



# Out of the frying pan, into the fire

New EPA loophole threatens community health, the climate, and local economies by allowing waste burning along with coal

Waste incineration has been regulated in the United States for decades, with good reason. It pollutes our air, water, and land, poses grave threats to our health and environment, and undermines recycling and conservation. Now communities across the country face a new, immediate threat. The U.S. EPA recently created a toxic and deceptive loophole around Clean Air Act health protections, allowing the deregulation of waste burning in literally hundreds of thousands of industrial facilities across the country. If these facilities burn waste under this loophole, they will not be required to meet federal emission control standards and permitting processes for incinerators – creating a disastrous back door way to get around regulations designed to protect public health!

## What happened?

Previous to February 2013, if wastes were burned, the facility burning the waste would be classified as an “incinerator” and would be subject to stricter emissions limits than other combustion facilities.

In February 2013, via obscure rule changes, the EPA approved a policy to allow processing facilities to take mixed waste, as well as used plastics, tires, chemically-treated wood, paper sludge, coal byproducts – you name it, and turn it into pellets or other fuel stuff that can be reclassified as “non-hazardous secondary materials” or NHTSM.

In an Orwellian twist, once “waste” is no longer regulated as “waste,” then burning it in industrial boilers and process heaters is no longer considered “incineration,” and most of the related pollution control and transparency regulations for burning waste are thus eliminated. More information about specifics is provided below.

This new rule goes hand in hand with an associated policy that creates **a major new loophole for burning coal**. Shockingly, under the industrial boiler and heater rule, coal plants and other facilities can avoid regulation as coal plants and qualify biomass by only getting only 15% or more of their energy from biomass. **This means that a facility could burn 15% biomass and 85% coal and avoid measuring nearly all pollutants.** Since the waste-derived fuel pellets will include a mix of plastics, paper, wood, and other materials, the use of mixed waste pellets alongside coal might allow an industrial facility to avail itself of this significant regulatory bypass.

## Why does this matter?

Over the last several decades, community leaders from around the country have been enormously successful at safeguarding community health, natural resources, and the climate by stopping new polluting incinerator projects. But if this rule is allowed to stand, it will undermine that progress, while providing special interest benefits to highly-polluting corporations from the cement, coal, biomass, and waste-burning industries. In some states these companies are even being positioned to receive valuable “renewable fuel” subsidies by switching from one dangerous fuel to another!

## What’s the threat?

**1 No requirement of public notice to burn waste at over 1.5 million facilities.** Communities will never really know if the fuel in a nearby facility is being switched – and the impacts are nationwide. This is an EPA map of the larger **Major Source Boilers**. Boilers are used in manufacturing, processing, mining, and refining or any other industry to provide steam, hot water, and/or electricity. This map does not include coal plants, cement kilns, or many thousands of smaller plants impacted by the new regulations.



## 2 More emissions, less control

Burning waste creates many harmful pollutants. In recognition of this difference, waste incinerators are required to meet stricter pollution control standards than other combustion facilities. Yet the recent EPA rule change will now allow other combustion facilities to burn processed waste without meeting incineration standards, or even measuring what is actually coming out of their smokestack (see chart).

The EPA has noted that almost all industrial power plants will fall under the “area source” category, and 99% will in fact not be subject to any emissions testing, but rather will have to meet weak procedural standards and conduct “tune ups” every 2-5 years. Almost all area “biomass” facilities will not report emissions, for example, even if they burn trash and coal with wood. In fact, only the largest and newest area source facilities will report particulate matter.

