



DECADES OF DENIAL

The Environmental Injustice of EPA's Failure to Regulate Incinerators

The U.S. Environmental Protection Agency (EPA) is responsible for regulating air emissions from large municipal solid waste incinerators. Congress required EPA to set emission standards and regularly update these emission standards to ensure that pollution from incinerators is reduced to the maximum extent possible. EPA has repeatedly failed to do this, resulting in unnecessary harm to community members who live near these incinerators and are exposed to the pollution from these facilities. After over a decade of delay and inaction, EPA is now finally planning to take action. When EPA does so, it must adopt the strongest possible standards to protect the health of community members and the environment.

This report highlights four key issues that EPA must address when updating the standards, and profiles three communities who are exposed to unnecessary risk of harm from EPA's current, weak rules.

BACKGROUND

Decades ago, Congress recognized the harms from incinerators and required EPA to act quickly to address these harms. Specifically, Congress required that EPA set the emission limits for incinerators to levels at least as stringent as the actual emissions of the least-emitting incinerators, so that the dirtiest incinerators would have to clean up to the levels of the best-performing incinerators.¹ In addition to setting emission limits, Congress required EPA to review and revise the standards every five years, so that as control technologies improved, the dirtiest incinerators would continue to clean up.² But EPA has consistently failed to meet these deadlines. And whenever it finally issues or updates the standards, the standards are not adequately protective.



Covanta Essex incinerator in Newark, NJ. Jonathan Smith / Earthjustice

EPA's weak and outdated rules have real impacts on community members who live near these incinerators and who have been denied the protections that updated standards would provide. This is particularly egregious because the communities surrounding these facilities are predominantly communities of color and low-income communities, otherwise known as environmental justice communities.³ Further, these incinerators are often some of the biggest pollution emitters in the communities in which they are located.⁴ And most of the incinerators in the United States have exceeded their thirty-year useful lives so are at greater risk of equipment failure that could lead to fires or other harmful incidents.⁵

1. 42 U.S.C. § 7429.

2. *Id.*

3. Ana Isabel Baptista & Adrienne Perovich, The New School Tishman Environment and Design Center, *U.S. Municipal Solid Waste Incinerators: An Industry in Decline* at 4 (May 2019), <https://static1.squarespace.com/static/5d14dab43967cc000179f3d2/t/5d5c4bea0d59ad00012d220e/156632984> (noting that 79% of municipal solid waste incinerators are located in environmental justice communities).

4. Earthjustice & Vermont Law School Environmental Advocacy Clinic, *New Jersey's Dirty Secret: The Injustice of Incinerators and Trash Energy in New Jersey's Frontline Communities* at 7–10 (Feb. 2021), https://earthjustice.org/wp-content/uploads/nj-incinerator-report_earthjustice-2021-02.pdf.

5. Baptista at 22–24.

RECOMMENDATIONS FOR UPDATED STANDARDS

As EPA finally begins to revise the standards for large municipal waste incinerators, there are numerous improvements to be made.

Weak & Unlawful Emissions Standards

Problem: As noted above, Congress required the emissions standards to be set to levels at least as stringent as the actual performance of the lowest-emitting incinerators. However, instead of doing this, EPA chose a different method that has resulted in emission limits that are many times higher than actual performance. This is in violation of the Clean Air Act. EPA itself has admitted that its standards were set using impermissible methods, but it still has not updated the standards to comply with the law.⁶

Because of EPA's failure to update these incinerator standards in the manner that Congress required, decades-old, dirty incinerators continue to operate with long outdated technology. For example, some incinerators – including Covanta Camden – continue to operate without baghouses to reduce particulate and other emissions, despite this technology being widely used among other types of facilities.⁷ EPA's permissive standards are allowing old, dirty incinerators to stay dirty.

Solution: EPA must set standards that comply with the law and are no higher than the actual performance of the least-emitting facilities. EPA must then tighten the standards even further so that incinerators use the most advanced pollution control technologies to reduce the pollution that community members have been living with for decades due to EPA's delay.

