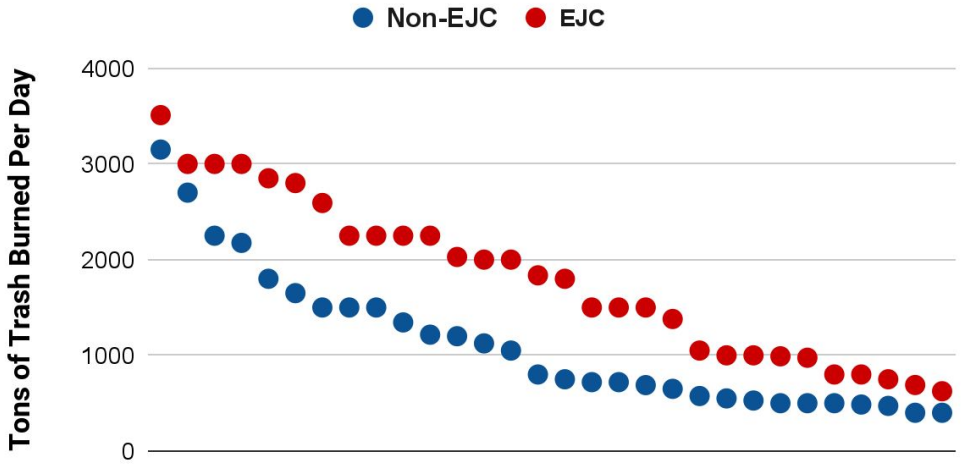
Environmental Justice

80% of active incinerators in the United States are located in environmental justice communities (neighborhoods where >25% of the community is a person of color, low income, or both) as well as in areas with high population density. The incinerators with the most emissions were even more likely to be found inside environmental justice communities.

This makes fighting against waste incineration **more than just a climate issue; it is also an issue of environmental racism** and should be explored through the lens of climate justice.

The chart below compares the amount of waste incinerated each day in the largest 30 incinerators in environmental justice communities with the largest 30 found in non-EJ communities.

Largest Incinerators in Environmental Justice Communities and non-EJ Communities



A Dying Breed: Why are Incinerators Shutting Down?

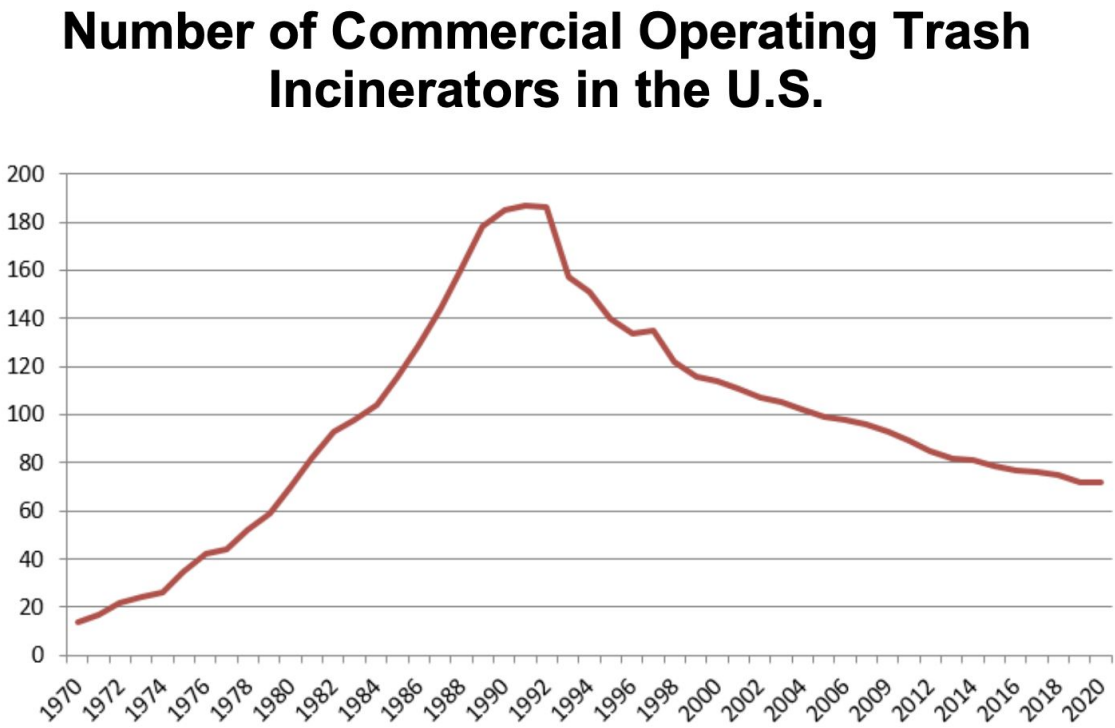
Incinerators are not built to last forever. The average lifespan of incinerators in the United States is 23 years. Despite the attempts of Covanta to frame incineration as the green energy alternative of the future, incinerators are routinely closed due to hemorrhaging funds, lack of demand, or simply being outcompeted by other forms of energy production. **In fact, no new incinerators have been built on new sites in 27 years.**

