



*Via email and certified U.S. mail*

May 19, 2021

Michael Regan, Administrator  
U.S. Environmental Protection Agency  
Office of the Administrator, 1101A  
1200 Pennsylvania Avenue, N.W.  
Washington, DC 20460  
Michael.regan@Epa.gov

**Re: 60-Day Notice of Intent to Sue: Violations of the Resource Conservation and Recovery Act; Failure to Respond to Rulemaking Petition in Reasonable Timeframe**

Dear Administrator Regan,

This letter serves as official notice of the Center for Biological Diversity's ("Center") intent to file suit pursuant to the Resource Conservation and Recovery Act ("RCRA"), 42 U.S.C. § 6901, *et seq.*, against the United States Environmental Protection Agency ("EPA") for violating its mandatory duty to take action on the Center's petition requesting the promulgation of regulations to address the threat of toxic chemicals released from discarded plastic waste.

Polyvinyl chloride ("PVC"), commonly known as "PVC" or "vinyl," is one of the most commonly used types of plastic in the world. Found in packaging, children's toys, building materials, and hundreds of other products, PVC is ubiquitous in American life.

Scientists have long understood that PVC is highly toxic to human health and the environment. At every stop of its lifecycle—from production, use, and disposal—PVC results in the release of toxic chemicals that build up in the water, air, and food chain. Despite its status as "one of the most hazardous consumer products ever created,"<sup>1</sup> PVC and its associated chemical additives are managed in much the same way as food scraps and grass clippings after disposal.

In recognition of this threat, on July 24, 2014 the Center formally petitioned EPA to classify discarded PVC as hazardous waste under RCRA. Designation of discarded PVC as hazardous waste would require the agency to revise its solid waste management guidelines to reduce the significant threats to human health and the environment arising from the improper disposal of this plastic trash. EPA has failed to comply with its nondiscretionary obligations under RCRA to take action on the Center's petition within a reasonable timeframe. 42 U.S.C. § 6974(a). In the nearly seven years EPA's response to the Center's petition has been languishing, roughly 49

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<sup>1</sup> S.M. Bidoki et al., Environmental and Economic Acceptance of Polyvinyl Chloride (PVC) Coating Agents, 18 J. OF CLEANER PRODUCTION 219, 221 (2010).

*billion* pounds of PVC have been discarded in the United States, further threatening public health and the environment with this plastic's toxic impacts.

### *The Hazards of Polyvinyl Chloride*

Many Americans use PVC products every day, yet few realize the threat these substances pose to the environment and their own health.

PVC products contain vinyl chloride, a substance EPA acknowledges is a human carcinogen,<sup>2</sup> as well as significant concentrations of chemical additives, such as phthalate plasticizers, known to have toxic, carcinogenic and mutagenic effects on humans and other life forms.<sup>3</sup> Exposure to vinyl chloride, phthalate plasticizers and other chemical additives is associated with a broad array of developmental and behavioral abnormalities in humans and wildlife species.

Recent studies reveal that finished PVC products leach significant concentrations of these compounds into the environment as they deteriorate with age, threatening severe biological consequences.<sup>4</sup> Substantial scientific evidence shows that the widespread mismanagement of discarded PVC has distributed toxic chemicals throughout our environment, threatening ecosystem health and endangering vulnerable portions of the human population.

For example, phthalate plasticizers are not chemically bound to PVC and enter the environment as discarded plastics deteriorate with age. High concentrations of these compounds seep into soil and groundwater following conventional landfill disposal, ultimately collecting in aquatic ecosystems and entering the food web.<sup>5</sup> As a result of their widespread use and significant ability to migrate, human exposure to multiple phthalate plasticizers is virtually universal, beginning in the womb and continuing throughout life, raising concerns about negative health consequences at every age.