More than Municipal Waste

Problem: Municipal solid waste incinerators are only supposed to burn municipal solid waste, but some facilities are trying to burn other waste streams,

such as medical waste and industrial waste, while still being regulated as municipal solid waste incinerators. This is inappropriate because Congress – in recognition of the differences inherent in burning these different materials – required EPA to set different emission standards for medical waste incinerators, industrial waste incinerators, and municipal waste incinerators. The incinerators' motivation for trying to burn other waste streams appears to be primarily financial as these facilities often do not generate adequate revenue from just burning municipal waste.⁸ For instance, the Covanta facility in Camden, New Jersey, has applied for approval to burn industrial liquid waste. The amount the facility would receive to process this industrial waste would be 25-40% higher than what the facility receives to process municipal solid waste.⁹

Solution: EPA must ensure that the only items that the municipal solid waste incinerators burn are the ones they are permitted to burn so that communities are not exposed to unknown harms from the addition of unpermitted waste streams.

Weak Waste Stream Oversight

Problem: Some incinerator facilities are unknowingly burning harmful substances or materials that they are not permitted to burn. This is due to their lack of oversight of the waste they are accepting. For instance, the Covanta Essex facility in Newark, New Jersey, had a series of incidents where the facility emitted pink and purple plumes.¹⁰ These plumes were likely caused by the burning of iodine present in the waste stream, the burning of which can lead to lung irritation and shortness of breath.¹¹

Solution: EPA must require facilities to install pre-combustion controls and to inspect the waste they accept so that any particularly harmful substances or materials that they are not permitted to burn are removed. EPA must also require data collection measures, such as periodic and detailed waste audits regarding the types of waste being burned.

6. EPA Motion for Voluntary Remand, *Sierra Club v. EPA*, No. 06-1250 (D.C. Cir., Nov. 9, 2007).

7. Eastern Research Group Memo to EPA, 2000 National Inventory of Large Municipal Waste Combustion (MWC) Units (June 2002).

8. Baptista at 25-26.

9. Neill Borowski, "Camden's Trash Incinerator Always a Hot Topic," TapIntoCamden (July 26, 2022), <https://www.tapinto.net/towns/camden/sections/business-and-finance/articles/camden-s-trash-incinerator-always-a-hot-topic>.

10. Earthjustice and the Environmental Advocacy Clinic at Vermont Law School, Ongoing Air Emissions Violations by Covanta Essex Company (Oct. 23, 2019), https://earthjustice.org/wp-content/uploads/2019_oct_icc_letter_njag_re_covanta_purple_plume.pdf.

11. New Jersey's Hazardous Substance Fact Sheet for iodine indicates that iodine can have adverse effects on human health when inhaled. Hazardous Substance Fact Sheet: Iodine, New Jersey Dep't of Health (2016), <https://nj.gov/health/eoh/rtkweb/documents/fs/1026.pdf>.



Fire at the incinerator in Miami-Dade County. *Juan Carlos Esquivel*

Up In Flames

Problem: Large fires and other incidents occur at incinerators on a regular basis, and there are very few safeguards in place to prevent these incidents. In 2017, there was a fire at the Covanta incinerator in Fairfax County, Virginia, that burned for days.¹² As a result of this fire, Covanta made some voluntary improvements to this facility, including the use of thermal imaging cameras, upgraded sprinklers, and an automatic dispatch system for emergency response. Covanta also implemented some operational changes, such as not allowing waste to remain on the tipping floor overnight.¹³ But these improvements are not required, and Covanta itself noted at the time that it was only considering whether to make similar updates and improvements at its other facilities.¹⁴ Because EPA has not required the implementation of these types of safety measures at other facilities, fires like the one in Virginia continue to happen. Most recently, a Covanta incinerator in Miami-Dade County, Florida, burned for days in February 2023 after a fire started in the warehouse where the trash

was dumped.¹⁵ Air monitoring reports showed elevated levels of harmful compounds, including particulate matter, volatile organic compounds, and chlorine, as a result of the fire.¹⁶

Solution: EPA must require incinerators to update their safety standards and incorporate both operational changes and other improvements, such as thermal imaging cameras, to ensure that these facilities reduce the risk of fires and other dangerous incidents.

CONCLUSION

Congress ordered EPA to fix the problem of incinerator pollution by the early 1990s, but thirty years later, environmental justice communities are still waiting for these needed protections. The Biden Administration has outwardly committed to making environmental justice a centerpiece of EPA's mission. EPA should further its environmental justice commitment by prioritizing the promulgation of stronger incinerator emission standards to protect communities who have suffered from incinerator pollution for far too long.

