FOR PUBLICATION

UNITED STATES COURT OF APPEALS
FOR THE NINTH CIRCUIT

ALASKA COMMUNITY ACTION ON TOXICS, *Petitioner*, v. U.S. ENVIRONMENTAL PROTECTION AGENCY; JAMES PAYNE, *Respondents*.	No. 21-70168 EPA Nos. EPA-HQ-OPPT-2019-0080 FRL-10018-87 ORDER AND AMENDED OPINION
YUROK TRIBE; CONSUMER FEDERATION OF AMERICA; CENTER FOR ENVIRONMENTAL TRANSFORMATION, *Petitioners*, v. U.S. ENVIRONMENTAL PROTECTION AGENCY; JAMES PAYNE, Acting Administrator, United States Environmental Protection	No. 21-70670 EPA Nos. EPA-HQ-OPPT-2019-0080 FR-10018-87

Agency,

Respondents.

YUROK TRIBE; ALASKA COMMUNITY ACTION ON TOXICS; CONSUMER FEDERATION OF AMERICA; CENTER FOR ENVIRONMENTAL TRANSFORMATION,

Petitioners,

v.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY,

Respondent.

No. 24-7497

EPA No. EPA–HQ–OPPT–2023–0376

On Petition for Review of an Order of the Environmental Protection Agency

Argued and Submitted March 3, 2026
San Francisco, California

Filed May 13, 2026
Amended July 7, 2026

Before: Sidney R. Thomas and Ronald M. Gould, Circuit Judges, and Brian M. Morris,* District Judge.

Opinion by Judge Gould

SUMMARY**

Toxic Substances Control Act

The panel granted a petition for review of a 2024 Rule issued by the Environmental Protection Agency ("EPA") concerning regulation of Decabromodiphenyl Ether ("decaBDE"), an additive flame retardant used in numerous products, and remanded without vacatur of the 2024 Rule to the EPA for renewed rulemaking and any other proceedings.

Congress, as one of its 2017 amendments to the Toxic Substances Control Act ("TSCA"), added 15 U.S.C. § 2605(h) ("§ 6(h)"), which governs risk-management rules addressing exposures to decaBDE. This new section directed EPA to propose risk-management rules within three years of the statute's enactment, and to promulgate final rules within 18 months of proposing such rules. EPA first promulgated a § 6(h) risk management rule for decaBDE in 2021 and published the final amendments in 2024.

*The Honorable Brian M. Morris, Chief United States District Judge for the District of Montana, sitting by designation.

** This summary constitutes no part of the opinion of the court. It has been prepared by court staff for the convenience of the reader.

The panel held that EPA's decisions to not further regulate decaBDE exposures in recyclable articles, disposal, wastewater and sewage sludge under TSCA § 6(h) were not supported by substantial evidence.

First, EPA's decision not further regulate recyclable articles containing decaBDE was not supported by substantial evidence. EPA cannot support a decision not to regulate under TSCA when EPA encounters "low levels" of decaBDE exposure because that consideration falls outside the scope of EPA's statutory authority under § 6(h). EPA's other rationales—that there was a purportedly high cost of implementing such regulations, and that regulating decaBDE would undermine EPA's overall goal of promoting recycling—were not supported by substantial evidence.

Second, EPA's determination that it was not practicable to further regulate disposal of waste, discharges, and sewage containing decaBDE was not supported by substantial evidence because (1) EPA cannot evade its responsibilities under TSCA to regulate decaBDE disposal merely by invoking EPA's compliance with another statute—the Resource Conservation and Recovery Act—regulating solid waste disposal, and failed to address contrary evidence relating to the costs of separating materials contaminated with decaBDE from uncontaminated materials; (2) EPA's decision not to regulate decaBDE discharges in wastewater did not account for evidence in the record that may dispute its findings, and it offered an explanation for its decision that runs counter to the evidence before it; and (3) EPA based its decision not to regulate decaBDE concentration in sewage sludge on a factor beyond its statutory authority.

