PUBLIC EMPLOYEES FOR ENVIRONMENTAL RESPONSIBILITY
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Office of Pollution Prevention and Toxics
Environmental Protection Agency
1200 Pennsylvania Ave., N.W.
Washington, D.C. 20460

Submitted via https://www.regulations.gov/

RE: Comments on ANPRM for 6PPD-quinone - Regulatory Investigation Under the Toxic Substances Control Act (TSCA) Docket Id No. EPA–HQ–OPPT–2024–0403

To Whom It May Concern:

Public Employees for Environmental Responsibility (PEER) is submitting these comments on the above-referenced ANPRM under TSCA Section 6(a) for N-(1,3-Dimethylbutyl)-N'-phenyl-p-phenylenediamine (6PPD) and its transformation product, 6PPD-quinone. As an advocate for public employees who protect the environment, PEER is extremely concerned about the use of 6PPD-quinone and its effect on fisheries, their habitats, and water quality. Our specific comments are set forth below.

Background. TSCA section 21 permits any person to petition EPA to initiate a rulemaking proceeding for the issuance, amendment, or repeal of a rule under TSCA sections 4, 6, or 8, or an order under TSCA sections 4, 5(e) or (f). If EPA grants the petition, the Agency must *promptly* commence an appropriate proceeding. More specifically, under TSCA section 6(a), if EPA determines that the manufacture, processing, distribution in commerce, use, or disposal of a chemical substance presents an unreasonable risk to human health or the environment, it must apply one or more of the TSCA section 6(a) requirements so that the chemical substance no longer presents an unreasonable risk. These actions include prohibiting or restricting the manufacturing, processing, or distribution in commerce of the chemical substance; prohibiting or restricting a particular use of the substance; commercial use requirements or disposal restrictions; or labeling and recordkeeping requirements.

On August 1, 2023, Earthjustice filed a TSCA section 21 petition on behalf of the Yurok Tribe, the Port Gamble S'Klallam Tribe, and the Puyallup Tribe of Indians, requesting that EPA establish regulations prohibiting the manufacturing, processing, use, and distribution of 6PPD in

tires under EPA's TSCA section 6(a) authority, 15 U.S.C. 2605(a). The petitioners sought regulations to take effect as soon as practicable to eliminate the unreasonable risk 6PPD in tires presents to the environment. Petitioners also provided a plethora of evidence regarding the unreasonable risk to the environment due to the acute toxicity of its transformation product, 6PPD-quinone, to coho salmon (*Oncorhynchus kisutch*) and other fish.

EPA's ANPRM. Despite the petitioners requesting immediate rulemaking due to the toxicity of 6PPD-quinone, EPA's ANPRM instead asks for more information – information that it already has. Specifically, EPA asks for:

- environmental effects of 6PPD and/or 6PPD-quinone on aquatic and terrestrial ecosystems;
- potential human health effects;
- environmental fate and transport;
- exposure pathways;
- persistence and bioaccumulation;
- additional uses of 6PPD;
- releases from consumer products (e.g., sneakers, playgrounds, rubber-modified asphalt, reused tire or other rubber products, etc.);
- information related to alternatives to 6PPD; and
- potential chemical transformation products associated with potential alternatives.

PEER is not going to recite the vast number of peer-reviewed studies that EPA already has in its possession regarding this requested information. These studies have been articulated in the Earthjustice petition and given to EPA by the Tribes. However, since EPA repeatedly flagged the lack of data on the impacts of 6-PPD-Q's effects on *terrestrial* organisms,[1] it is worth noting that there are recent studies regarding 6PPD-Q's effects on terrestrial ecosystems, such as a 2024 study that concluded, "The emerging substance of 6PPD-Q has been shown to pose acute mortality and long-term hazards to … terrestrial organisms at concentrations below environmentally relevant levels."[2] Indeed, this article states, "The toxic effects of chronic exposure to trace amounts of 6PPD-Q and their potential mechanisms have been ***extensively investigated in terrestrial organisms***"[3] (emphasis added).

EPA must engage in rulemaking to eliminate the unreasonable risk 6PPD presents to the environment. EPA's tactics of asking for additional information and more studies merely delays what is required under the law: elimination of the risks posed by 6PPD. In May of 2024, EPA

[1] For example, EPA states, "There are very limited data publicly available on how 6PPD and/or 6PPDquinone may impact terrestrial ecosystems." 89 FR at 91303

[2] Yang Jiang, Chunzhi Wang, Ling Ma, Tiantian Gao, Yán Wāng, *Environmental profiles, hazard identification, and toxicological hallmarks of emerging tire rubber-related contaminants 6PPD and 6PPD-quinone*, Environment International, Volume 187, 2024, 108677, ISSN 0160-4120, https://doi.org/10.1016/j.envint.2024.108677.

[3] Id.

published a document entitled "Acute Aquatic Life Screening Value for 6PPD-quinone in Freshwater,"[4] stating:

> This work was undertaken to fulfill a pressing need to establish protective values for 6PPD-q, which has been found to be extremely toxic to certain sensitive aquatic species, including sensitive salmonids. The EPA developed this screening value in accordance with Section 304(a)(2) of the Clean Water Act (CWA) to provide states, authorized Tribes, and other stakeholders with the best available information on the toxicity of 6PPD-q to aquatic organisms.

EPA goes on to complain that data are "limited," yet a search on Google Scholar for "6PPD toxicity" shows 1,510 results from 2021 until the present. These peer-reviewed articles discuss fate, transport, toxicity, bioavailability, environmental occurrence, and all the other topics EPA requested in its ANPRM.

Conclusion. There is an overwhelming consensus among scientists that 6PPD-Q is dangerously toxic, and additional studies are not going to change that conclusion. PEER also notes that numerous species of salmon and steelhead impacted by 6PPD-Q are listed under the Endangered Species Act (ESA); EPA must not ignore its obligation to protect these species.

We therefore urge EPA to immediately take action and phase out the use of 6PPD in the manufacture of tires.

Sincerely,

Timothy Whitehouse
Executive Director

[4] https://www.epa.gov/system/files/documents/2024-05/6ppd-q-screening-value-2024.pdf