

BEFORE THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

280 ENVIRONMENTAL, PUBLIC HEALTH, INDIGENOUS, AND COMMUNITY NON-GOVERNMENTAL ORGANIZATIONS,* (full list on pages i-iii)

Petitioners,

vs.

ANDREW WHEELER, ADMINISTRATOR, UNITED STATES ENVIRONMENTAL PROTECTION AGENCY,

Respondent.

PETITION TO REVISE THE CLEAN WATER ACT EFFLUENT LIMITATIONS GUIDELINES AND STANDARDS FOR THE PETRO-PLASTICS INDUSTRY UNDER THE 40 C.F.R. PART 419 PETROLEUM REFINING INDUSTRIAL CATEGORY (CRACKING AND PETROCHEMICALS SUBPARTS) AND PART 414 ORGANIC CHEMICALS, PLASTICS, AND SYNTHETIC FIBERS INDUSTRIAL CATEGORY

EXECUTIVE SUMMARY

From bags to bottle caps, plastic garbage is littering coastlines, filling our oceans, and killing whales, seabirds, and fish around the world. And without major changes to how we use, produce, and regulate plastic, the plastic pollution crisis is about to get much worse. As a first and necessary step to ending that crisis, this petition urges the U.S. Environmental Protection Agency (EPA) to update the 26-year-old water pollution rules it uses to approve industrial facilities that create plastic and to eliminate plastic discharges from these plastic plants.

The United States already creates more waste per capita than any other country. But in the next 10 years, the petrochemical industry plans to increase plastics production by at least 35 percent, with more than 300 new projects slated for the United States alone. Using fracked natural gas, the new and expanded facilities planned by the industry will produce the essential building blocks for an endless deluge of throwaway plastic. Nearly 50 percent of plastic produced is disposable packaging meant to be discarded within minutes. Much of it will end up in our oceans, smothering corals, traveling through the ocean food web, and polluting our beaches.

But the pollution created by these facilities goes beyond plastic waste. The plastics industry is among the dirtiest and most toxic in the nation, fouling the air and water of some of our poorest communities. The facilities that convert fossil fuels into plastics release a host of toxic pollutants into waterways. They pollute our water with benzene—a known human carcinogen—and dioxins, best known as the toxic contaminant in Agent Orange. Other wastewater pollutants include phthalates, a known cause of developmental and reproductive toxicity in humans, and polycyclic aromatic hydrocarbons, which cause cancer, damage organs, and suppress our immune systems. Plastics facilities also push massive quantities of plastic pellets and other plastic particles into waterways through stormwater discharge—affecting the recreational, aesthetic, biological, cultural, water quality, and economic values and uses of our shorelines and waterways.

In addition to the water quality hazards created during production, irreversible environmental problems stem from the skyrocketing use and disposal of consumer plastics. Threats from increasing plastic production include accumulation of plastic in natural habitats; wildlife and human ingestion of plastics materials; entanglement in discarded plastic products; and the potential for plastics to transfer chemicals to wildlife and humans. The growth of plastic production has far outpaced the ability of waste management to keep up, as demonstrated by the mountains of plastic that choke our waterways and oceans.

Despite plastic production's harms, EPA is allowing this industry to expand its poisoning of our nation's waters. EPA only regulates a subset of wastewater pollutants produced by this industry under its current Clean Water Act regulatory program, using unacceptably old technology-based standards. EPA must start more effectively regulating the plastics industry now.

In light of the Clean Water Act's stated goal of ending the discharge of pollutants into the country's waterways, Petitioners formally request that EPA update the Effluent Limitations Guidelines and Standards applied to facilities that convert fossil fuels into plastics. The Effluent

Limitations Guidelines and Standards for the plastics industry are largely unchanged from their original adoption in the 1970s and 1980s. In the meantime, plastic production and pollution have exploded, and monitoring and treatment technologies have advanced. An update is long overdue and necessary to comply with the Clean Water Act’s mandate for effluent limitations, reflect updates in science, and ensure new technologies and treatment methods are used to address emerging pollutants of concern.

Primarily, Petitioners request that EPA take **these four actions**:

1. **Prohibit the discharge of plastic pellets** and other plastic materials in industrial stormwater and wastewater;
2. Update Effluent Limitations Guidelines and Standards for new facilities to **eliminate the discharge of toxic priority pollutants** from wastewater and stormwater streams;
3. For existing facilities, put into effect Effluent Limitations Guidelines and Standards for **pollutants of concern not currently regulated**; and
4. Update current Effluent Limitations Guidelines and Standards for existing facilities to **reflect advances in detection and treatment technologies** since the last revisions decades ago.

EPA has the duty and obligation to ensure that both wastewater and stormwater discharges from petro-plastics facilities do not degrade the health of the country’s rivers, oceans, ecosystems, or communities.

I. Notice of Petition

The undersigned organizations hereby petition EPA to promptly review and revise the Effluent Limitations Guidelines and Standards that apply to the facilities that convert natural gas liquids into plastics under the Part 419 Petroleum Refining industrial category (Subpart B Cracking and Subpart C Petrochemical)¹ and Part 414 Organic Chemicals, Plastics, and Synthetic Fibers industrial category pursuant to the Administrative Procedures Act (APA)² and the Clean Water Act.³ The citizen right to petition the government originates in the First Amendment⁴ and is codified and applied to federal agency regulations through the APA’s requirement that “[e]ach agency shall give an interested person the right to petition for the issuance, amendment, or repeal of a rule.”⁵ The APA also imposes an affirmative obligation on EPA to respond to this petition in a timely manner, requiring that “[w]ith due regard for the convenience and necessity of the parties or their representatives and within a reasonable time,

¹ To the extent that EPA regulates facilities producing ethylene, propylene, or other monomers for Plastics under 40 C.F.R. Part 419, subpart E (Integrated Subcategory), this Subpart should also be reviewed and updated as proposed below for subparts B and C.