The panel rejected EPA's contention, relying on *Bluewater Network v. EPA*, 372 F.3d 404 (D.C. Cir. 2004), that its decision not to regulate decaBDE in the disputed areas was valid because EPA may regulate in stages. As *Bluewater Network* illustrates, EPA's ability to regulate in stages is statute dependent. TSCA § 6(h) does not permit tiered rulemaking and instead requires completing the regulation on an expedited timeline.

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ORDER

Respondents' Petition for Panel Rehearing to Amend Opinion (Dkt. No. 53) is GRANTED. The panel's amended opinion shall be filed concurrently with the issuance of this order.

OPINION

GOULD, Circuit Judge

Decabromodiphenyl Ether ("decaBDE"), an additive flame retardant used in numerous products including electronics, appliances, and car and airplane parts, is a highly hazardous persistent, bioaccumulative, and toxic ("PBT") chemical. The omnipresent chemical decaBDE can damage the immune system, reproductive system, brain, thyroid, liver, and other organs. It has also been linked to cancer, endocrine disruption, and altered gene expression. According to EPA, it poses a particular danger to "human and environmental health" because it "remain[s] in the environment for long periods of time, can accumulate up the food chain . . . , and have toxic attributes in small quantities."

Recognizing these grave dangers to human and environmental health, Congress, as one of its 2016 amendments to the Toxic Substances Control Act ("TSCA"), added subsection (h), which governs risk-management rules addressing exposures to decaBDE and other "substances identified in the 2014 update of the TSCA Work Plan for Chemical Assessments." 15 U.S.C.

§ 2605(h) (referred to throughout this opinion as "§ 6(h)"). This new section directed EPA to take "[e]xpedited [a]ction" to propose such rules within three years of the statute's enactment. *Id.* § 2605(h)(1); *see supra* Part II. EPA was further directed to promulgate final rules within 18 months of proposing such rules. *Id.* at § 2605(h)(3).[1]

EPA first promulgated a § 6(h) risk management rule for decaBDE on January 6, 2021, the Decabromodiphenyl Ether (DecaBDE); Regulation of Persistent, Bioaccumulative, and Toxic Chemicals Under TSCA Section 6(h). This initial rule prohibited the manufacturing, processing, and distribution of decaBDE and articles or products containing it, but the initial rule permitted delayed compliance dates in specified industries. *See* 40 C.F.R. § 751.405(a). Relevant to this appeal, the initial rule did not regulate decaBDE exposure in recycling of plastics containing decaBDE, manufacturing of new articles from plastic when "no new decaBDE" was added, disposal of decaBDE, releases of decaBDE into air, water, and soil, and decaBDE concentration in sewage sludge.

After Petitioners timely petitioned this Court for review of the 2021 Rule, EPA moved for a voluntary remand of the 2021 Rule to reconsider the initial rule. We granted that motion on June 23, 2022, and held Petitioners' challenge to the 2021 Rule in abeyance.[2] On November 24, 2023, as part of its reconsideration, EPA solicited public comment on the

[1] Before promulgating the Final Rules in 2021 and 2024, EPA was required to provide at least 30 days for the public to comment on the proposed rules and "participate in the rule making through submission of written data, views, or arguments . . . ." 5 U.S.C. § 553(c).

[2] This motion was granted by an earlier panel of this Court consisting of Judge Owens, Judge Lee, and Judge Bumatay.

