6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

[EPA-HQ-OLEM-2022-0971; FRL-10181-02-OLEM]

Response to Petition to Classify Discarded Polyvinyl Chloride as RCRA Hazardous Waste

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final petition response.

SUMMARY: The Environmental Protection Agency (EPA or the Agency) is responding to a rulemaking petition from the Center for Biological Diversity requesting that discarded polyvinyl chloride be listed as a hazardous waste under the Resource Conservation and Recovery Act. The Agency published a tentative denial of the rulemaking petition on January 12, 2023. Today, after review of the public comments, EPA is affirming that decision. The petition is denied.

DATES: This final action is effective on **[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

FOR FURTHER INFORMATION CONTACT: Daniel Lowrey, Materials Recovery and Waste Management Division, Office of Resource Conservation and Recovery, (5304T), Environmental Protection Agency, 1200 Pennsylvania Avenue NW., Washington, DC 20460; telephone number: 202-566-1015; email address: lowrey.daniel@epa.gov.

SUPPLEMENTARY INFORMATION:

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I. General Information

A. Does this Action Apply to Me?

The Agency is not proposing any regulatory changes at this time. Entities that may be interested in this denial of the petition include any facility that manufactures, uses, or generates as waste any materials containing polyvinyl chloride (PVC) or its components. If you have questions regarding the applicability of this action to a particular entity, consult the person listed in the **FOR FURTHER INFORMATION CONTACT** section.

B. How Can I Get Copies of This Document and Other Related Information?

1. Docket. EPA has established a docket for this action under Docket ID No. EPA-HQ-OLEM-2022-0971. Publicly available docket materials are available either electronically through www.regulations.gov or in hard copy at the EPA Docket Center, WJC West Building, Room 3334, 1301 Constitution Ave., NW, Washington, DC. The Docket Center's hours of operations are 8:30 a.m. – 4:30 p.m., Monday – Friday (except Federal Holidays). For further information on the EPA Docket Center services and the current status, see: https://www.epa.gov/dockets.

2. Electronic Access. You may access this *Federal Register* document electronically from https://www.federalregister.gov/documents/current.

C. List of Abbreviations and Acronyms

CBD Center for Biological Diversity

BBP Butyl benzyl phthalate

DBP Dibutyl phthalate

DEP Diethyl phthalate

DEHP Diethylhexyl phthalate

DIDP Diisodecyl phthalate

DINP Diisononyl phthalate

DMP Dimethyl phthalate

DnOP Di-n-octyl phthalate

EPA Environmental Protection Agency

L liter

mg milligram

PVC Polyvinyl chloride

RCRA Resource Conservation and Recovery Act

TC Toxicity characteristic

TCLP Toxicity characteristic leaching procedure

D. What action is the EPA taking?

The EPA is providing notice of and finalizing its denial of CBD's 2014 rulemaking petition concerning the regulation of discarded polyvinyl chloride (PVC) and associated chemical additives under the Resource Conservation and Recovery Act (RCRA). With this action, the Agency is also publishing its response to public comments on the tentative denial.

E. What is the EPA's authority for taking this action?

On July 24, 2014, the Center for Biological Diversity (CBD) petitioned the EPA to list discarded PVC as a hazardous waste under RCRA ("Petition"). The Agency is responding to this Petition for rulemaking pursuant to 42 U.S.C. 6903, 6921 and 6974, and EPA's implementing regulations at 40 CFR part 260.20, 261.3, 261.10, and 261.11. Authority for the identification and listing of hazardous wastes is granted pursuant to 42 U.S.C. 6903 and 6921, and implementing regulations 40 CFR parts 260 and 261.

F. What are the incremental costs and benefits of this action?

As this action proposes no regulatory changes, this action will have neither incremental costs nor benefits.

II. Background

A. Background on polyvinyl chloride

PVC is one of the most common plastics, used in a variety of applications—primarily in the construction industry, but also in packaging and consumer goods (OECD 2022). PVC is formed from the polymerization of vinyl chloride monomer and additives. Additives include stabilizers that limit degradation from sources such as oxygen, heat, light, and flame, and plasticizers that make the PVC more flexible.

All PVC contains stabilizers. Some PVC contains stabilizers containing metals such as barium, cadmium, and/or lead. Other PVC contains stabilizers based on calcium, zinc, and/or tin (Hahladakis et al. 2018; European Commission 2022).

