

Trash incineration FACT CHECK:

Covanta's "Energy-from-Waste Emissions" flyer

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Covanta: "Like all combustion processes (e.g. cars, trucks, fossil-fuel power plants, landfill gas to energy) and nearly all waste management processes (e.g. landfilling, composting, anaerobic digestion, recycling), Energy-from-Waste (EfW) facilities have air emissions."

Fact: Covanta's emissions are FAR greater than any of these things. Whether you compare their pollution to the amount you'd get processing the same amount of waste with another method, or producing the same amount of energy with another method, trash incineration is the dirtiest option. Covanta's air emissions are even shown to be dirtier than burning coal – and this is even after their "sophisticated air pollution control equipment" (that isn't state-of-the-art, anyway).

Dirtier than coal: Compared to coal power plants in Maryland, the Covanta incinerator, to produce the same amount of energy, releases 15% more fine particulate matter, 60% more arsenic, 68% more global warming pollution, and 94% more nitrogen oxide (NOx) pollution (which triggers asthma attacks). Even more stark, it emits 3.5 times as much chromium, 11 times as much lead, 21 times as much cadmium, 26 times as much mercury, and 50 times as much hydrochloric acid.¹

Covanta: "Emissions are monitored both continuously and with periodic testing."

Fact: This is true, but misleading, since only four pollutants are continuously monitored, and none of the toxic ones. For dioxins, mercury, lead, beryllium, cadmium, particulate matter, sulfuric acid, hydrofluoric acid, they test just once a year. If we regulated speeding the way we do smokestacks, this annual stack testing is like setting a speed limit and allowing drivers to drive all year with no speedometer. Once a year, on the highways, a speed trap would be set, with signs leading up to it warning "slow down, speed trap ahead" ...and letting the driver's brother run the speed trap (they do their own testing). In reality, incinerators are "speeding" many other days of the year, with excessive emissions during startup, shutdown and malfunction times, when testing is not done.

What is an "Energy-from-Waste (EfW)" facility?

Covanta's facilities are properly described as trash incinerators. EPA regulates them as "Municipal Waste Combustors," and has stated multiple times that this is synonymous with "incinerator." Energy-from-Waste is just the latest public relations twist from an industry that avoids the "'i' word" as they call it.

Before this, it was "trash-to-steam," or "waste-to-energy" – both of which are scientifically invalid PR terms, as trash is turned into far more than water vapor when burned, and waste cannot be literally turned into energy without violating the laws of physics.

In reality, trash is turned into toxic ash and air pollution, and produces less energy than would be saved by composting or recycling what is burned. The industry admits that they're primarily waste facilities, and that energy production is a secondary function, but the PR effort makes them out as if they're primarily energy facilities, making something good out of something bad.

Covanta: U.S. trash incinerator emissions have fallen dramatically between 1990 and 2005, with over 90% reductions in dioxins, mercury, cadmium, lead, particulate matter and hydrochloric acid.

Fact: As Covanta admits, the industry-wide reductions are from a combination of incinerators closing as well as installation of pollution controls on some existing facilities. Most of this reduction is due to incinerators closing down, not existing ones installing substantial pollution controls. Nearly half of the industry (86 of 185 trash incinerators) closed between 1990 and 2005, including many that were exceptionally old and dirty. These closures were largely the result of community activist pressure and the industry's poor economics. A lot of the "cleanups" and closures are also the result of stricter air pollution regulations ("MACT retrofits") that environmentalists fought for in the first place. In the cases where existing facilities reduced their air emissions by adding pollution controls, this simply transfers a lot of those pollutants from the air to the ash that is landfilled, making groundwater more toxic.

¹ The coal data is from the adjacent Dickerson Generating Station (60% coal, 38% gas, 2% fuel oil), and the two power plants in the state that are 100% coal (Morgantown Generating Station and Warrior Run). Data is from EPA's 2017

National Emissions Inventory, EPA's 2016 eGRID database (for global warming pollution), and Energy Information Administration's Form 923 data on electricity production.

Covanta: Air pollution from our trash incinerators is below federal standards.