2021 Rule. Petitioners submitted comments contending that the 2021 Rule violated TSCA's mandate to address decaBDE risks and adopt all practicable exposure-reduction measures. The period for public comments lasted until January 8, 2024. Thereafter, EPA published the final amendments on November 19, 2024. Decabromodiphenyl Ether and Phenol, Isopropylated Phosphate (3:1); Revision to the Regulation of Persistent, Bioaccumulative, and Toxic Chemicals Under the Toxic Substances Control Act (TSCA). EPA's only answer to Petitioners' criticism about its lack of decaBDE recycling regulations was to require the sole company owning and using plastic shipping pallets containing decaBDE to post warning signs for its workers and require the workers' use of personal protective equipment.[3] EPA's only answer to Petitioners' criticism about EPA's lack of decaBDE wastewater regulation was to restrict decaBDE discharges to water "during manufacture, processing, and distribution in commerce of decaBDE and decaBDE-containing *products*." 40 C.F.R. § 751 (emphasis added). This prohibition did not apply to articles containing decaBDE.[4] The 2024 Rule also did not adopt any new regulations relating to decaBDE disposal or sewage sludge.

[3] EPA required that "[a]ll persons in this regulated area who recycle plastic shipping pallets that contain decaBDE are required to wear personal protective equipment, including respiratory protection that is at least as protective as a NIOSH-approved N95 respirator with an assigned protection factor (APF) of 10 and dermal protection of gloves that are chemically resistant to decaBDE." 40 C.F.R. § 751.405(d)(2).

[4] EPA defines an article as "a manufactured item: (1) Which is formed to a specific shape or design during manufacture, (2) Which has end use function(s) dependent in whole or in part upon its shape or design during end use, and (3) Which has either no change of chemical composition during its end use or only those changes of composition which have no

The 2024 Rule did not alleviate Petitioners' concerns about the 2021 Rule. Petitioners filed a timely new petition for review of the 2024 Rule on December 12, 2024, which this Court consolidated with Petitioners' challenge to EPA's 2021 Rule. Petitioners now ask this Court to declare the 2024 Rule unlawful based on EPA declining to regulate the following areas of decaBDE exposure:

(1) Nearly all recycling of plastics containing decaBDE and use of that plastic to produce new articles;

(2) Disposal of decaBDE and materials containing it;

(3) Wastewater discharges of decaBDE from facilities that manufacture, process, and dispose of articles containing decaBDE; and

(4) Use of decaBDE-contaminated sewage sludge as fertilizer

Petitioners request a remand of the 2024 Rule, without vacatur, to EPA with instructions to propose within 180 days, and finalize within one year, amendments that adopt all practicable measures to reduce decaBDE exposures in the four areas Petitioners identified.

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commercial purpose separate from that of the article, and that result from a chemical reaction that occurs upon end use of other chemical substances, mixtures, or articles; except that fluids and particles are not considered articles regardless of shape or design." 40 C.F.R. § 751.403.

I. TSCA'S GENERAL FRAMEWORK

Congress found that "human beings and the environment are being exposed each year to a large number of chemical substances and mixtures." 15 U.S.C. § 2601(a)(1). "[A]mong the many chemical substances and mixtures which are constantly being developed and produced, there are some whose manufacture, processing, distribution in commerce, use, or disposal may present an unreasonable risk of injury to health or the environment" and "the effective regulation of interstate commerce in such chemical substances and mixtures also necessitates the regulation of intrastate commerce in such chemical substances and mixtures." 15 U.S.C. §§ 2601(a)(2), (3).

Congress enacted TSCA in 1976 to protect the public from unreasonable risks to health or the environment posed by chemicals. 15 U.S.C. § 2601. When EPA determines that a use "presents an unreasonable risk of injury to health or the environment," EPA must apply one or more regulatory tools under 15 U.S.C. § 2605(a) ("Section 6"): prohibiting or restricting the substance's manufacture, processing, or distribution in commerce; requiring the substance be marked with warning and instructions for use; requiring recordkeeping by manufacturers and processors; prohibiting, limiting or otherwise regulating the manner or method of the substance's commercial use; and prohibiting or regulating the manner or method by which the substance may be disposed. Section 6(b) requires EPA to conduct "risk evaluations," that involve identifying substances as "high" and "low" priority for evaluation, as well as setting standards and deadlines for the evaluation process. 15 U.S.C. § 2605(b). If EPA determines that a substance "presents an unreasonable risk of injury to health or the environment,"

then § 6(c) sets forth the timeline, process, and requirements for issuing § 6(a) rules. 15 U.S.C. § 2605(c).

