

# Types and Categories of Unregulated Toxic Pollutants Addressed by the Petition

Northwest Environmental Advocates and the Center for Biological Diversity have petitioned the U.S. Environmental Protection Agency to add pollutants to the 47-year old Toxic Pollutant List.

The Petition details numerous categories of toxic pollutants where EPA itself, other federal agencies, and independent scientists have concluded that there is evidence of harm to human health and/or aquatic species. None of these have been placed on the Toxic Pollutant List. Here are some of the types and categories of pollutants detailed in the Petition.

## ☿ **PFAS “Forever” Chemicals EPA Says Pose an Urgent Danger.**

There are thousands of chemicals in the PFAS family, historically used to make a wide range of consumer and industrial products. They are very slow to break down, ubiquitous in the nation’s waters, and have been deemed by EPA as an urgent health matter. While some states have taken regulatory action, EPA did not begin to address PFAS until late 2021, when it announced approaches under numerous environmental laws. Notwithstanding these actions, EPA has not proposed to place any PFAS chemical on the Toxic Pollutant List, which would guarantee regulatory action in the years to come.

## ☿ **Leading Causes of Environmental Injustice.**

Manganese concentrations in drinking water “way off the scale” have been found in Appalachian states. Manganese causes neurological effects—affecting memory, intelligence, attention, and motor skills—making exposure to excess manganese a major threat to the intellectual development of children. It is one of the health consequences of mountain-top mining for coal. Manganese disproportionately affects socioeconomically disadvantaged people.

## ☿ **“Contaminants of Emerging Concern” & Pharmaceuticals and Personal Care Products.**

Contaminants of emerging concern include persistent organic pollutants, veterinary medicines, endocrine-disrupting chemicals, and pharmaceuticals and personal care products (“PPCP”)—including a wide suite of prescribed and over-the-counter drugs, hormones, cleaners, fragrances, and the like—enter waterways through the discharge of treated sewage. Along with other endocrine-disrupting pollutants, these PPCP are implicated as the cause of intersex fish downstream of sewage treatment plants, reproductive failure, and other adverse effects.

## ☿ **Toxic Pollutants for Which EPA has Issued Recommended Criteria.**

Under the Clean Water Act, EPA recommends criteria (allowable levels) for states to adopt into their water quality standards. If a pollutant with such recommendations is also on the Toxic Pollutant List, states are required to adopt numeric criteria for them. EPA has established criteria for the protection of aquatic life for 13 pollutants that are not on the List, allowing states to avoid regulating them. Examples include: *Nonylphenol*, *ammonia*, *aluminum*, *tributyltin*.

### ⌘ **Persistent Bioaccumulative Toxics Pollutants Tracked in the TRI Program.**

EPA administers the collection of data in the Toxics Release Inventory (“TRI”) where manufacturers report annual releases to the environment of identified toxic chemicals that cause cancer and chronic diseases, acute health effects, and significant environmental effects. TRI includes over 750 chemicals, only a small fraction of which are on the Toxic Pollutant List.

### ⌘ **Polybrominated Diphenyl Ethers (PBDE).**

PBDEs are used as flame retardants in consumer products, building up—through a process called biomagnification—in fish and marine mammals, such as killer whales, well over threat levels. People who consume PBDE-contaminated fish and Native Americans who consume whale and seal blubber are particularly at risk of high exposures.

### ⌘ **Organotins.**

Over the over 250 organotin compounds that exist, the most commonly known is tributyltin or “TBT,” a biocide used on vessel hulls. Other organotins are widely used in agricultural pesticides and in the production of PVC plastics, from which they leak into aquatic systems. Organotins are highly toxic endocrine disruptors that are known to bioaccumulate.

### ⌘ **Microplastics.**

Microplastics carry toxic contaminants such as pesticides, pharmaceuticals, metals, PCBs, PAHs, and other chemicals into life forms, causing a variety of adverse health impacts. Plastics themselves contain hazardous chemicals from the manufacturing process. Fish exposed to microplastics show higher rates of mortality as do seabirds.

### ⌘ **6PPD-Quinone, Extremely Toxic to Salmon.**

After high percentages of salmon in restored streams were dying after rainstorms in Seattle, scientists identified 6PPD-quinone as the killer in urban stormwater. It has been determined to be one of the most toxic chemicals.

### ⌘ **Current-Use Pesticides that Jeopardize Threatened & Endangered Species.**

The National Marine Fisheries Service and U.S. Fish and Wildlife Service have identified scores of currently used pesticides as jeopardizing the continued existence of threatened and endangered aquatic species. These poisons cause mortality and a wide range of sublethal effects such as behavioral changes, endocrine disruption, and reproductive disorders. Examples include: *atrazine, chloropyrifos, glyphosate, imidacloprid, and malathion.*

### ⌘ **Pollutants Not Regulated by EPA for Recalcitrant States Under the National Toxics Rule.**

In 1992, EPA responded to states that had failed to adopt water quality standards for toxics, as required by the Clean Water Act, by establishing the National Toxics Rule. The criteria EPA has federally promulgated for these states, however, is limited to only those on the Toxic Pollutant List. As a result, states covered by the National Toxics Rule lack protections from: *aluminum, ammonia, chloride, chlorine, iron, nonylphenol, tributyltin, and the pesticides carbaryl, chlorpyrifos, demeton, diazinon, guthion, malathion, methoxychlor, mirex, and parathion.*