² 5 U.S.C. §§ 551 *et seq.*

³ 33 U.S.C. §§ 1251 *et seq.*

⁴ U.S. Const. amend. I (“Congress shall make no law . . . abridging . . . the right of the people . . . to petition the Government for a redress of grievances”).

⁵ 5 U.S.C. § 553(e).

each agency shall proceed to conclude a matter presented to it.”⁶ In the event EPA seeks to deny the petition in whole or in part, it must provide “[p]rompt notice” to the petitioners.⁷

While mass production of plastic products only began in the 1950s, plastic production and waste have created a global pollution and health crisis today. All along its lifecycle—from fossil fuel extraction, transport, refining, and polymerization to consumer use, waste disposal, and degradation in the environment—plastic is harming the health of people and the planet (CIEL 2019a). Plastic contaminates species, communities, ecosystems, and food chains at a staggering scale.



Plastic trash on the Island of Kaho'olawe, Hawaii. Source: NOAA Office of Response and Restoration

Despite these harms, according to the American Chemistry Council, the plastics and chemical industry is investing more than \$202 billion in the United States for an estimated 333 projects (including new facilities and expansions) designed in large part to convert “plentiful and affordable natural gas” from shale into petrochemical and plastic products (American Chemistry Council 2018a). The industry aims to increase North American plastics production by at least 35 percent by 2025 (CIEL 2017; CIEL 2019). These new plastics will be used to manufacture a variety of products, including water bottles, straws, utensils, food wrappers, packaging, shopping bags, and other single-use items that account for approximately 40 percent of plastic use (Geyer et al. 2017).

Of the approximately 6,300 million metric tons of plastic waste already produced globally as of 2015, only 9 percent has been recycled, with 12 percent incinerated and the remaining 79 percent accumulating in landfills and the natural environment (Geyer et al. 2017).

An additional 8 million tons of plastic pollution enters the water each year. Thousands of seabirds and sea turtles, seals, and other marine mammals are harmed and killed after ingesting plastic or becoming entangled in it. Plastic has been found in our drinking water, seafood, and farthest reaches of the oceans. And more plastic is on the way. If current trends continue, plastics in the ocean could outweigh fish by 2050 (World Economic Forum 2016).

Aside from the legacy of pollution these products create, new and expanded “petro-plastics” facilities emit and discharge a variety of harmful air and water pollutants in the local communities and ecosystems where they are sited. This includes the discharge of plastic resin pellets, flakes, powders, and granules, as well as harmful pollutants including phthalates, dioxin,

⁶ *Id.* § 555(b).

⁷ *Id.* § 555(e); the APA further grants a right of judicial review to “[a] person suffering legal wrong because of agency action, or adversely affected or aggrieved by agency action” *id.* § 702 which is defined to include the “failure to act.” *Id.* § 551(13). In the event EPA fails to timely respond or improperly denies the petition in whole or part, courts “shall compel agency action unlawfully withheld or unreasonably delayed,” *id.* § 706(1), and “hold unlawful and set aside agency action, findings, and conclusions found to be arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.” *Id.* § 706(2)(A).

and benzene. Many of these pollutants are carcinogens and known to harm human health and the environment.

Petrochemical companies are locating these plastics facilities near existing fossil fuel infrastructure, which means they are targeting Gulf Coast communities in Louisiana and Texas that already shoulder a heavy burden of oil and gas industry pollution. Across the United States, these facilities are often located in and have a disproportionate impact on low-income and minority neighborhoods (Bullard 2000; Collins et al. 2016). Studies dating back to the 1970s have documented a consistent pattern of siting facilities disproportionately where poor people and people of color live (Brown 1995). In the fence-line zones around industrial facilities that use or store hazardous chemicals, the percentage of Latinos is 60 percent greater and percentage of blacks 75 percent greater than for the United States as a whole (Environmental Justice and Health Alliance for Chemical Policy Reform 2014).

EPA regulates the discharge of pollutants into surface waters under the Clean Water Act's national pollution discharge elimination system (NPDES) program and its Effluent Limitations Guidelines and Standards. This program and standards are intended to ensure that wastewater and stormwater discharges from industrial facilities do not harm public health or the environment. However, EPA has not revised or updated the Effluent Limitation Guidelines and Standards for Petroleum Refining (Cracking and Petrochemical subcategories) *in any way* since 1985 or the Organic Chemicals, Plastics, and Synthetic Fibers ("Plastics") industries *in any way* since 1993. In the decades since, there have been advancements in scientific knowledge and technology as well as changes in the petro-plastics industry and related pollution, all of which warrant a thorough update of these technology-based standards to achieve the goals of the Clean Water Act.⁸ EPA has the authority and duty to rigorously review and update these regulations to ensure full compliance with the Clean Water Act and protection of public health and the environment.



Deceased Laysan Albatross. Source: NOAA Office of Response and Restoration

On behalf of our millions of supporters and members, the undersigned organizations petition EPA to promptly review and revise the Effluent Limitations Guidelines and Standards for the Part 419 Petroleum Refining industrial category (Subpart B Cracking and Subpart C Petrochemical) and Part 414 Organic Chemicals, Plastics, and Synthetic Fibers industrial category pursuant to the Administrative Procedures Act (APA) and the Clean Water Act.

⁸ See, e.g. *Sw. Elec. Power Co. v. U.S. EPA*, 920 F.3d 999, 1003 (5th Cir. 2019) ("By requiring BAT, the Act forces implementation of increasingly stringent pollution control methods" (citation omitted)).