



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
ENFORCEMENT AND
COMPLIANCE ASSURANCE

May 2, 2023

MEMORANDUM

SUBJECT: Enforcement Statement Regarding the Prohibition of Processing and Distribution in Commerce of Decabromodiphenyl Ether (DecaBDE)-Containing Wire and Cable Insulation in Nuclear Power Generation Facilities under 40 C.F.R. § 751.405(a)(2)(ii)

FROM: Lawrence E. Starfield
Acting Assistant Administrator

TO: Michal Freedhoff
Assistant Administrator
Office of Chemical Safety and Pollution Prevention

In response to your request of April 20, 2023, the Office of Enforcement and Compliance Assurance (OECA) is issuing this enforcement statement regarding the Toxic Substances Control Act (TSCA) Section 6(h) Rule that prohibits the processing and distribution in commerce of decaBDE-containing wire and cable insulation for use in nuclear power generation facilities after January 6, 2023. *See* 40 C.F.R. § 751.405(a)(2)(ii).¹

As explained more fully below, EPA does not intend to pursue enforcement actions for certain violations of the decaBDE rule and TSCA, where such violations allow for use in nuclear power generation facilities, as long as the entities involved are diligently seeking to qualify their alternative products in accordance with Nuclear Regulatory Commission (NRC) regulations and guidance and meet other conditions of this enforcement statement.

EPA's decision to issue this enforcement discretion statement is based in large part on the Office of Chemical Safety and Pollution Prevention's (OCSPP's) explanation that once decaBDE has been encased in the cured coating the potential for worker exposure is minimal. OCSPP explained that failing to enforce violations of the prohibition on the processing and distribution of wire and cable already containing decaBDE would not jeopardize EPA's efforts to ensure the protection of health and the environment under TSCA. We understand that OCSPP plans to address the compliance deadline as part of the rulemaking amending the 2021 decaBDE rule, with a proposed rule expected in November 2023, and a final rule expected in September 2024.

¹ The final rule entitled "Decabromodiphenyl Ether (DecaBDE); Regulation of Persistent, Bioaccumulative, and Toxic Chemicals Under TSCA Section 6(h)," (or the "decaBDE rule") was published on January 6, 2021. The decaBDE rule phased-in the prohibition of all processing and distribution in commerce of decaBDE for use in wire and cable insulation in nuclear power generation facilities, and decaBDE-containing wire and cable insulation, setting a January 6, 2023, compliance deadline.

The decaBDE rule prohibited the manufacture and processing of decaBDE or decaBDE-containing products or articles after March 8, 2021, but included an extended compliance deadline of January 6, 2023, for processing and distribution in commerce of decaBDE for use in wire and cable insulation in nuclear power generation facilities, and for decaBDE-containing wire and cable insulation. EPA developed the extended deadline in the January 2021 final rule after engaging with stakeholders, including the primary supplier of the decaBDE-containing wires and cables. DecaBDE is used in Class 1E cables, which are qualified to meet industry standards and the Nuclear Regulatory Commission's (NRC) requirements in 10 C.F.R. § 50.49, "Environmental qualification of electric equipment important to safety for nuclear power plants."

Since the January 6, 2023, compliance deadline in the final rule, the primary supplier of a specific Class 1E wire and cable that contains decaBDE notified their customers that they had discontinued processing and distribution of decaBDE wire and cable due to the January 6, 2023, compliance date. The discontinuation led to multiple emails, calls, and letters of concern to EPA that decaBDE-containing wire and cable – essential for operations in the nuclear power sector – might no longer be available. Although an alternative wire and cable insulation technology, which does not contain decaBDE, has been developed and recently qualified in accordance with NRC regulations and guidance (including 10 C.F.R. § 50.49), it is EPA's understanding from industry and regulatory partners that each individual component that contains the alternative wire and cable insulation technology will also need to undergo its own subsequent qualification process.

Regulatory and industry stakeholders have told EPA that, until this decaBDE-free alternative-containing wire and cable insulation can be qualified and then placed into service in the components that contain wire and cable, multiple nuclear power plants may need to delay scheduled maintenance, may be required to shutdown based on the inability to meet NRC requirements for operation, or may not be able to restart following scheduled maintenance if they were unable to replace necessary components with qualified replacement components during the maintenance.² Moreover, other units may need to be taken offline unexpectedly, for indefinite periods, in the event of an unplanned equipment failure because they cannot safely operate until acceptable replacement components become available.