II. TSCA 2016 AMENDMENT, EPA'S § 6(h) OBLIGATIONS RELATED TO DECABDE

After TSCA's initial passage in 1976, TSCA has been amended many times, including in 2016 by the Frank R. Lautenberg Chemical Safety for the 21st Century Act, which, as detailed above, required EPA to take "expedited action" on PBTs listed in EPA's 2014 update of the TSCA Work Plan for Chemical Assessments that EPA (1) reasonably determines to be toxic; (2) rates high for either persistence or bioaccumulation; and (3) determines are likely to generate exposure to the general population, to higher-risk-sub-populations, or the environment. 15 U.S.C. § 2605(h).

EPA rated decaBDE "high" for hazard, exposure, persistence, and bioaccumulation. The hazard rating is not surprising because, according to the 2021 Rule, "exposure to decaBDE is likely under the conditions of use to the general population, to a potentially exposed or susceptible subpopulation, or the environment" and there is "potential for exposure" to decaBDE under "the conditions of use at all stages of its lifecycle." And once decaBDE is released into the environment, it is very persistent. When decaBDE does break down, which can take generations, it can generate even more persistent, toxic and bioaccumulative byproducts.

Section 6(h) required EPA, "under subsection (a)," to issue a proposed rule regulating each PBT chemical within three years of the Act's passage—by June 22, 2019—and to issue a final rule within 18 months thereafter. 15 U.S.C. §§ 2605(h)(1), (3). Unlike under the typical § 6(a) process, EPA is not required to conduct a risk evaluation under

§ 6(h). 15 U.S.C. § 2605(h)(2). Section 6(h)(4) informs EPA's selection of regulatory tools aimed at reducing the risk of exposure to PBT chemicals:

> In selecting among prohibitions and other restrictions promulgated in a rule under subsection (a) pursuant to paragraph (1), the Administrator shall address the risks of injury to health or the environment that the Administrator determines are presented by the chemical substance and shall reduce exposure to the substance to the extent practicable.
>
> 15 U.S.C. § 2605(h)(4).

III. DISCUSSION

Our review of EPA's risk management rules promulgated under TSCA is more probing than the familiar "arbitrary and capricious" review under § 706(2)(A) of the Administrative Procedure Act ("APA").[5] TSCA requires us to set aside an EPA risk management rule if we determine "that the rule is not supported by substantial evidence in the rulemaking record taken as a whole." 15 U.S.C. § 2618(c)(1)(b)(i)(I). Under TSCA, we must "engage in a *searching review* of the" agency's rationales for its

[5] Under the APA, agency action is "arbitrary and capricious if the agency has relied on factors which Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise." *See, e.g.*, *Motor Vehicle Manufacturers Ass'n of the United States, Inc. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983).

conclusions. *Chemical Mfrs. Ass'n v. EPA*, 859 F.2d 977, 991 (D.C. Cir. 1988) (quoting H.R. Rep. No. 1341 at 55–56 (1986)). In practice, however, the "substantial evidence" and "arbitrary and capricious" standards are applied similarly to the review of agency factual conclusions. *See Bonnichsen v. United States*, 367 F.3d 864, 880 n.19 (9th Cir. 2004); *ASSE Int'l., Inc. v. Kerry*, 803 F.3d 1059, 1072 (9th Cir. 2015). We will find an agency's factual determination unsupported where it "entirely fail[s] to consider an important aspect of the problem," *Motor Vehicle Mfrs. Ass'n of U.S. v. State Farm Mut. Auto. Ins.*, 463 U.S. 29, 43 (1983), or where it fails to provide, based on the record, an explanation for its regulatory decision, *Waterkeeper All. v. EPA*, 140 F.4th 1193, 1228 (9th Cir. 2025). We review *de novo* rather than defer to the agency on questions of statutory interpretation. *Loper Bright Enters. v. Raimondo*, 603 U.S. 369, 412 (2024).