12. Cody Boteler, "After the fire: Revamping one of Covanta's biggest facilities after it went up in smoke," *Waste Dive* (Apr. 24, 2018), <https://www.wastedive.com/news/after-the-fire-re-vamping-one-of-covantas-biggest-facilities-after-it-went/521241/>.

13. *Id.*

14. *Id.*

15. Douglas Hanks, "As a trash pit burns inside, walls coming down to let firefighters inside Doral plant," *Miami Herald* (Feb. 16, 2023), <https://www.miamiherald.com/news/local/community/miami-dade/article272519420.html>.

16. Fire at County Waste-to-Energy Facility, Miami-Dade County (updated March 30, 2023), <https://www.miamidade.gov/global/solidwaste/wastefire/home.page>.

COMMUNITY STORIES

CAMDEN, NEW JERSEY

INCINERATOR PROFILE

Facility Name: Covanta Camden Energy Recovery Center

Address: 600 Morgan Blvd., Camden, NJ

5 miles: Pop. 536,719; 45% people of color; \$39,958 per capita income

Distance to closest home: 0.15 miles

Total Criteria Air Pollutants (2020): 1,056,660 pounds

Total Hazardous Air Pollutants (2020): 55,478 pounds

Issue: Covanta Camden still does not have a baghouse, and the facility says it will only install a baghouse if it is allowed to burn liquid industrial waste. If EPA had stronger rules, Covanta Camden would have been required to have a baghouse already, and they would not be allowed to burn industrial waste.

COMMUNITY EXPERIENCE

Responses provided by Jon Compton, Executive Director, Center for Environmental Transformation

What harmful health impacts are you most concerned about? How has your daily life been impacted?

Residents cannot always tell exactly where air pollution is coming from since most of it is invisible. But they know that the incinerator is contributing to the health problems of the community and they know that the Covanta incinerator is the largest source of air pollution in the area according to the air permits issued by the New Jersey Department of Environmental Protection (NJDEP).

What efforts have you made to raise your concerns with state and/or local government or regulatory agencies and what has their response been?

Covanta Camden is currently undergoing a NJDEP permitting process and this has been another



Covanta Camden (in pink) and surrounding residential areas (in color). Google Earth

opportunity to raise community concerns about the lack of modern air filtering systems at the facility. Covanta, which is experiencing a lack of long-term municipal trash contracts, is trying to develop a new income source by seeking a permit to burn liquid industrial waste. They have been dangling the prospect of installing a state of the art baghouse in front of the community for several years. However, instead of moving forward with installing the baghouse, they have tied it to the approval of their liquid waste permit. The liquid waste revenues, they say, will justify the cost of the baghouse. The community does not believe it is fair to tie the baghouse, which will reduce many categories of pollution by 90%, to the business prospects of Covanta. Community health should not be the trade-off for the poor business prospects of an incinerator.

What is your vision for a healthier, safer community? What would justice look like?

Communities like Camden City and the surrounding Camden County need to move meaningfully toward zero waste and away from trash incineration. Incineration is a terrible solution to the problem of overconsumption and waste and there should not be incinerators in any community.

What issues would you like EPA to address in the updated rules? What can they do to provide you and your community with the strongest protections?

We do not believe that incineration should continue to exist as an industry as it is an ongoing and constant threat to human health for those who are exposed to their emissions. But in the meantime, EPA should continue to increase the requirements for pollution control and not allow incineration companies to hold communities hostage to their business interests.



