



BENNINGTON COLLEGE

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Comments from Beyond Plastics on Docket Number: EPA-HQ-OAR-2025-0068

Beyond Plastics works nationwide to end plastic pollution and protect people from the negative health, climate, and environmental impacts of the production, usage, and disposal of plastics. We submit these comments on the EPA’s proposed rule and request for comment titled “Standards for Air Curtain Incinerators that Only Burn Wood Wastes, Yard Wastes and Clean Lumber; Provision for Commercial and Industrial Solid Waste Incineration Units: Temporary Use Incinerators and Air Curtain Incinerators Used in Disaster Recovery.”

I. Regarding proposed rule on Air Curtain Incinerators

These proposed regulations are a dumpster fire — both literally and figuratively.

Air curtain incinerators (ACIs) are giant metal dumpsters with forced air and no effective pollution controls. They should be banned, not deregulated. The 2026 American Lung Association State of the Air report on air quality found that nearly half of children living in the United States — 33.5 million people under age 18 — are breathing unhealthy air.¹ This proposed regulatory change will make that worse.

A 2016 report by the EPA describes ACIs as “mobile incinerators that utilize a high-volume sheet of air that is blown at a slight downward angle across the top and into the combustion vessel.”² Diesel fuel or kerosene is used as a starter fluid and you may see a “temporary puff of black smoke.”

This is a primitive approach to waste management.

¹*State of the Air*, American Lung Association. April 24, 2026. <https://www.lung.org/research/sota>

² *Managing Debris After a Natural Disaster*, US EPA. Retrieved from <https://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=P100SK1W.TXT>

It may reduce the volume of wood to be handled, but it also creates air pollution and large amounts of ash. ACIs are barely regulated today, and now the EPA is proposing to walk away from any regulation. This is a mistake.

After hurricanes and floods, local residents are exhausted, physically run down, and often dealing with mold inside their homes. The last thing they need is to breathe in particulate matter and the wide range of toxins that can be emitted when treated wood is burned, including but not limited to arsenic, chromium, copper, dioxins, and polycyclic aromatic hydrocarbons (PAHs). And while, shockingly, the EPA no longer acknowledges the seriousness of climate change, our communities are indisputably getting hotter. The last three years were the hottest on record.^{3,4}

These regulations would allow a steady flow of air pollution on hot days — a recipe for more asthma attacks and cardiac problems.

It is inevitable that wood treated with chemicals will be burned and that other solid waste will also be burned, especially when there is no one on-site providing oversight. There is no requirement for people to be trained.

If there is a large amount of debris, ACIs could run for months or years at a time. When the wood is wet (very common after hurricanes and floods) and less complete combustion occurs, there will be even more air pollution.

This opens the door to private landscape operators purchasing these devices and using them in backyards and roadsides and schools, rather than chipping and mulching.

The EPA's own experts warn that allowing ACIs to operate without regulation poses inherent and unmanageable risks — especially in disaster scenarios, where control over operations routinely breaks down. The docket memorandum entitled “ACI Consolidation EIA 20250827” contains the following commentary: “If the disaster makes the operation emission controls technically infeasible, this may result in emissions increases that we are unable to quantify due to the uncertainty in volume and composition of waste,” and further notes that “there is the potential that emissions from CISWI units and ACI could increase as a result.” In other words, the EPA is

³ “Copernicus: 2025 was third hottest year on record.” Copernicus Climate Change Service, European Commission. January 14, 2026.

<https://climate.copernicus.eu/copernicus-2025-was-third-hottest-year-record>

⁴ “WMO confirms 2025 was one of warmest years on record.” World Meteorological Organization, January 14, 2026. <https://wmo.int/news/media-centre/wmo-confirms-2025-was-one-of-warmest-years-record>

consciously proposing a framework that allows precisely the conditions under which toxic emissions are uncontrolled, unknowable, and almost certainly increased.

We can do better. We must do better.

Wood and yard waste instead should be chipped and used for mulch and compost, improving soil health especially in areas that are losing top soil; the EPA itself has been encouraging such practices for more than 30 years.⁵ This is not hard to do and can be done over time, even after emergencies. This should be built into federal, state, and local emergency response plans, including identifying areas to store wood that should start being chipped and composted.

The Army Corps of Engineers often pushes air curtain incinerators, but instead should be using federal funds to chip and compost the wood.

The EPA should ban air curtain incinerators, not facilitate more pollution.

II. Regarding request for comment on the redefinition of pyrolysis

The rule titled “Standards for Air Curtain Incinerators that Only Burn Wood Wastes, Yard Wastes and Clean Lumber; Provision for Commercial and Industrial Solid Waste Incineration Units: Temporary Use Incinerators and Air Curtain Incinerators Used in Disaster Recovery” purports to focus on the regulation of temporary air curtain incinerator units.

However, Section VI of the proposed rule diverts entirely from this stated purpose to request comment on revising the definition of “Municipal Waste Combustion Unit” under OSWI rules to remove pyrolysis units.

The request for comment on changing the definition of pyrolysis is not addressed in the title of the rule, the summary of the rule, or in answer to the question “does the proposed rulemaking apply to me?”

Of the 12 documents included as “supporting and related material” in the federal docket, not a single one addresses the request for comment on changing the definition of pyrolysis.

Redefining pyrolysis and thereby deregulating pyrolysis facilities is in no way clearly connected to the proposed rule on air curtain incinerators, except perhaps insofar as both actions pose serious dangers to the health of American communities and ecosystems.

⁵ EPA Fact Sheet: Yard Waste Composting. May 1991.
<https://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=10001BB3.TXT>.