Mounting scientific evidence links phthalate exposure to a broad array of health and behavioral problems among humans and wildlife. Evidence shows that low levels of prenatal phthalate exposure influence fetal hormone regulation, resulting in abnormal development of the brain and reproductive organs.<sup>6</sup> Ingestion of contaminated breast milk interferes with androgenic hormone

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<sup>2</sup> EPA factsheet on Vinyl Chloride, available at <https://19january2017snapshot.epa.gov/sites/production/files/2016-09/documents/vinyl-chloride.pdf>

<sup>3</sup> See, e.g., Jennifer Beth Sass et al., Vinyl Chloride: A Case Study of Data Suppression and Misrepresentation, 113 ENVTL. HEALTH PERSP. 809, 811 (2005) (finding that EPA's assessment of vinyl chloride "downplay[s] risk" and reflects excessive industry participation); see also Janet Kielhorn et al., Vinyl Chloride: Still a Cause for Concern, 108 ENVTL. HEALTH PERSP. 579, 579 (2000) (explaining that vinyl chloride "remains a cause for concern because potential exposure to this chemical and new cases of [related cancers] are still being reported").

<sup>4</sup> Bonnie Ransom Stern et al., Are There Health Risks from the Migration of Chemical Substances from Plastic Pipes into Drinking Water? A Review, 14 HUMAN AND ECOLOGICAL RISK ASSESSMENT 753, 755 (2008).

<sup>5</sup> Joshua Kastner et al., Aqueous Leaching of Di-2-Ethylhexyl Phthalate and "Green" Plasticizers from PolyVinyl Chloride), 432 SCI. OF THE TOTAL ENV'T 357, 363 (2012)

<sup>6</sup> S.M. Bidoki et al., Environmental and Economic Acceptance of Polyvinyl Chloride (PVC) Coating Agents, 18 J. OF CLEANER PRODUCTION 219, 221 (2010); Jennifer J Adibi et al., Prenatal Exposures to Phthalates Among Women in New York City and Krakow, Poland, 111 ENVTL. HEALTH PERSP. 1719, 1722 (2003) (reporting that pregnant women in New York City "appear to be exposed [to phthalates] at levels above background levels in the United States, which may have implications for their pregnancy and/or the fetus");

production in male infants, potentially affecting sexual development, and childhood exposure may contribute to rising rates of attention deficit hyperactivity disorder, asthma, and obesity.<sup>7</sup> Among adult men, high concentrations of phthalate plasticizers correlate with poor semen quality, abdominal obesity, and insulin resistance.<sup>8</sup> Exposed women may be more likely to suffer pregnancy complications and contract diabetes. In addition, scientific studies indicate that phthalate plasticizers may exert carcinogenic effects in the liver and other organs.

In addition, evidence links exposure to plasticizer compounds to behavioral and developmental abnormalities in a range of wildlife species, demonstrating a “concrete risk” for populations living in polluted regions and threatening a cascade of effects throughout the ecosystem.<sup>9</sup> According to recent estimates, Americans discard over seven billion pounds of PVC each year.<sup>10</sup> There are no regulations regarding the disposal of discarded PVC, allowing it to be thrown away in the same manner as orange rinds and milk cartons. Experts anticipate that annual waste generation will increase significantly in the near future as durable products and construction goods reach the end of their useful lives. Disposal of PVC material poses a grave danger to the American public.

### *Legal Background*

Congress enacted the Resource Conservation and Recovery Act (“RCRA”), 42 U.S.C. § 6901, *et seq.*, because economic and population growth had “resulted in a rising tide of scrap, discarded, and waste materials,” leading to endangerment of public health and “needless” pollution of the environment. *Id.* § 6901(a), (b). The law provides a comprehensive framework to ensure the safe treatment, storage, and disposal of hazardous materials. *See id.* §§ 6921– 6939g. “Hazardous waste” includes any discarded material or solid waste that may pose “a potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed.” *Id.* § 6903(5).

EPA has developed criteria governing the identification and listing of hazardous wastes. These regulations authorize EPA to classify as hazardous waste any solid waste that typically contains a designated “toxic constituent,” provided that the agency’s analysis of 11 enumerated factors reveals that “the waste is capable of posing a substantial present or potential hazard to human health or the environment when improperly ... managed.” 40 C.F.R. § 261.11(a)(3).

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<sup>7</sup> Bung-Nyun Kim et al., Phthalates Exposure and Attention-Deficit/Hyperactivity Disorder in School-Age Children, 66 *BIOLOGICAL PSYCHIATRY* 958, 960-61 (2009); Barbara Kolarik et al., The Association Between Phthalates in Dust and Allergic Diseases Among Bulgarian Children, 116 *ENVTL. HEALTH PERSP.* 98, 102 (2008); Susan L. Teitelbaum et al., Associations Between Phthalate Metabolite Urinary Concentrations and Body Size Measures in New York City Children, 112 *ENVTL. RES.* 186, 189 (2012).