Fact: They would be illegal to operate if built today. Federal standards allow these decades-old facilities to operate under much weaker standards than if they were permitted and built in the past decade. The standards are also weak compared to those in other countries. Also, nearly all of the pollutants they monitor are self-tested just once a year, underestimating their emissions.

Covanta: We have a “rigorous stack testing program performed by a regulator-approved third party.”

Fact: Polluters like Covanta choose and hire their own testing company, and the testing companies know that if they show results that their client doesn’t like, they may not be hired again. Even some “regulator-approved third party” testing labs have been busted for falsifying data.

Some incinerators are allowed to just test one boiler each year, and to pick which one they test, as they do at the Wheelabrator Baltimore trash incinerator. It’s not unusual that if an incinerator stack test shows a high level, they assume it’s a mistake and test again until they get a more acceptable result. State regulatory agencies allow them to get away with this, and allow averaging of multiple test results to get an acceptable passing result. Even when emissions are above limits, companies sometimes don’t get fined, or are allowed to negotiate with the state to reduce the amount of a fine. They pay the fines as the cost of doing business, and fines are not significant enough to deter pollution or to get companies to install better pollution controls.

Covanta: “contrary to myth, facility operators do not remove plastics from the waste stream or alter operations in any way to improve emissions performance during the test.”

Fact: This is no myth. Covanta was once busted by the Connecticut Attorney General for tampering with their continuous emissions monitors to make it look like their emissions were lower than reality.² They were busted most recently in Oklahoma in a criminal investigation conducted by the EPA, relating to “improprieties in the recording and reporting of emissions data.” No fines were assessed.³ We know from Covanta worker experiences at multiple plants that altering the waste stream for stack tests is common at Covanta facilities, where they’ll stockpile material that burns cleaner, like

cardboard, and use that during their stack test, which is illegal. Similar activity was once exposed at an incinerator in Columbus, Ohio.⁴

Covanta: “Some [incinerator opponents] cite old data.”

Fact: Covanta is using 1990-2005 and 2014 data. Our data is in the past decade and is the newest available.

Covanta: Incinerators are not large sources of mercury and dioxins, and emit roughly half the mercury that landfills do and 1/7th that of scrap metal recycling.

Fact: If this were true, it’s still awful because there are 8 times as many landfills, accepting a much higher volume of waste. The amount of mercury emitted is far higher if incinerated than if landfilled. However, the newest EPA data (2017) shows that incinerators release 3.1 times as much mercury as landfills: 534 lbs from 59 trash incinerators vs. 171 lbs from over 480 landfills in the EPA National Emissions Inventory.

This same logic error is used when comparing to mercury from scrap metal recycling. There are far more scrap metal recyclers than trash incinerators. Fair comparisons look at the amount of a pollutant per ton of waste disposed – or per amount of electricity produced if comparing to energy sources. Whether comparing fairly to landfills or to coal power plants, incinerators come out worse. Covanta’s false comparisons are for PR purposes.

Also, their supposedly small amount of dioxin only looks at air emissions (most of their dioxin emissions at in their toxic ash), and underestimates the emissions by 30-50 times for lack of continuous monitoring.

Covanta: “research by Columbia University scientists”

Fact: Columbia University scientists are the “tobacco scientists” of the incineration industry. They’re referring to WTER, an academic think tank that aggressively promotes incineration because they’re thoroughly funded by the incinerator industry, including Covanta.⁵ We’ve looked at some of their research and have found clear flaws in their methodology, which is obviously in the pursuit of pro-incinerator “academic” information.

Covanta: Nanoparticles are removed by controls

Fact: Nanoparticles are too small to monitor or control, and studies purporting to assess this cannot be trusted for lack of accurate monitoring technology.

² See the 3rd violation on page 37 of this 93-page compilation of Covanta violations through 2006: www.energyjustice.net/files/incineration/covanta/violations2006.pdf.

³ “Tulsa Matter,” Covanta’s 2019 10-K SEC filing for FY2018, p.104.

⁴ www.americanhealthstudies.org/wastenot/wn302.htm

⁵ www.seas.columbia.edu/earth/wtert/sponsor.html