PVC may contain plasticizers, with the concentration and identity of plasticizers varying widely based on the desired properties of the final material. Plasticizers that are phthalates include but are not limited to: di(2-ethylhexyl) phthalate (DEHP), dibutyl phthalate (DBP), diethyl phthalate (DEP), dimethyl phthalate (DMP), di-n-octylphthalate (DnOP), benzyl butyl phthalate (BBP), diisononyl phthalate (DINP) and diisodecyl

phthalate (DIDP) (Hahladakis et al. 2018; Czogała, Pankalla, and Turczyn 2021). Other plasticizers that are not phthalates include adipates and trimellitates. Rigid forms of PVC contain little to no plasticizers while more flexible forms require the addition of more plasticizers.

It is difficult to determine the proportion of PVC products that contain plasticizers because PVC manufacturers and PVC product manufacturers are not generally required to report this information. Typically, plasticizers constitute from zero up to about 50 percent of the product by weight, although higher concentrations have been reported (Hahladakis et al. 2018; Kim et al. 2020; European Commission 2022). Voluntary data from 2000 indicates at least two thirds of PVC is of rigid grades that do not typically contain any amount of plasticizers (Borrelli et al. 2005).

B. How is the EPA addressing discarded PVC?

Separate from the Petition and EPA's action on it, the EPA regulates the management of solid waste, including discarded plastics such as PVC, under RCRA. EPA has established different standards for units accepting different types of non-hazardous waste, see 40 CFR parts 257 - 258, and RCRA generally prohibits non-compliant "open dumping" of non-hazardous solid waste. 42 U.S.C. 6945(a).

The EPA Strategic Plan of 2022-2026 (U.S. EPA 2022) sets forth priorities to reduce waste and prevent environmental contamination (Objective 6.2) including that "EPA will administer grant programs to improve Tribal, state, and local solid waste management programs and infrastructure and education and outreach on waste prevention. EPA also will address land-based contributions to the mismanagement of post-consumer materials and plastic waste." Further information about the management of discarded plastic, including discarded PVC, can be found at https://www.epa.gov/facts-and-figures-about-materials-waste-and-recycling/advancing-

sustainable-materials-management.

The EPA Strategic Plan also sets priorities to protect and restore waterbodies and watersheds (Objective 5.2) including that "EPA also will engage in both domestic and international partnerships to support trash pollution prevention programs, recycling efforts in rural and suburban communities, and waterfront revitalization" and that EPA will "[i]mplement programs to prevent or reduce nonpoint source pollution, including nutrients and plastic pollution." Further information about the EPA's actions on plastic pollution in bodies of water, including marine plastic pollution as directed by the Save Our Seas 2.0 Act of 2020 (Public Law 116-224) signed into law in December 2020, can be found at https://www.epa.gov/trash-free-waters/trash-free-waters-projects (EPA 2024a).

In April of 2023 the EPA released for public comment and peer review a draft national strategy to prevent plastic pollution (EPA 2023). Proposed actions from the draft national strategy to prevent plastic pollution (EPA 2024b) include to:

- Reduce the production and consumption of single-use, unrecyclable, or frequently littered plastic products.
- Minimize pollution across the life cycle of plastic products.
- Increase public understanding of the impact of plastic mismanagement and how to appropriately manage plastic products and other waste.
- Identify and implement policies, programs, technical assistance, and compliance assurance actions that effectively prevent trash/microplastics from getting into waterways or remove such waste from waterways once it is there.

C. Regulatory background

EPA defines hazardous waste for purposes of the RCRA hazardous waste

regulations in 40 CFR 261.3. There are three ways by which a solid waste may be listed as hazardous waste under the RCRA hazardous waste regulations. See 40 CFR 261.11(a). Two of these are relevant to the Petition: 40 CFR 261.11(a)(1) and (a)(3).

A solid waste may be listed as a hazardous waste pursuant to 40 CFR 261.11(a)(1) if it "exhibits any of the characteristics of a hazardous waste." The four characteristics of a hazardous waste are found in 40 CFR 261.21-24. The most relevant to the Petition is the toxicity characteristic, found in 40 CFR 261.24. A solid waste exhibits the characteristic of toxicity if it leaches specified toxic contaminants in the toxicity characteristic leaching procedure (TCLP) in excess of the regulatory limit listed in Table 1 of 40 CFR 261.24. See 40 CFR 261.24(a).