EPA Emission Standards				
Contaminant	Waste Incinerators	Major Source Boiler/heater	Area Source Boiler/heater	Area Source “Biomass”
Cadmium	0.0026 mg/dscm	No limits	No limits	No limits
Carbon Monoxide	36 ppmv	130 - 2800 ppmv	420 ppmv to no limits	No limits
Dioxins, Furans TEQ	0.13 ng/dscm	No limits	No limits	No limits
Hydrogen Chloride	29 ppmv	0.022 ppm	No limits	No limits
Mercury	0.47 mg/dscm	57E—07 to 8E—07 MMBtu	220E—07 MMBtu to no limits	No limits
Lead	0.0036 mg/dscm	No limits	No limits	No limits
Nitrogen Oxides	53 ppmv	No limits	No limits	No limits
Particulate Matter (Filterable)	34 ppmv	2.3E—05 to 650E—05 MMBtu	3000E—05 MMBtu to no limits	3000E—05 MMBtu <sup>4</sup> to no limits
Sulfur Dioxide	11 ppmv	No limits	No limits	No limits

NOTES: Major source boilers and process heaters emit at least 10 tons of any one toxic air pollutant each year, or 25 tons of all toxic air pollutants combined. All other facilities are area source. EPA standards vary in units and approach. Incinerator regulations limit total emissions, while other burners establish weaker standards around emissions per volume of fuel processed.

## 3 Potential health impacts to communities and to workers

Burning waste in boilers means communities and workers will be subjected to more pollution, as is clear from the table above, with less public right to know protections and fewer public health controls. More pollution and little to no oversight could lead to higher rates of cancer, respiratory diseases, and other impacts. The fact that waste-burning boilers and process heaters will not measure dioxin emissions is extremely dangerous. Municipal, construction, and other waste streams usually contain PVC, which when burned creates dioxin – a highly toxic chemical that “can cause reproductive and developmental problems, damage the immune system, interfere with hormones and also cause cancer,” per the World Health Organization.

## 4 How it works: no enforcement, no transparency

An EPA petition process gives companies permission to make pellets or otherwise process waste, and then sell it as “non-hazardous secondary material,” which means it can be sold as a fuel. In order to qualify for this reclassification, companies must show that they have processed the waste (through sorting, shredding, etc.), and that it is being treated as a product to be bought and sold on the market – thus supporting an expanded waste trade. *This map shows some of the companies that have already been granted permission to process waste for sale as fuel, and started operations.*

Each company’s petition must show evidence that the processed waste is comparable to the dirtiest coal, which is hardly considered a “non-hazardous” fuel. EPA appears to accept this information without independent testing of company claims. Facilities burning this so-called “fuel” will no longer have to meet Title V operating permit requirements associated with incineration, and 99% of boilers won’t be required to have an operating air permit at all. Manufacturers will also be able to burn their own industrial waste onsite, without processing.



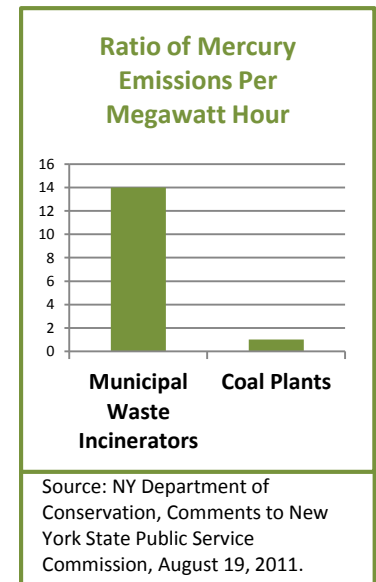
## 5 Evidence shows that burning waste is dirtier than burning coal – for human health and the climate!

Although companies producing the pelletized waste must tell EPA that emissions from burning the waste are less than from burning coal, there is no independent evaluation of this claim. In fact, actual data comparing waste incinerators to coal-fired power plants shows that burning trash emits significantly more greenhouse gases and toxic heavy metals for the same amount of energy produced.

The following chart demonstrates this comparison based on facilities in Maryland, where burning trash emits up to 2 times the quantity of greenhouse gases, and hundreds of times the mercury and lead emissions, for the same amount of energy.