Members of Center for Environmental Transformation. Jon Compton

DORAL, FLORIDA

INCINERATOR PROFILE

Facility Name: Miami-Dade County Resource Recovery Facility (operated by Covanta)

Address: 6990 NW 97th Ave., Doral, FL

5 miles: Pop. 353,188; 94% people of color; \$23,660 per capita income

Distance to closest home: 0.35 miles

Total Criteria Air Pollutants (2020): 4,498,000 pounds

Total Hazardous Air Pollutants (2020): 89,806 pounds

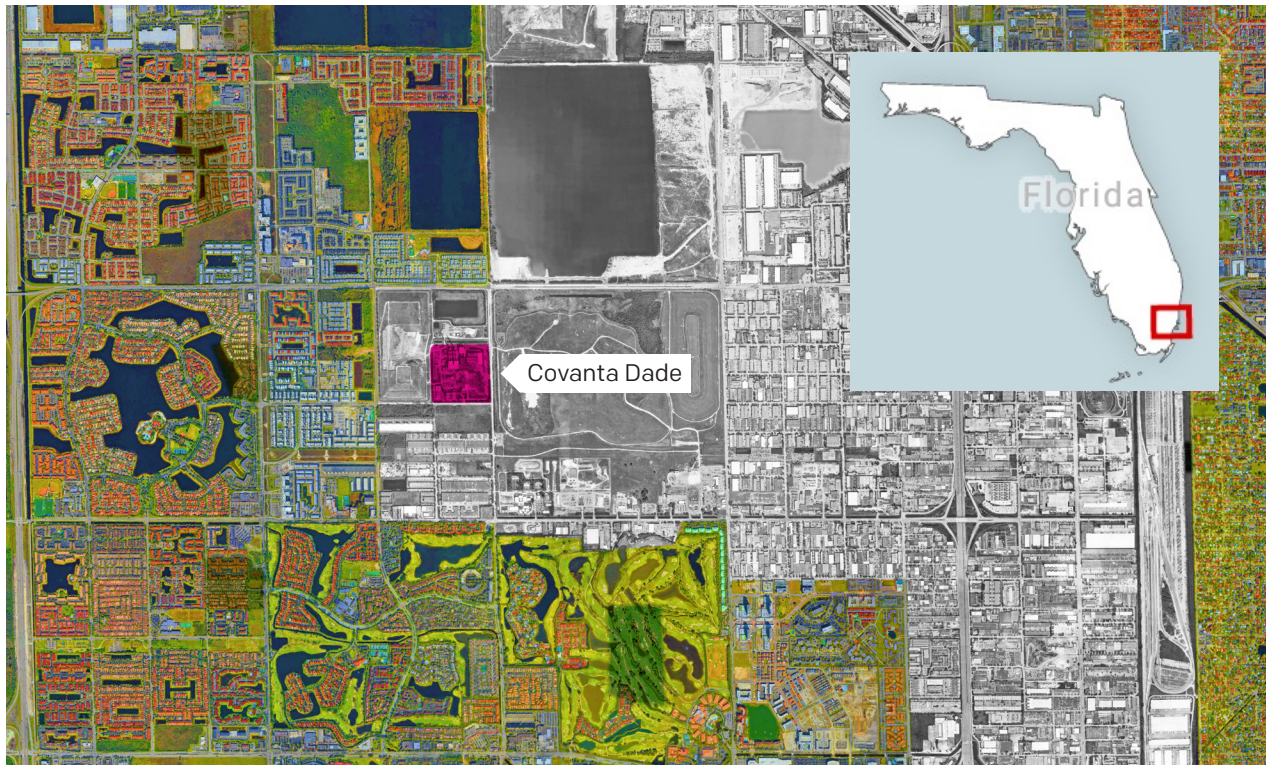
Issue: The facility recently had a massive fire that burned for weeks. If EPA had stronger rules, the facility would have been required to have additional safeguards in place to minimize the risk of incidents like this.

COMMUNITY EXPERIENCE

The following responses are compiled from numerous community members who live near Covanta's Miami-Dade County incinerator.

What harmful health impacts are you most concerned about? How has your daily life been impacted?

Ever since the Covanta plant fire, my eyes have been affected with a condition that doctors are still trying to diagnose. • Asthma, allergies, breathing difficulties, skin sensitivity and rashes, burning eyes, cancer. • I have had to frequently forgo exercising outdoors or going to a park. The smell from the incinerator when it was working was horrendous most evenings. • Concerned about long-term consequences to our health. There are days when we can't enjoy our backyard because of the disgusting smells. • Many of us have been exposed to bad odors and pollutants emitted by the plant for



Covanta Dade (in pink) and surrounding residential areas (in color). Google Earth



Community members rallying for clean air in Miami-Dade. *Gina Romero*

decades. Water contamination, arsenic levels in the soil, air quality, and the long-term effects that all these factors have on our health are daily concerns for us. • I suffer from asthma and have a lot of difficulty breathing – the black smoke from the February 12 fire affected me so much that I had to be hospitalized. • We can't take family walks or feel safe letting the kids play outside.