A solid waste may be listed as a hazardous waste pursuant to 261.11(a)(3) if "it contains any of the toxic constituents listed in Appendix VIII [to 40 CFR part 261]," and the Administrator concludes, after considering eleven factors, that it "is capable of posing a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported or disposed of, or otherwise managed." 40 CFR 261.11(a)(3). EPA lists hazardous constituents on Appendix VIII to 40 CFR part 261.

Pursuant to 42 USC 6974, any person may petition the Administrator to conduct a RCRA rulemaking, including requesting a listing of a hazardous waste. EPA's regulations require that "[a]fter evaluating all public comments the Administrator will make a final decision [on the petition] by publishing in the Federal Register a regulatory amendment or a denial of the petition." 40 CFR 260.20(e). The regulations require that every petition must include "a statement of the need and justification for the proposed action, including any supporting tests, studies, or other information." 40 CFR 260.20(b)(4). While 40 CFR 260.20 does not provide specific information requirements for hazardous waste listing petitions, EPA has clarified that the information relevant to the listing criteria set forth in 261.11(a) is useful for petitioners to include in such a

petition. See 45 FR 33070. Therefore, when a petition requesting a listing of a substance as a hazardous waste, as supplemented by the public comments, provides insufficient information to consider all of the relevant listing criteria under 261.11(a), EPA is not required to grant the petition and may deny the petition as a matter of its discretion for having provided an insufficient justification as required by 260.20(b)(4). EPA's discretion under 260.20 includes the choice of whether to pursue a matter beyond what is provided in the petition and any subsequent public comments, where they fail to provide sufficient indicia of a hazard to human health or the environment.

III. Petition for rulemaking, EPA's tentative denial, and comments received

A. Summary of the Petitioner's Requested Changes and EPA's tentative denial

On July 24, 2014, the Center for Biological Diversity (CBD) petitioned the EPA to "promulgate regulations governing the safe treatment, storage and disposal of PVC, vinyl chloride and associated dialkyl- and alkylarylesters of 1,2-benzenedicarboxylic acid, commonly known as phthalate plasticizers." In doing so, CBD requested that discarded PVC be listed as a hazardous waste, which would require a narrative listing of discarded PVC from non-specific sources be added to the "F" list under 40 CFR 261.31.

On January 12, 2023, the Agency published a tentative denial of the Petition. In the denial, the Agency explained that petitioners had not provided sufficient evidence to support a listing of discarded PVC as a RCRA hazardous waste as the Petition did not provide sufficient information that discarded PVC, under current waste management practices, "present[s] a substantial present or potential hazard to human health or the environment when solid waste is improperly treated, stored, transported or disposed of, or otherwise managed (40 CFR 261.11)." Rather, much of the information provided in the Petition concerned potential exposures during the use of PVC as a product. Based on the information provided in the Petition, the Agency proposed to determine that a listing of

discarded PVC was unwarranted at this time.

B. Summary of Comments Received

The Agency received public comments on the tentative denial during the 30-day comment period that ran from January 12, 2023, through February 13, 2023. On February 23, 2023, after the comment period had closed, the Agency received a request to extend the comment period for an additional thirty days following the train derailment in East Palestine, Ohio. The Agency chose not to reopen the comment period because the release in East Palestine, Ohio did not have a direct bearing on the Petition. Furthermore, the Agency had entered into a consent decree with the Center for Biological Diversity (see docket EPA-HQ-OGC-2022-0406) in which the EPA had committed to sign the final determination on the Petition by April 12, 2024 (which the parties subsequently stipulated to extend to April 26, 2024). The requested extension of the comment period could have interfered with meeting that commitment.

The Agency received 4,543 comments on the tentative denial. 63 comments supported the tentative denial, including 2 letter writing campaigns representing approximately 52 of the comments, with 10 substantive and distinct comments. 4,480 comments were opposed to the denial, including a letter writing campaign covering approximately 4464 of the comments, with 3 substantive and distinct comments.

The comments supporting the tentative denial largely echoed the language of EPA's tentative denial, including the lack of evidence in the Petition that discarded PVC meets the 40 CFR 261.11 listing criteria, Agency discretion, the variable composition of PVC, other EPA efforts addressing plastic pollution, and the existing regulations on landfills, incinerators, and toxic contaminants. These commenters also cited recent EPA actions under the Toxic Substances Control Act (TSCA) related to the risk evaluations of vinyl chloride and phthalates and noted that the studies provided by the petitioner related

to direct phthalate exposure which, the commenters argued, cannot substitute for evidence of potential exposure or effects from discarded PVC. Additional comments expressed concern about the potential regulatory burden and/or complexity of complying with the changes requested by the Petition, particularly with regard to generator status, regulated medical waste, and recycling/sustainability efforts.