The last new incinerator was built in 1995, with a steady decline from a peak of nearly 190 to just 75 today.

The rising popularity of zero-waste efforts is emblematic of a market in which incineration is even less advantageous. Incinerators are struggling even with the current rates of waste production to burn enough to break even. They are simply too expensive, inefficient, and disruptive to the communities they occupy.

A Dying Breed Contd.

The graph below, courtesy of Energy Justice Network, illustrates the overestimated need for incineration followed shortly after by a sharp decline due to lack of demand and insufficient amounts of waste to actually burn. As the years progress many shut down due to budget issues,



If This is True, How Have Incinerators Lasted So Long?

Covanta Marion's violations and intentionally unincorporated locations are par for the course in terms of incinerator operation. Citizens in cities like Detroit, MI, Los Angeles, CA, and Hartford, CT have openly and regularly criticized local facilities since their construction for the threat they pose to the health of residents of nearby communities. Unfortunately this outrage has been largely unfruitful because these facilities tend to reside in poorer neighborhoods with large communities of color.

Popular incinerator locations include unincorporated towns and interstate-adjacent plots. The longevity of incineration is no doubt bolstered by the limited potential for community organization in small towns and a wholly ineffective government regulation of waste-to-energy facilities.

Even when these violations are punished it often comes in the form of a fine, that compared to millions in construction and operation costs is ultimately inconsequential.

How Have Incinerators Lasted So Long? Contd.

The issue with the system lies in fundamental flaws in the regulations of incineration. Emissions testing is shoddy at best, and knowing what we know about oversights in testing from other incinerators, we should be very suspicious of Covanta Marion's impact on the surrounding environment. It is even more concerning that **Covanta is well within their rights to contract a private company to test.** Internally contracted testing raises a host of concerns. Covanta is not only responsible for releasing their own report, but are fully aware of when the testing will take place, **they are even able to arrange for relatively cleaner waste to be burned ahead of time, which they have long been suspected of doing.** The avenues available for Covanta to cherry pick data while also contorting and obscuring the results are numerous, and they have done everything in their power to leverage this.

Successful Opposition to Incineration

In the case of Detroit's incinerator, and many others, the greatest threat to incineration as a viable fuel alternative is itself. **Burning trash is a deeply inefficient and extremely costly process** that is being met with growing opposition in cities across the country.

The truth is that Covanta and similar companies have no choice but to import trash and burn anything and everything: including hazardous and medical waste, this spurred one notable incident in which Covanta was accused of burning fetuses led to national attention, even after the allegations were denied, The negative attention has lingered and prompted further investigation. They continue to burn this because it is simply too expensive not to keep a constant burn. **The number of corners these incinerators choose to cut in the pollutant output testing further proves that they cannot exist if met with actual, authoritative punishments rather than petty fines.**

Detroit's Victory and Path to Opposition

Detroit's decisive victory is a direct result of grassroot groups raising awareness, this took years but local lawmakers have grown increasingly wary of the incinerator's repeated violations, underwhelming financial returns, and an increasingly organized community with voting power and platforms to speak out against this environmental injustice.

Covanta Marion is already receiving similar treatment from Oregon lawmakers, **twice the incineration facility has filed for a renewable energy designation and twice it has been struck down.** Shortly after Covanta received a $15,000 fine for its pollutant output.