Facility		Average Toxic Emissions Per Year			GHG (lbs/MWh)
Waste Incinerators	Electricity Generating Capacity (Megawatts)	Lead (lbs)	Mercury (lbs)	NO <sub>x</sub> (Tons)	CO <sub>2</sub>
		Wheelabrator Baltimore	65	275	68
MCRRF	68	130	46	765	4,537
Coal-Fired Power Plants					
Ft. SmallWood	2429	11	80	5,246	2029
Chalkpoint	2563	180	20	4,483	2116

Data from Environmental Integrity Project: *Waste-To-Energy: Dirtying Maryland's Air by Seeking a Quick Fix on Renewable Energy?* October 2011.



## 6 Disrupting the economics of recycling, and encouraging plastics pollution

Recycling, composting, and reuse provide nearly 1 million U.S. jobs, and could provide 1.5 million more if we hit 75% waste diversion targets, a level already reached in some cities. Despite its numerous economic and environmental benefits, recycling has to compete against waste incineration and landfills, and now this permission to burn waste nearly everywhere. Meanwhile, the plastics industry continues to say that unfettered production of disposable and unrecyclable plastic products is ok, as long as they can be burned for fuel. It's time for a smarter approach!

### Why is this happening?

There are many industries that want to waste to be burned more easily and frequently across the country, to avoid regulations and eliminate the need public pressure for product redesign.

The plastics and chemical industry, for example, has campaigned strongly to burn waste plastics as a fuel in order to avoid responsibility for low-quality, toxic-laden, single-use plastic products and packaging. The paper industry also wants to burn its waste as fuel while avoiding requirements around reducing hazardous emissions from incineration.

At the same time, the cement industry sees climate regulation coming, and is seeking to improve its image. Cement producers have long sought "alternative fuels" like hazardous waste, tires, and municipal waste, in an attempt to appear more "green" and spend less money on fuel. In the European Union, the cement industry has profited from carbon trading schemes that are also based on burning waste.

Although relatively small at this point, the new EPA petition process means that **the industry making pelletized waste is poised to grow**. The May 2013 issue of industry magazine *Renewable Energy from Waste* included an article titled *Coal Swap*, which concludes with the following claim: "By capturing valuable commodities and marketing EF [engineered fuel] to the existing infrastructure of utility boilers and cement kilns... mixed waste processing facilities will likely become more prevalent in the United States..."

"Definitions of renewable energy should be broadened to include energy from non-recycled plastics."

*American Chemistry Council website, americanchemistry.com*

"We understand that some consumers view packaging as waste. We want to help consumers feel good about plastic packaging..."

*Jeff Wooster, Dow, Plastics Today, 1/13*

## What's next?

- 1** EPA is currently preparing a **blanket approval for all construction and demolition “biomass,”** which would likely include wood treated with toxic contaminants, lead painted materials, and the potential for contamination by PVC and other plastics, asbestos, and other hazards. C&D is a highly recyclable waste streams, so this could also impact the increasing amounts of C&D recycling. **Organizations are mobilizing to stop this, and could use support.**
- 2** The companies that make the pelletized waste to sell as fuel are **lobbying for renewable energy credits** and other subsidies and incentives. For example, “pelletized waste” is eligible for the Wisconsin renewable portfolio standard (RPS). In 2012 the waste industry failed in its attempt to include pelletized waste in the Illinois RPS, but this is being discussed in other states. Citizen organizing have stopped many waste burning additions to RPSs, and we all need to be watchful of new attempts. **If you'd like to work on safeguarding your state's climate policies, please contact us.**
- 3** Earthjustice has **filed a lawsuit to stop this loophole,** and expects the case to be heard in 2014.
- 4** **If you live near a coal-fired industrial plant, and especially a cement kiln, paper manufacturer, or other big fuel user, we'd love to work with you** to learn more about what may be happening in your community, and to help you strategize around how to protect yourself.

As long as waste can be snuck through these burning loopholes, we're harming our chances for meaningful climate and energy and pollution reduction policies, for innovations in product design and manufacturing, & for real waste solutions.

**Please work with us to reverse this this shift before it becomes a widespread practice.** Contact us with your ideas: Monica Wilson, [monica@no-burn.org](mailto:monica@no-burn.org), 510-883-9490 x103.