The comments opposed to the denial of the Petition echoed the language of CBD's petition, expressing concern about potential releases of toxic constituents during the manufacture, use, and disposal of PVC. Specific concerns regarding disposal of PVC included plastic pollution and its effect on the environment, the scope of existing regulations, presence in landfills and incinerators, and potential release of hazardous constituents from landfill leachate and incineration. Commenters expressed concern about the potential toxicity of discarded PVC resin apart from any consideration of additives (i.e., phthalate plasticizers and metals from heat stabilizers). Additionally, the petitioner submitted 30 additional scientific studies as support.

Responses to specific comments may be found in the response to comments document published separately in this docket.

IV. Reasons for EPA's final denial of the petition

Pursuant to 40 CFR 260.20, the Petition, as supplemented by public comments, must provide sufficient information to justify the listing of discarded PVC as a hazardous waste. The Petition and public comments fail to do so.

The Petition does not specifically request that EPA list discarded PVC as a hazardous waste pursuant to 40 CFR 261.11(a)(1). However, it does provide some information that could be construed as relevant to a request for such a listing. The Petition does specifically request that EPA conduct a hazardous waste listing pursuant to 40 CFR 261.11(a)(3). Accordingly, EPA has considered information to be relevant to the

Petition if it is relevant to either 261.11(a)(1) or (a)(3). EPA proposed to deny the Petition based on the lack of information provided by Petitioners. After considering public comment on the tentative denial, EPA concludes that the Petition, even as supplemented by the information received through the public comment period, still provides insufficient information to justify a listing of discarded PVC as a hazardous waste at this time under either 261.11(a)(1) or 261.11(a)(3).

With respect to 40 CFR 261.11(a)(1), the Petition states that PVC may contain any of the following hazardous contaminants found in Table 1 of 40 CFR 261.24: vinyl chloride monomer (D043), barium (D005), cadmium (D006), and lead (D008). Under EPA's regulations, a solid waste exhibits the hazardous waste characteristic of toxicity (TC) when the values in Method 1311 (TCLP) exceed 0.2 milligrams per liter (mg/L), 100 mg/L, 1 mg/L, and 5 mg/L, respectively, for these contaminants. However, the Petition and comments are insufficient because they do not provide evidence that discarded PVC leaches these hazardous contaminants in excess of their TC regulatory levels. Additionally, EPA is also aware of at least one study suggesting that discarded PVC may not exhibit the hazardous waste characteristic of toxicity for vinyl chloride. Specifically, a survey of American vinyl producers conducted in 2000 found concentrations of residual vinyl chloride monomer to be too low to exceed the vinyl chloride TC regulatory level (Borrelli et al. 2005). That is, the study found that residual vinyl chloride concentrations were less than twenty times the TC regulatory level for vinyl chloride (20 x 0.2 mg/L = 4 mg/L), which according to agency guidance may be classified as non-hazardous with respect to the presence of vinyl chloride without having to conduct a TCLP test (https://www.epa.gov/hw-sw846/hazardous-waste-characteristics#question23). Therefore, given the insufficient information to determine whether hazardous contaminants in discarded PVC exceed their TC regulatory levels, EPA denies the Petition to the extent it requests a listing under 40 CFR 261.11(a)(1).

With respect to 40 CFR 261.11(a)(3), the Petition does provide some evidence that discarded PVC may contain one or more toxic constituents listed in Appendix VIII. Specifically, petitioner provided evidence that discarded PVC contains residual vinyl chloride monomer, and may contain barium, cadmium, lead, DEHP, DBP, DEP, DMP, DnOP, and BBP.

Nevertheless, the Petition, even as supplemented by the information received through the public comment period, does not provide sufficient information that discarded PVC is "capable of posing a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported or disposed of, or otherwise managed" based on the eleven factors provided in 40 CFR 261.11(a)(3). 40 CFR 261.11(a)(3). To determine whether discarded PVC meets the 261.11(a)(3) criteria, EPA must consider eleven factors. The discussion below focusses on factors (ii), (iii), (vii), and (ix), detailing how the Petition and comments received provide insufficient information relevant to these criteria. Petitioner's failure to provide compelling information on these factors is sufficient to support EPA's final denial. EPA is not relying on an evaluation of, and does not intend to imply the sufficiency of, the evidence provided to support the other factors.