<sup>8</sup> Giuseppe Latini et al., Phthalate Exposure and Male Infertility, 226 *TOXICOLOGY* 90, 90 (2006); Metabolism of Phthalates in Humans, 51 *MOLECULAR NUTRITION & FOOD RES.* 899, 905 (2007)

<sup>9</sup> See, e.g., Jörg Oehlmann et al., A Critical Analysis of the Biological Impacts of Plasticizers on Wildlife, 364 *PHIL. TRANSACTIONS OF THE ROYAL SOC. B* 2047, 2051 (2009) (“Exposures to phthalates have ... been shown to alter behavior in fish.”); see also Ye, *supra* note 81, at 116 (explaining that “DEHP has been extensively characterized as a developmental and reproductive toxicant in many aquatic toxicological studies,” and reviewing relevant research).

<sup>10</sup> Center for Health, Environment and Justice: PVC: The Poison Plastic - The Campaign for Safe, Healthy Consumer Products: <http://chej.org/wp-content/uploads/Bad-News-Executive-Summary.pdf>

RCRA empowers any person to seek further regulation or hazardous wastes, including the listing of a substance as a hazardous waste, by petitioning the EPA for the “promulgation, amendment or repeal of any regulation” under the Act. 42 U.S.C. § 6974(a). EPA must “take action” with respect to citizen petitions “within a reasonable time following receipt.” *Id.* RCRA authorizes any person to file suit against EPA to compel the completion of any nondiscretionary duty. *Id.* § 6972(a)(2).

### *The Center’s Petition*

Because new scientific information indicates that PVC satisfies EPA’s criteria for hazardous waste, 40 C.F.R. § 261.11(a)(3), the Center submitted a petition<sup>11</sup> on July 24, 2014, requesting the agency exercise its authority under RCRA to designate discarded PVC as hazardous waste. Designation of PVC as a hazardous waste under RCRA would result in promulgation of a comprehensive regulatory scheme to ensure protection of human health and the environment. These safeguards would include standards applicable to generators and transporters, requirements regarding storage and disposal, and an extensive “cradle to grave” manifest system, tracking the generation, transport, and receipt of hazardous wastes.

The Center also requested the agency revise its solid waste management guidelines to reduce the threats to human health and the environment arising from the improper disposal of PVC. The Center’s petition provided extensive scientific information on the threats posed by PVC and its constituent components and analyzed the eleven regulatory factors that EPA evaluates in all hazardous waste designations. *See id.*

EPA has failed to provide the Center with a substantive response granting or denying its rulemaking petition, or otherwise designate discarded PVC as hazardous waste.

### *Violations of Law*

RCRA allows any person to petition EPA for the “promulgation, amendment or repeal of any regulation” under the Act. 42 U.S.C. § 6974(a). The Center utilized these rights when it submitted a petition for the classification of discarded PVC as hazardous waste.

EPA has a duty to promptly answer such a petition. *Id.* § 6974(a). Specifically, EPA “shall take action with respect to such petition and shall publish notice of such action in the Federal Register, together with the reasons therefor” within a reasonable time following the receipt of such petition. *Id.* RCRA provides for judicial review against EPA when the agency has failed to perform a nondiscretionary duty under RCRA. *Id.* § 6972(a)(2).

EPA has failed to formally respond to, or otherwise take action on, the Center’s July 2014 petition to issue a rule regarding the classification of discarded PVC as hazardous waste. EPA’s failure to take action on the Center’s petition, and to publish notice of such action in the Federal Register, violates the agency’s nondiscretionary duty under Section 6974(a) of RCRA. EPA’s failure is subject to judicial review. *Id.* § 6972(a)(2).

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<sup>11</sup> Available at [https://www.biologicaldiversity.org/campaigns/ocean\\_plastics/pdfs/PVC\\_RCRA.pdf](https://www.biologicaldiversity.org/campaigns/ocean_plastics/pdfs/PVC_RCRA.pdf)

*Conclusion*

The Center urges EPA to act on the Center's petition and issue a rule classifying discarded PVC as hazardous waste to reduce the threats from the improper disposal of this dangerous material. If EPA does not act on the Center's petition, we will pursue litigation in federal court.

Please let us know if you have any questions.

Sincerely,



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