For the reasons that follow, we hold that EPA's decisions to not further regulate decaBDE exposures in recyclable articles, disposal, wastewater and sewage sludge under TSCA § 6(h) were not supported by substantial evidence.

A. Regulation of decaBDE in Recycling

Petitioners first challenge EPA's decision not to regulate decaBDE exposure in recyclable articles. EPA supported its decision by pointing to its determinations that there were low levels of decaBDE in recycled-content articles, that there was a purportedly high cost of implementing such regulations, and that regulating decaBDE would undermine EPA's overall goal of promoting recycling. We conclude that EPA's rationales for not further regulating recyclables containing decaBDE are not supported by substantial evidence.

We first hold that EPA cannot support a decision not to regulate under TSCA when EPA encounters "low levels" of decaBDE exposure because that consideration falls outside the scope of EPA's statutory authority under § 6(h). EPA's reliance on there being low levels of decaBDE in recyclable articles, therefore, does not support its decision not to regulate. Under TSCA § 6(a), EPA must first determine whether "there is a reasonable basis to conclude that" a particular chemical "presents, or will present an unreasonable risk of injury to health or the environment." And for regulations promulgated under § 6(a), EPA engages in a risk assessment, determining whether particular levels of exposure to a chemical are dangerous enough to warrant regulation. But TSCA § 6(h), by contrast, expressly tells EPA that it is not "required to conduct risk evaluations on chemical substances" like decaBDE that are "identified in the 2014 update of the TSCA Work Plan for Chemical Assessments." 15 U.S.C. § 2605(h)(1)-(2). This is because, unlike chemicals subject only to regulation under TSCA § 6(a), chemicals like decaBDE subject to regulation under TSCA § 6(h) have already been deemed by Congress to be sufficiently hazardous that any level of exposure warrants EPA consideration for regulation. Under TSCA § 6(h)(4), the level of decaBDE exposure will ordinarily be relevant to EPA's "selecti[on] among prohibitions and other restrictions promulgated in a rule," but it cannot properly support the decision not to regulate at all. Stated another way, the amount of exposure to decaBDE will ordinarily guide EPA's discretion as to how to regulate decaBDE, but it will not permit a total failure to regulate decaBDE.

Next, even assuming without deciding that EPA may consider the TSCA § 6(c)(2) factors in making a § 6(h) practicability assessment, its cost- and policy-based

rationales here are not supported by substantial evidence. EPA, in its final Economic Analysis, cited two studies, neither of which supports its cost determination. The first study addressed laboratory costs for testing numerous chemicals in articles. Importantly, this study did not isolate costs or testing methods for decaBDE specifically, nor did it isolate costs or testing methods by industry. For those reasons, this first study does not shed light on how expensive it would be to test for decaBDE in recyclables. The second study, which was done by the Consumer Product Safety Commission, another federal agency, analyzed testing for lead and phthalates[6] in children's products. EPA acknowledged that the costs that EPA cited, $50 to $350 per article, did not reflect the costs of testing for the presence of decaBDE in recycled plastics because those costs were based on the Consumer Product Safety Commission's testing for lead and phthalates.

EPA also did not consider targeted alternatives to a complete ban on recycling articles containing decaBDE, which further undermines its cost rationale. EPA determined that regulating recycling of articles containing decaBDE would be "difficult to make . . . cost-effective" and "prohibitively expensive" based exclusively on the specter of a complete recycling ban of such articles. As an example of less drastic measures that EPA could have considered, Petitioners recommended enacting restrictions on high levels of concentration for specific waste streams

[6] Phthalates are chemicals that make plastics more flexible and durable. "Phthalates have the potential to cause human health abnormalities that EPA is seriously concerned with, including hormone deficiencies and endocrine disruption." U.S. Env't Prot. Agency, *Phthalates* (last updated Dec. 31, 2025), https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/phthalates. [https://perma.cc/J7GJ-U4SZ].