EPA is aware of the critical role the nuclear industry plays in the U.S. power system, which provides approximately 20% of the domestic power supply. The Department of Energy (DOE) and/or NRC estimate that flame-retardant material is required in approximately 450 miles of wires and cables and in over 2,000 components and subcomponents in each of over 90 commercial nuclear power reactors. Unplanned down-powers and/or shutdowns (possibly for extended durations) at one or multiple nuclear power plants would reduce the amount of electric power available, potentially impacting electric power grid stability.

EPA did not intend the development of the final decaBDE rule to have a disruptive impact on the infrastructure of the power supply sector. As you noted, OCSPP's objective was to provide adequate time to ensure the availability of an approved alternative, but information on all stakeholder needs was

² According to the Department of Energy (DOE), each reactor schedules outages every 18 - 24 months to reload fuel and perform required maintenance and inspections. Every April, approximately 20 GW of nuclear generation is offline for maintenance (mainly in the Eastern United States), but quickly returns to provide stable power supplies during transition into summer. DOE estimates that due to the January 6, 2023, compliance deadline, seven reactors that generate approximately 8 GW of electricity may be unable to obtain necessary components that currently contain decaBDE and would be prevented from restarting this spring, and approximately 33 additional power reactors would need to defer planned maintenance and replacement work to a later outage.

not provided to EPA during the rulemaking process. It is now clear that compliance with the January 6, 2023, deadline is not feasible for the nuclear industry. Industry and government agencies estimate the process of qualifying alternative cable and wires for each component use could take years.

OCSPP has indicated that, for the above reasons, EPA plans to revisit the compliance deadline, as well as potential export notification due to decaBDE's listing on Annex A of the Stockholm Convention on Persistent Organic Pollutants (the POPs Convention), for this use in the upcoming rulemaking, estimated to be completed in September 2024.

In recognition of these extremely unusual circumstances, EPA does not intend to pursue enforcement for the following violations:

- Prohibitions on processing and distributing in commerce of decaBDE-containing wire and cable insulation for use in nuclear power generation facilities, after January 6, 2023 (see 40 C.F.R. § 751.405(a)(2)(ii)).
- The requirement in 40 C.F.R. § 751.405(c)(1)(ii) that records that must be maintained must contain a statement that the decaBDE-containing products or articles are complying with 40 C.F.R. § 751.405(a) for entities processing and distributing in commerce decaBDE-containing wire and cable insulation for use in nuclear power generation facilities after January 6, 2023.
- Any related TSCA Section 15(2) violation for using, for commercial purposes, a chemical substance or mixture which a person knew or had reason to know was manufactured, processed or distributed in commerce in violation of TSCA Section 6 (i.e., use by a nuclear power plant or a manufacturer of component parts for a nuclear power plant of any decaBDE-containing wire, cable, component processed or distributed after January 6, 2023).

I emphasize that **this statement of enforcement discretion applies only to the requirements stated above and only to entities working diligently to qualify their alternative components under NRC regulations and guidance.** The statement does not cover the prohibition of all processing and distribution in commerce of decaBDE (i.e., raw or compounded) for use in wire and cable insulation in nuclear power generation facilities. This exercise of enforcement discretion is also conditioned on compliance with all other aspects of the final decaBDE Rule, as well as the following additional conditions:

- **Records:** Records required to be kept under 40 C.F.R. § 751.405(c)(1)(ii) must contain a statement that the decaBDE-containing products or articles, either are complying with 40 C.F.R. § 751.405(a) or are consistent with this enforcement statement.
- **Export Notification:** A condition of the exercise of enforcement discretion described in this enforcement statement is that any entity processing or distributing in commerce of decaBDE-containing wire and cable insulation for use in nuclear power generation facilities after January 6, 2023, must report any exports of such wire or cable to EPA as if under TSCA Section 12(b) and the provisions of subpart D of 40 C.F.R. part 707, using the TSCA Section 12(b) reporting tool available in EPA's Central Data Exchange (CDX).

This enforcement statement reflects EPA's enforcement intent only until either (1) 11:59 PM ET, September 30, 2024, or (2) the effective date of a final action addressing the compliance date for the

prohibition on processing and distributing in commerce of decaBDE-containing wire and cable insulation, whichever occurs earlier. EPA reserves the right to revoke or modify this enforcement statement at any time.

If you have any further questions regarding this matter, please contact Phil Milton of my staff at (202) 564-5029 or milton.philip@epa.gov.

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