EPA received mixed information relevant to factor (ii). Factor (ii) specifies that EPA will consider the concentration of the Appendix VIII constituent in the waste. The petitioner provided some evidence that discarded PVC may contain residual vinyl chloride monomer, and that the following toxic constituents may be present due to additives: barium, cadmium, lead, DEHP, DBP, DEP, DMP, DnOP, and BBP. To support this, petitioner claimed that barium, cadmium and lead additives are often present in PVC. Petitioner also made generalized claims from a number of limited sources that the listed phthalates are often used by the PVC industry and may constitute up to eighty percent by weight of certain PVC products. However, EPA also received public

comments explaining that all of the toxic constituents that petitioners describe have been largely phased out of PVC in the United States over decades, such that, for example, less than 9 percent of new PVC contains any phthalates (including phthalates not listed on Appendix VIII), and the concentration of residual vinyl chloride monomer may be so low as to not be detectable (Vinyl Institute 2023 p 4, 13-14). Given the conflicting information on the prevalence and concentrations constituents in PVC, EPA has determined that the Petition and comments received provide insufficient information to consider the concentration of Appendix VIII constituents in discarded PVC.

EPA received insufficient information relevant to factor (vii). Factor (vii) specifies that EPA will consider plausible types of improper management to which discarded PVC could be subjected. In evaluating this factor, EPA does not consider spills, accidents, or other unlikely scenarios. *See Dithiocarbamate Task Force* v. *EPA,* 98 F.3d 1394, 1400-1401 (D.C. Cir. 1996); 63 FR 64383. Rather, EPA considers the current management practices for the waste at-issue and must identify "some factual support for a conclusion that a particular mismanagement scenario is plausible." *Dithiocarbamate Task Force* at 1400. The Petition relies on the presence of plastic pollution and evidence of phthalate exposure as evidence that mismanagement of discarded PVC has occurred and characterizes – without further elaboration – a limited number of sources for the proposition that marine pollution results from flawed waste management techniques.

These claims are insufficiently supported in several respects. First, management of discarded PVC depends on the type and source of PVC, but may include disposal in construction and demolition landfills, municipal solid waste landfills, or incineration as municipal solid waste. The Petition fails to distinguish between the management practices applicable to the different sources of this PVC waste,[1] and therefore, fails to properly

[1] For example, as noted in unit II.B. of this notice, different federal standards apply to different classifications of non-hazardous waste landfills.

identify potential improper management scenarios, or evaluate their plausibility. Second, the Petition fails to explain what amount of plastic pollution, including marine litter, can be attributed to PVC, as opposed to other forms of plastic. Third, the Petition also fails to explain the extent that this pollution has resulted from mismanagement of discarded PVC, as opposed to other sources such as uncontrolled litter or product use that occurs outside of the current waste management regime.[2] For all of these reasons, the Petition and comments received provide insufficient evidence for EPA to consider the plausible types of improper management to which discarded PVC could be subjected.

EPA also received insufficient information relevant to factors (iii) and (ix). Factor (iii) specifies that EPA will consider the potential of the constituent or any toxic degradation product of the constituent to migrate from the waste into the environment under the types of improper management considered in factor (vii); and factor (ix) specifies that EPA will consider the nature and severity of the human health and environmental damage that has occurred as a result of the improper management of wastes containing the constituent(s). Both of these factors require consideration of plausible mismanagement scenarios. However, as explained above, EPA received insufficient information about the plausible types of mismanagement to which discarded PVC could be subjected. The Petition and comments provided information about potential exposures from the use of PVC products. However, they did not explain why the information is germane to evaluating the potential of the constituent or any toxic degradation product of the constituent to migrate from waste (i.e., discarded PVC) into the environment under the particular environments found in waste management scenarios. Nor did they explain how it is relevant to human health or environmental damage occurring as a result of improper waste management. Finally, the Petition and

[2] See Figure 10 of OECD 2022 for sources of aquatic plastic including product use; See also Table 8 of US EPA 2020, which shows that discarded PVC is less than 3% of the plastic in municipal solid waste.

comments fail to identify any cases or situations where substantial human health or environmental damage has occurred from exposure to hazardous constituents in PVC resulting from the management of discarded PVC.