and facilities known to have high levels of decaBDE such as end-of-life vehicles, construction and demolition waste, and electronic waste. EPA does not address whether such restrictions would be prohibitively expensive or why it could not otherwise regulate recyclables in this way. *See Port of Seattle, Wash. v. FERC*, 499 F.3d 1016, 1035 (9th Cir. 2007) ("[A]n agency must account for evidence in the record that may dispute the agency's findings."). EPA also did not address evidence in the record that more affordable options are available for chemical testing and sorting of recyclables.[7] One such option, XRF testing, costs only one tenth of EPA's cited average lab-testing cost.

EPA's final rationale for not regulating decaBDE in recyclables–that banning recycling of recyclable articles containing decaBDE would undermine its general goal to promote recycling–is not persuasive because the agency gave it undue weight. Even if EPA, *arguendo*, may consider general recycling goals under TSCA § 6(c)(2) when considering how to regulate under § 6(h), its general policy goals cannot properly override its explicit congressional mandate to reduce decaBDE exposure to the extent practicable. Although EPA's policy preferences may affect the agency's willingness to regulate, it does not affect the agency's capability to regulate, which is more relevant to a practicability determination.

Because EPA has not sufficiently provided an explanation for its regulatory decision, *Waterkeeper*, 140 F.4th at 1228, its decision not to regulate recyclable articles

[7] These methods include "sink/float" systems that separate plastics with high bromine content (which reflects the addition of brominated flame retardants such as decaBDE), X-ray transmission scanning, and X-ray fluorescence ("XRF") scanning.

containing decaBDE is not supported by substantial evidence. 15 U.S.C. § 2618(c)(1)(B)(i)(I).

B. Regulation of decaBDE in Disposal, Wastewater and Sewage Sludge

Petitioners' remaining challenges contend that EPA, in deciding not to regulate disposal, wastewater, or sewage sludge, either improperly deferred to EPA's existing disposal regime under the Resource Conservation and Recovery Act ("RCRA") without considering RCRA's limits or did not support its decision with substantial evidence. EPA contends that the existing federal and state controls on waste management, combined with the 2024 Rule's broad prohibition on manufacture, processing, and commercial distribution of articles containing decaBDE reduce to the extent practicable the potential for human exposure to harmful chemicals as a result of disposal activities. EPA primarily bases its decision not to regulate wastewater on both cost and an assertion that there are not decaBDE releases into wastewater. EPA again points to low levels of decaBDE to support its decision not to regulate sewage sludge. EPA's determinations that it was not practicable to further regulate disposal of waste, discharges, and sewage containing decaBDE are not supported by substantial evidence.

i. Waste Disposal

With regard to waste disposal, EPA said that RCRA's existing waste disposal regulatory regime already reduces decaBDE exposure from municipal solid waste landfills to the extent practicable, and so additional regulation was not needed. EPA added that "states generally play a lead role in ensuring that the federal requirements are met" and that "[i]ndustrial waste (nonhazardous) landfills and

construction/demolition waste landfills are primarily regulated under state regulatory programs, and in addition they must meet the criteria set forth in federal regulations" under RCRA.

EPA cannot evade its responsibilities under TSCA to regulate decaBDE disposal merely by invoking EPA's compliance with another statute regulating solid waste disposal. *See Limerick Ecology Action, Inc. v. U.S. Nuclear Regul. Com.*, 869 F.2d 719, 741 (3d Cir. 1989) ("We conclude that, contrary to the NRC's contention, simply meeting the requirements of the AEA does not exempt the Commission from complying with NEPA's procedural requirements."); *K.M. v. Tustin Unified Sch. Dist.*, 725 F.3d 1088, 1092 (9th Cir. 2013) ("We do not find in either statute an indication that Congress intended the statutes to interact in a mechanical fashion in the schools context, automatically pretermitting any Title II claim where a school's IDEA obligation is satisfied.").

