

# “Advanced Recycling”

## Plastics incineration without pollution controls

In recent years, plastics industry lobbyists have been promoting an old incineration method as a new way to solve the plastic pollution crisis. They are calling the process “advanced recycling,” even though nothing gets recycled.<sup>1,2</sup> Instead, the trash that enters a so-called “advanced recycling” facility is burned, creating harmful air pollution and toxic ash.

The petrochemical lobby is currently trying to convince the Environmental Protection Agency (EPA) that plastic incineration should not count as incineration. This would leave these incinerators free to emit as much harmful air pollution as they wish, without any monitoring, reporting, or control technologies.

## What is “advanced recycling?”

Chemical industry lobbyists are aiming to co-opt the term “recycling.” Do not be misled.

Under the banner of “advanced recycling,” plastics lobbyists are greenwashing a decades-old incineration technology as a new form of recycling.

The process, called pyrolysis and gasification, offers incineration on-the-cheap—a way to combust plastics without having to protect neighboring communities.



The plastic trash that enters the “advanced recycling” incinerators gets burned, releasing dioxins, benzene, heavy metals, and other toxic air pollutants.<sup>3</sup> Out the back end of these pyrolysis and gasification incinerators come chemical wastes that are burned again later as hazardous waste or as a heavily contaminated industrial fuel, releasing yet another round of toxic air pollution.<sup>4,5</sup> **This is not recycling.**

Since “advanced recycling” incinerators combust solid waste, they meet the legal definition of incinerators under the Clean Air Act. The statute requires the same strong protections for these incinerators as it does for other incinerators.

But shockingly, EPA has been allowing most of these plastics incinerators to sidestep Clean Air Act requirements. Now EPA and Congress are considering changing the legal definitions themselves so that the incinerators would be fully exempted from pollution control laws.

This misleading practice is greenwashing at its worst



## What are the health impacts of plastic incineration?

Plastics are made from fossil fuels. They are the biggest category of “petrochemicals.” They contain hundreds of toxic chemicals, including heavy metals, phthalates, flame retardants, bisphenol A, and PFAS.<sup>6,7</sup>

Burning plastics in these incinerators releases chemicals known to cause cancer, birth defects, and other serious health harms. These include benzene, cadmium, dioxins, arsenic, lead, polycyclic aromatic hydrocarbons (PAHs), and mercury.<sup>8</sup>

Most “advanced recycling” incinerators are located in communities of color and in low-income neighborhoods, many of which are already overburdened by industrial air pollution.

## What can EPA do to protect us?

Even though these pyrolysis and gasification incinerators are heavily polluting, most operate without any emissions standards or controls. They have no limits on which toxic chemicals they can release or in what quantities. They have no monitoring requirements or reporting obligations. EPA lets these waste combustion facilities operate without any pollution limits *even though effective control technologies are readily available.*

At the state level, the chemical lobby has been wildly successful in convincing legislators to redefine pyrolysis and gasification as green solutions to plastic waste. Twenty states have passed legislation to promote "advanced recycling."<sup>9</sup>

**But the petrochemical lobby's biggest prize awaits: Convincing EPA to exempt plastics burning from air pollution laws at the federal level.** Under pressure from the plastics industry, the Biden EPA and Congress are considering whether to officially exclude these incineration technologies from classification as incinerators, thus evading Clean Air Act pollution requirements altogether.<sup>10</sup>



Brightmark "advanced recycling" facility in Ashley, Indiana. May 2022.  
Photo credit: The Last Beach Cleanup

## What's in a name?

The term "advanced recycling" is deceptive. There is nothing "advanced" about burning plastics, nor is it "recycling."

For plastics proponents this is a dream come true. Having an eco-sounding way to make plastic waste disappear helps the industry justify the exponential growth in plastics production—expected to triple over the next 40 years.<sup>11</sup>

Renaming the process "advanced recycling" is a duplicitous ploy to evade pollution controls.

## How can we protect our communities from plastic incineration?

We can't let petrochemical lobbyists get away with this. Burning plastics moves the landfill from the Earth to the sky—and directly into our lungs.<sup>12</sup>

Changing the laws so that plastics incinerators can emit as much toxic pollution as they please in low-income and minority communities reeks of environmental injustice.<sup>13</sup> EPA must not allow these plastics incinerators to sidestep the pollution control requirements of the Clean Air Act.

The solution to the plastics crisis is to produce less plastic, not to let plastics incinerators emit unlimited amounts of toxic air pollution.

Sign our petition, and learn more about how you can speak out:  
[www.momscleanairforce.org/issues/advanced-recycling](http://www.momscleanairforce.org/issues/advanced-recycling)



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[momscleanairforce.org/sources-advanced-recycling](http://momscleanairforce.org/sources-advanced-recycling)