As such, the Petition fails to provide enough information to compel EPA to list discarded PVC as a hazardous waste. Nor do the Petition and comments include sufficient information of a potential hazard to human health or the environment that would otherwise justify, in the Agency's discretion, initiating a rulemaking procedure to supplement the insufficient information provided in the petition and public comments. Accordingly, EPA has determined that the Petition, even as supplemented by the information received through the public comment period, provides insufficient information to justify granting the petition under 260.20. The petition is denied.

V. References

The following is a listing of the documents that are specifically referenced in this document. The docket includes these documents and other information considered by the EPA, including documents that are referenced within the documents that are included in the docket, even if the referenced document is not physically located in the docket. For assistance in locating these other documents, please consult the technical person listed under **FOR FURTHER INFORMATION CONTACT**.

1. CBD. Petition for Rulemaking Pursuant to Section 7004(a) of the Resource Conservation and Recovery Act, 42 U.S.C. § 6974(A), and Section 21 of the Toxic Substances Control Act, 15 U.S.C. § 2620, Concerning the Regulation of Discarded Polyvinyl Chloride and Associated Chemical Additives. July 29, 2014.

2. Borrelli, F. , de la Cruz, P. , and Paradis, R. 2005. Residual Vinyl Chloride Levels in U.S. PVC Resins and Products: Historical Perspective and Update. Journal of Vinyl & Additive Technology, June 2005 65-69. https://doi.org/10.1002/vnl.20040

3. Czogała, J., Pankalla, E., and Turczyn, R. 2021. Recent Attempts in the Design of Efficient PVC Plasticizers with Reduced Migration. Materials (Basel, Switzerland) 14(4): 844. https://doi.org/10.3390/ma14040844.

4. European Commission, Directorate-General for Environment. 2022. The use of PVC (poly vinyl chloride) in the context of a non-toxic environment: final report. Publications Office of the European Union. https://data.europa.eu/doi/10.2779/375357.

5. Hahladakis, J., Velis, C., Weber, R., Iacovidou, E., and Purnell, P. 2018. An overview of chemical additives present in plastics: Migration, release, fate and environmental impact during their use, disposal and recycling. Journal of Hazardous Materials 344, 179-199. https://doi.org/10.1016/j.jhazmat.2017.10.014.

6. Kim, D.Y.; Chun, S.-H.; Jung, Y.; Mohamed, D.F.M.S.; Kim, H.-S.; Kang, D.-Y.; An, J.-W.; Park, S.-Y.; Kwon, H.-W.; Kwon, J.-H.. 2020. Phthalate Plasticizers in Children's Products and Estimation of Exposure: Importance of Migration Rate. International Journal of Environmental Research. and Public Health, 202017(22) 8582. https://doi.org/10.3390/ijerph17228582.

7. Organisation for Economic Cooperation and Development (OECD). 2022. Global Plastics Outlook: Policy Scenarios to 2060 – Policy Highlights. OECD Publishing, Paris. https://read.oecd-ilibrary.org/view/?ref=1143_1143481-88j1bxuktr&title=Global-Plastics-Outlook-Policy-Scenarios-to-2060-Policy-Highlights.

8. United States Environmental Protection Agency. 2020. Advancing Sustainable Materials Management: Facts and Figures Report, December 2020. https://www.epa.gov/facts-and-figures-about-materials-waste-and-recycling/advancing-sustainable-materials-management

9. United States Environmental Protection Agency. 2022. FY 2022-2026 EPA Strategic Plan. Washington, D.C.: U.S. Environmental Protection Agency, March 2022. Periodical. https://www.epa.gov/system/files/documents/2022-03/fy-2022-2026-epa-strategic-plan.pdf.

10. United States Environmental Protection Agency. 2023. Draft National Strategy to Prevent Plastic Pollution: Executive Summary, April 2023. https://www.epa.gov/system/files/documents/2023-04/Draft_National_Strategy_to_Prevent_Plastic_Pollution_Executive_Summary.pdf.

11. United States Environmental Protection Agency. 2024a. Trash Free Waters Projects, Retrieved March 28, 2024. https://www.epa.gov/trash-free-waters/trash-free-waters-projects.

12. United States Environmental Protection Agency. 2024b. Draft National Strategy to Prevent Plastic Pollution, Retrieved March 28, 2024. https://www.epa.gov/circulareconomy/draft-national-strategy-prevent-plastic-pollution.

13. Vinyl Institute. 2023. Public Comment. EPA-HQ-OLEM-2022-0971-0028 Attachment 1.

Michael S. Regan,
Administrator.

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