In passing TSCA, Congress compelled comprehensive chemical regulation, layered on top of existing statutes. *Safer Chems. v. EPA*, 943 F.3d 397, 406 (9th Cir. 2019) ("TSCA was 'designed to fill a number of regulatory gaps' in premarket review, regulation of chemicals themselves (rather than regulation of discharges, emissions, ambient air, or consumer products), and information-gathering responsibility."). In its final 2024 Rule, EPA neither suggested that exposure-reduction measures under TSCA could be so expensive or difficult to accomplish that they should be considered not "capable of being done," nor adequately examined the RCRA regulatory regime as applied to decaBDE.

EPA also did not discuss the significant gaps between TSCA's and RCRA's coverage as it pertains to decaBDE regulation. Among these gaps is the salient fact that decaBDE emissions from private or municipal solid waste incinerators processing "non-hazardous" wastes, construction and demolition landfills, and certain small landfills are not regulated by RCRA. *See* 40 C.F.R. § 257.2; 40 C.F.R. pt. 257, subpts. A, B; 42 U.S.C. § 6949a(c)(5); 40 C.F.R. § 258.1(f)(1)(i) & subpts. D, E. In determining that regulation of disposal containing decaBDE would be too costly, EPA also did not address the established ways to regulate disposal of waste containing decaBDE that were shown in the record, such as restrictions in effect in other countries and technologies to reduce disposal-related exposures.[8] *Port of Seattle*, 499 F.3d at 1035.

EPA did not address the gaps between TSCA's and RCRA's regulation of decaBDE exposure. And EPA also did not address contrary cost evidence relating to the costs of separating materials contaminated with decaBDE from uncontaminated materials. For these and the other reasons stated above, we conclude that EPA's decision not to regulate disposal of waste containing decaBDE is not supported by substantial evidence. 15 U.S.C. § 2618(c)(1)(B)(i)(I).

ii. Wastewater

In the 2024 Amendments, EPA added a prohibition against releases of decaBDE to water during manufacture, processing, and distribution of decaBDE and products

[8] For example, the European Union and United Kingdom, rejecting arguments that doing so would be infeasible to the regulated entities, regulate releases of Polybrominated Diphenyl Ethers ("PBDEs") and other PBT chemicals from waste management operations.

containing decaBDE. EPA pointed to its most recent 2021 data indicating that there were "zero releases of decaBDE to water." EPA also said that it imposed this prohibition as an anti-backsliding provision to prevent regulated entities from weakening existing pollution controls or reverting to less stringent requirements over time. EPA did not extend these prohibitions to facilities manufacturing, processing, or distributing decaBDE or *articles* containing decaBDE, because EPA determined that "disposal requirements that would effectively require wastewater treatment plants to test" for decaBDE would be impracticable. EPA asserted that "it would be extremely burdensome to identify articles containing decaBDE to determine if a facility that recycles articles is subject to this final release to water prohibition."

EPA, however, did not address evidence that ran contrary to its wastewater determination. Petitioners challenge EPA's contention that there are "zero releases of decaBDE to water." EPA relied on self-reporting from a limited set of facilities for that determination, ignoring data provided by petitioners to the contrary, which included data from the State of Washington's Department of Ecology documenting substantial decaBDE discharges in wastewater from several categories of facilities. If Petitioners had not introduced contradictory evidence, the zero-release finding may have been sufficient to justify EPA's decision not to regulate wastewater discharges. But to survive judicial review, "an agency must account for evidence in the record that may dispute the agency's findings." *Port of Seattle*, 499 F.3d at 1035.

EPA also did not address the practicability of restricting decaBDE discharges from facilities other than recyclers. Petitioners contend that "the record identifies additional facility categories beyond recyclers—such as wastewater

treatment plants, industrial laundries, and metal finishers—that contribute to high concentrations of PBDEs such as decaBDE in wastewater." EPA's determination is undermined by its lack of consideration of these additional facility categories when deciding whether to regulate decaBDE exposure in wastewater. EPA also disregarded evidence of widely available wastewater treatment technologies that have been shown to reduce concentrations of decaBDE in wastewater.