We therefore believe that the appropriate experts and members of the public with an interest in the definitions contained within the Municipal Waste Combustion Unit regulations are not being afforded adequate opportunity to provide public comment.

Beyond procedural concerns, we strongly object to the EPA's efforts to redefine pyrolysis under the Clean Air Act. Beyond Plastics and the International Pollution Elimination Network (IPEN) released a report in 2023⁶ closely examining the 11 chemical recycling facilities then operating across the country, of which eight were pyrolysis facilities. Our research and technical analysis underscore that plastics pyrolysis units generate a complex mixture of hazardous air pollutants comparable to, and in some cases exceeding, those emitted by conventional waste incineration. The report further shows this technology hasn't worked for decades, it's still failing, and it threatens the environment, the climate, human health, and environmental justice.

Of note, three of the eight plastics pyrolysis facilities we examined — Regenyx (OR), New Hope Energy (TX), and Prima America (NH) — have since ceased to operate. Others have experienced repeated compliance, operational, and financial issues, including air permit violations, fires, and underperformance relative to intended capacity.

It is astonishing that this coast-to-coast constellation of environmentally hazardous and fiscally irresponsible industry failure is not enough for federal regulators to pause before further unleashing these facilities on even more Americans.

A. Hazards of plastics pyrolysis

Our review of available emissions data, permit applications, and independent studies finds that pyrolysis of plastic waste can release significant quantities of carcinogenic and toxic compounds, including benzene, toluene, ethylbenzene, and xylene (BTEX), as well as dioxins, furans, polycyclic aromatic hydrocarbons (PAHs), and heavy metals. These emissions are of particular concern given the variability and contamination inherent in plastic waste streams, which often include additives, flame retardants, and legacy pollutants that are mobilized during thermal decomposition.

The report also showed that many pyrolysis facilities already operate with limited continuous emissions monitoring, incomplete characterization of feedstocks, and insufficient public disclosure of emissions data. This lack of transparency and oversight exacerbates risks to nearby

⁶ Chemical Recycling: A Dangerous Deception. Beyond Plastics and IPEN. October 2023. www.beyondplastics.org/publications/chemical-recycling

communities, particularly environmental justice populations already burdened by cumulative pollution. In several cases, permit records reveal that projected emissions of hazardous air pollutants would trigger major source thresholds under the Clean Air Act if fully accounted for, yet many facilities have been permitted under less stringent classifications.

Taken together, this body of evidence contradicts any assumption that pyrolysis represents a cleaner or fundamentally different process than waste incineration. Instead, it reinforces alignment with Congress’s longstanding directive under the Clean Air Act to regulate emissions from waste processing units that pose risks to public health and nearby communities. In light of that statutory purpose, maintaining these units within the existing OSWI/MWCU regulatory framework is necessary to ensure that the Act’s core protections against harmful waste-related air pollution are not undermined.

B. Violation of the EPA’s prior reasoning and reversals

The EPA reversed its efforts toward exactly this deregulatory move in 2023, to “prevent any regulatory gaps and ensure that public health protections are maintained”⁷ for pyrolysis-related emissions. The EPA has offered no evidence of completing the thorough review the agency itself deemed necessary to inform any attempts to redefine pyrolysis in the intervening time.

C. Statutory text and creation of regulatory gaps

The CAA’s Section 129 and implementing regulations were designed to capture facilities that thermally destroy solid waste and emit hazardous pollutants. The definition of “incineration” has consistently included thermal decomposition units since at least 1995. By removing “pyrolysis/combustion units” without clear statutory language excluding such units, the EPA would be rewriting the law rather than interpreting it.

Further, redefining pyrolysis out of its current CAA Section 129 coverage would create major regulatory gaps at odds with the structure and purpose of the statute, while undermining public health and environmental protection obligations. Reclassifying pyrolysis out of Section 129, but not into another clear CAA category, would leave many pyrolysis facilities essentially unregulated for hazardous air pollutants and routine emissions monitoring. This violates Congress’ intent under Section 129 to tightly control emissions from solid waste combustion.

⁷ FACT SHEET: Withdrawal of Proposed Provision Removing Pyrolysis/Combustion Units From the Other Solid Waste Incineration Standards Notice. May 24, 2023.
https://www.epa.gov/system/files/documents/2024-07/fact-sheet_withdrawal-notice_-_may242023.pdf

As far as the public has been made aware, the EPA currently lacks technical analysis showing that pyrolysis units are less polluting than other incinerators, especially when plastics and mixed solid waste are used as feedstocks.

D. Environmental-justice and public-health impacts

A change in the long-established definition of pyrolysis would have a disproportionate impact on overburdened communities near proposed or existing pyrolysis facilities, undermining Section 129's role in protecting vulnerable populations from dioxins, heavy metals, and other hazardous pollutants resulting from the treatment and processing of waste.

Beyond Plastics and IPEN conducted an analysis of a 5-mile ring around each of the 11 constructed plastic pyrolysis plants in the country in 2023, using the U.S. Environmental Protection Agency's Environmental Justice Screening and Mapping Tool.⁸ The analysis revealed that eight of the plants were located in areas with lower-than-average levels of income, compared to the national average; and five had higher-than-average concentrations of people of color than the rest of the country.

The EPA has shown no evidence of adequately analyzing environmental-justice impacts or demonstrating that the reclassification will not worsen cumulative burdens in frontline communities.

The EPA **should not** redefine pyrolysis.

Respectfully submitted,

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⁸ Chemical Recycling: A Dangerous Deception. Beyond Plastics and IPEN. October 2023.
www.beyondplastics.org/publications/chemical-recycling