COVANTA Marion

Just a few miles outside of Salem lies our very own COVANTA waste incinerator. As the public has become more concerned about climate change and emissions, COVANTA has tried their best to appear good in the public eye. Through massive efforts of **greenwashing** as well as **under-reporting emissions** and using cherry-picked statistics, COVANTA has remained in operation close to our city. They took greenwashing literally; their website is blue and green themed. They tout their "sustainable" waste solutions and energy production through natural gas.

Underneath all this, though, we know that **COVANTA is not safe.** Like other incinerators, it pollutes our air and our land. COVANTA Marion is allowed to release higher levels of toxins due to the building's age and was found to be **one of Oregon's top 20 CO2 polluters**. The incinerator itself is in Brooks, OR, an area that meets many of the requirements to be considered an environmental justice community.

COVANTA Marion

The Marion County incinerator not only burns Salem's municipal waste, but also **out-of-state medical waste** that is even more polluting than municipal waste. COVANTA Marion exceeded the emission limits for hospital incinerators for **lead, mercury, carbon monoxide, and other toxic substances.**

COVANTA is burning moe dangerous medical waste than large medical incinerators, but **is not regulated the same way** that they are because of its classification as a municipal waste incinerator. Incineration creates more greenhouse gases than any alternative; so **what is the answer?**

The COVANTA Marion plant lies close to the local childcare facility, exposing those children to high levels of toxins.

Anti-Incineration Activism in Marion County

Testing done by local scientists and activists has taken place, in which moss samples are studied and used to evaluate the ambient pollution produced and scattered by the Incinerator onto adjacent land. **Environmentalists such as Susann Kaltwasser have been participating in anti-incineration activism for decades, even from the time of construction.**

The support for Waste-to-Energy at the time was largely drummed up by misleading figures and posturing similar to what is going on today.

Unfortunately those that are most affected by this issue are hit the hardest by the physiological effects. In a lecture given by Mrs. Kaltwasser, she reflected on the friends in the movement that she has lost to illnesses that are linked to the myriad harmful chemicals that Covanta Marion spews every day, and **“when it doesn’t kill you it makes your life very bad”.**

Zero Waste

We have gone over the detrimental effects of waste incinerators, but we know that landfilling all of our trash is also bad for the environment. The most effective way to stop waste from being such a dangerous climate crisis instigator is to dramatically decrease the amount of waste we produce as a society, a movement called Zero Waste. Seattle has been working towards zero waste since the early 2000s, aiming for a community where waste can be repurposed and industries design products with a zero waste outlook in mind.

A Zero Waste plan from DC starts with the goal of diverting 70% of waste from landfills. Important steps include: building better recycling centers, charging houses for the amount of trash they produce, composting food scraps and organic materials, and repairing and reusing waste whenever possible.

The Zero Waste movement may have become an online individual aesthetic, but it could be a great solution if applied in the right contexts.


RETHINK/REDESIGN
REDUCE
REUSE
RECYCLE/COMPOST
MATERIAL RECOVERY
RESIDUALS MANAGEMENT
(Biological treatment and stabilized landfilling)
UNACCEPTABLE
(Waste deregulation, incineration, and "waste-to-energy")
THE ZERO WASTE HIERARCHY

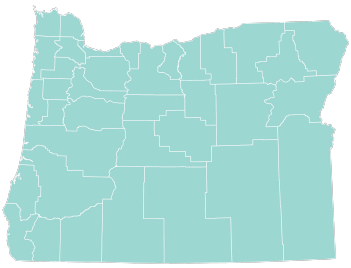
Zero Waste

However, it is also important to **avoid the individualization of responsibility**, and ensure that policies are put in place to make corporations participate in zero waste efforts even more than individuals. NPR reported that **20 companies are responsible for 55% of the world's single-use plastic waste,** and 100 companies are responsible for over 90%.

This is why it is essential to **demand that corporations are held accountable** for the waste they produceand not allowed to pass all of the blame onto individuals.

Get involved in local zero waste efforts and contact your representatives and tell them to support zero waste for all of Oregon to create a healthier world for all.

Who represents you in the government? Scan one of these QR code to find your local elected officials to find out who to call!



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