EPA's decision not to regulate decaBDE discharges in wastewater did not "account for evidence in the record that may dispute [its] findings," *Port of Seattle*, 499 F.3d at 1035, and it "offered an explanation for its decision that runs counter to the evidence before" it, *State Farm*, 463 U.S. at 43, so its decision is not supported by substantial evidence. 15 U.S.C. § 2618(c)(1)(B)(i)(I).

iii. Sewage Sludge

EPA also declined to regulate decaBDE in the use of land-applied biosolids ("sewage sludge"), which are common outputs of wastewater treatment plants. The 2024 Final Rule's preamble did not justify this decision. EPA contends that decaBDE levels are low enough to justify not regulating sludge. But as we have explained, it is beyond EPA's authority to justify a decision not to regulate based on there being low levels of decaBDE. TSCA § 6(h)(4) permits EPA to consider decaBDE levels for the purpose of deciding between regulatory tools, but not in deciding whether to use a regulatory tool at all.

Because EPA based its decision not to regulate decaBDE concentration in sewage sludge on a factor beyond its statutory authority, its decision is not supported by substantial evidence. 15 U.S.C. § 2618(c)(1)(B)(i)(I).

C. *Bluewater Network*'s Inapplicability

EPA contends, relying upon *Bluewater Network v. EPA*, that its decision not to regulate decaBDE in the disputed areas is valid because EPA may regulate in stages. 372 F.3d 404, 406, 411 (D.C. Cir. 2004). But, as *Bluewater Network* illustrates, EPA's ability to regulate in stages is statute dependent. TSCA § 6(h) does not permit the tiered rulemaking EPA asserts the ability to undertake here. Instead, TSCA § 6(h) requires completing the regulation on an expedited timeline.

At issue in *Bluewater Network* was EPA's promulgation of a final rule setting certain emissions standards under the Clean Air Act ("CAA"). 372 F.3d at 406. The specific statutory provision at issue there, CAA § 213, required EPA to consider "lead time" for the adoption of technology in setting emissions standards for nonroad engines and vehicles. *Id.* at 408. The CAA also required EPA to revise its "standards from time to time" and relied upon EPA committing to follow "interim standards" with subsequent regulations after a specified date. *Id.* at 412. Under CAA § 213, EPA set emissions standards for nonroad engines and vehicles in two stages. *Id.* at 408. The D.C. Circuit upheld EPA's tiered rulemaking approach based on the statute's express language contemplating tiered rulemaking and noting that "perhaps most importantly, EPA has committed to incorporating the new technologies into stricter emissions standards in the [later] rulemaking." *Id.* at 412.

EPA's rulemaking mandate under TSCA § 6(h) is categorically different from its rulemaking mandate under CAA § 213. One consideration is that TSCA § 6(h) expressly places regulation of decaBDE on an expedited timeline, not a prolonged one. *See* 15 U.S.C. § 2605(h)(1)

(requiring "Expedited Action"). Another important consideration is that here EPA has not committed to further regulation in the future. Nothing in TSCA § 6(h) contemplates a tiered rulemaking process, which EPA asserts that it had the discretion to pursue. And even if EPA had such discretion, EPA made no commitment to further revise its Amended Rule in the future. *Bluewater Network*, therefore, does not validate EPA's asserted and potential tiered regulatory approach.

IV. CONCLUSION

We GRANT the petition for review and REMAND to EPA for renewed rulemaking and any other proceedings so that it may, under TSCA, regulate—or more adequately support its decision not to regulate—consistent with this opinion, the areas this Court has identified. At the parties' request, we REMAND WITHOUT VACATUR, leaving the 2024 Rule in place during the pendency of further agency proceedings, because the parties have recognized that vacatur of the 2024 Rule would risk further health and environmental harm because it would eliminate the currently required measures to reduce decaBDE exposure. We are remanding for further proceedings consistent with this opinion.