What efforts have you made to raise your concerns with state and/or local government or regulatory agencies and what has their response been?

We have attended meetings, signed petitions, spoken to neighbors, reported odors, and more. • I have sent many complaints through the channels provided by the city and the county, without any response on the matter. The Covanta plant had to burn down to draw attention to the pathetic environmental state in which we residents of Doral live. • I have reported to the city almost every week for the past 5 years.

What is your vision for a healthier, safer community? What would justice look like?

I would like to see Doral as a clean city without incinerators and landfills exposing us to all types

of health-related issues. • My vision is a community where we can enjoy our environment (fresh and clean air) with no fear about any illness caused by contamination. • Justice would be served if the Covanta plant would be closed once and for all. • Queremos respirar aire puro. No queremos incineradores y procesadoras de basura cerca de nuestras casas y nuestros niños.

What issues would you like EPA to address in the updated rules? What can they do to provide you and your community with the strongest protections?

Guarantee that safety standards are raised and always enforced to ensure that no one in America is ever exposed to polluted air caused by outdated and inefficient technologies. • Review the current safety standards and enforce them. • Stricter rules on emissions and standards, move to a zero-waste system. • Do not allow incinerators close to schools, parks, and residential areas. Stop burning. We must find a healthier solution. • Stronger monitoring of the harmful effects of incinerators and landfills in the middle of the city. Stronger rules and enforcement to prevent health-related issues both in the short and long term.

NEWARK, NEW JERSEY

INCINERATOR PROFILE

Facility Name: Essex County Resource Recovery Facility (operated by Covanta)
Address: 183 Raymond Blvd., Newark, NJ
5 miles: Pop. 763,650; 78% people of color; \$34,089 per capita income
Distance to closest home: 0.42 miles
Total Criteria Air Pollutants (2020): 2,342,000 pounds
Total Hazardous Air Pollutants (2020): 39,720 pounds

Issue: The community had to sue Covanta before they finally agreed to install a baghouse. If EPA had stronger rules that were updated on time, the facility would have been required to install a baghouse decades ago. Also, Covanta Essex burned large quantities of the prohibited iodine waste for over a year and had no idea where it came from. If EPA had stronger rules, waste inspection and separation could have been required, which might have prevented this.

COMMUNITY EXPERIENCE

The following responses are compiled from community members who live near Covanta Essex.

What harmful health impacts are you most concerned about? How has your daily life been impacted?

Ever since I moved to East Ironbound in Newark, my health has declined – I have severe asthma because the quality of air that we are breathing is horrible. Other folks in the neighborhood have cancer and we know that the incinerator releases harmful compounds like dioxins, mercury, and lead, which are harmful to the reproductive system, the lungs (causing asthma), and the gastrointestinal system. In addition, lead causes intellectual disabilities and many kids in our neighborhood have learning disabilities and there are not enough resources to help them overcome these disabilities.

What efforts have you made to raise your concerns with state and/or local government or regulatory agencies and what has their response been?

The people in the Ironbound neighborhood have marched against Covanta, asking them to operate



Covanta Essex (in pink) and surrounding residential areas (in color). Google Earth



within their permit limits and they haven't. We also asked them to work with the community to divert food waste away from their facilities and work with composting. I have told so many people about Covanta and how they have not been operating within their air permit limits. No one at the government level has done anything about it. Why give facilities permits and not do anything when they exceed the limits of their permit?

What is your vision for a healthier, safer community? What would justice look like?

We would like Covanta to shut down because they are making us sick and harming our community.

What issues would you like EPA to address in the updated rules? What can they do to provide you and your community with the strongest protections?



Top: Members of Ironbound Community Corporation protesting against the Covanta incinerator. Sharon Guynup

Bottom: Members of the Ironbound community advocating for clean air. ICC Picturing Justice Archives

We want to see Covanta shut down but until then, the facility should not receive clean energy credits and must be required to operate within its permit limits or be penalized for exceeding these limits.