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CONNECTICUT, HAWAII, ILLINOIS, MAINE, MARYLAND, MINNESOTA,
NEW JERSEY, NEW YORK, OREGON, RHODE ISLAND,
AND THE DISTRICT OF COLUMBIA**

July 13, 2022

Via Electronic Filing

EPA-HQ-OPPT-2021-0057

Michael S. Regan, Administrator
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue NW
Washington, DC 20460-0001

Re: Proposed Rule; Asbestos Part 1: Chrysotile Asbestos; Regulation of Certain Conditions of Use Under Section 6(a) of the Toxic Substances Control Act (87 Fed. Reg. 21,706 (Apr. 12, 2022))

Dear Administrator Regan:

The Attorneys General of Massachusetts, California, Connecticut, Hawaii, Illinois, Maine, Maryland, Minnesota, New Jersey, New York, Oregon, Rhode Island, and the District of Columbia, appreciate this opportunity to comment on the U.S. Environmental Protection Agency's (EPA) proposed rule setting certain restrictions on the manufacture (including import), processing, distribution in commerce, and commercial use and disposal of chrysotile asbestos to prevent unreasonable risk of injury to health in accordance with Toxic Substances Control Act (TSCA)¹ section 6(a), 15 U.S.C. 2605(a). *See Proposed Rule; Asbestos Part 1: Chrysotile Asbestos; Regulation of Certain Conditions of Use Under Section 6(a) of the Toxic Substances Control Act (TSCA)*, 87 Fed. Reg. 21,706 (Apr. 12, 2022) (Chrysotile Asbestos Management Rule or Management Rule). In January 2021, EPA determined that many uses of chrysotile asbestos pose an unreasonable risk of injury to health under TSCA.² With certain improvements

¹ 15 U.S.C. §§ 2601, et seq.

² *Asbestos (Part 1: Chrysotile Asbestos); Final Toxic Substances Control Act (TSCA) Risk Evaluation; Notice of Availability*, 86 Fed. Reg. 89 (Jan. 4, 2021) (Chrysotile Asbestos FRE). In the Chrysotile Asbestos FRE, EPA determined that chrysotile asbestos presents an unreasonable risk of injury to health based upon the following conditions of use: processing and industrial use of chrysotile asbestos diaphragms in the chlor-alkali industry; processing and industrial use of chrysotile asbestos-containing sheet gaskets in chemical production; industrial use and disposal of chrysotile asbestos-containing brake blocks in the oil industry; commercial use and disposal of aftermarket automotive chrysotile asbestos-containing brakes/linings; commercial use and disposal of other chrysotile asbestos-containing vehicle friction products; commercial use and disposal of other chrysotile asbestos-containing gaskets; consumer use and disposal of aftermarket automotive chrysotile asbestos-containing brakes/linings; consumer use and disposal of other chrysotile asbestos-containing gaskets. These comments address the Chrysotile Asbestos Management Rule and do not address the final risk evaluation for chrysotile asbestos. For example, the comments do not address the "no unreasonable risk" determinations in the agency's final risk evaluation nor the agency's decision to include only chrysotile asbestos in the final risk evaluation.

identified in this letter, the Management Rule's banning the manufacture and distribution of chrysotile-containing friction products and, after a two-year moratorium, banning its use in making diaphragms for the chlor-alkali industry, will help protect our states' residents from unreasonable risks posed by the substance. EPA should finalize the rule promptly.

The Attorneys General submit the following comments for EPA's consideration as the agency proceeds to finalize the Chrysotile Asbestos Management Rule.

INTRODUCTION AND SUMMARY OF COMMENTS

The Attorneys General support the goal that motivated Congress to enact the Frank R. Lautenberg Chemical Safety for the 21st Century Act,³ amending TSCA in 2016 to remove obstacles that had hindered EPA from playing a more robust role in protecting public health and the environment from toxic chemicals. In large part, the Chrysotile Asbestos Management Rule serves that purpose and begins a necessary course correction as to how EPA addresses unreasonable risks to public health that it has identified, a process that the Fifth Circuit short circuited as to asbestos decades ago with *Corrosion Proof Fittings v. EPA*.⁴ Accordingly, the Attorneys General support EPA's proposed rule, and offer these comments to help improve it.

Asbestos is a known human carcinogen. There is no safe level of exposure to this highly toxic material ubiquitous as a legacy material in our built environment and still used in a variety of applications, including aftermarket automotive brakes and brake linings, sheet gaskets used in chemical production, and diaphragms used in the chlor-alkali industry. Because of its potential for substantial harm to public health, a federal failure to adequately regulate asbestos subjects our states and their residents to substantial risks, including greater risks to potentially exposed or susceptible subpopulations such as those with environmental justice concerns, where the failure to perform a full analysis may have the most severe adverse impact. In the absence of sufficient national regulation of asbestos, our states face continued ongoing costs of state-subsidized medical care for diseases caused by asbestos exposure, as well as lost productivity resulting from those diseases and increased regulatory and enforcement costs.

The potential for harm posed by asbestos is universally recognized and addressing its risks was a Congressional priority in reforming TSCA:

Asbestos, for example, is one of the most harmful chemicals known to humankind, and it takes 15,000 lives a year. It is linked to a deadly form of lung cancer called mesothelioma. People can breathe in these fibers deep into their lungs where they cause serious damage.⁵

In 1989, EPA concluded that asbestos is a highly potent carcinogen regardless of the type of asbestos, whether as chrysotile asbestos or any of its five other forms, or the size of the fiber.⁶

³ Pub. L. No. 114—182, 130 Stat. 448 (June 22, 2016).

⁴ 947 F.2d 1201 (5th Cir., 1991).

⁵ Sen. Barbara Boxer speaking in support of H.R. 2576, the Frank R. Lautenberg Chemical Safety for the 21st Century Act, 114th Congress, Second Session, 162 Cong. Rec. S3511 (Jun. 7, 2016).

⁶ See *Final Rule: Asbestos; Manufacture, Importation, Processing, and Distribution in Commerce Prohibitions*, 54

EPA has long possessed an abundance of information that supports aggressive regulatory actions to protect the public from asbestos disease risks.⁷ According to EPA, “asbestos is one of the most hazardous substances to which humans are exposed in both occupational and non-occupational settings . . . [and] [t]here is wide agreement that all types of asbestos fibers are associated with pulmonary fibrosis (asbestosis), lung cancer, and mesothelioma. Gastrointestinal cancer and other cancers at extrathoracic sites, as well as other lung disorders and diseases, have also been associated with asbestos exposure All of these asbestos-related diseases are life-threatening or disabling and cause substantial pain and suffering [These] conclusions regarding the health effects of asbestos exposure represent a widely accepted consensus of opinion of health agencies, scientific organizations, and independent experts.”⁸ Accordingly, asbestos is one of the ten chemical substances (Initial Ten TSCA Chemicals) that EPA chose for its initial chemical risk evaluations under the 2016 amendments to TSCA.⁹ EPA’s recent work developing the Chrysotile Asbestos Management Rule only confirms the science in this regard.¹⁰

While the Attorneys General are in favor of the Chrysotile Asbestos Management Rule’s proposal to ban the most prominent uses of the substance, thus advancing public health, and applaud EPA for taking definitive action in proposing the bans, nonetheless, we urge EPA to strengthen the rule in several areas.

We believe the rule falls short by not requiring an across-the-board ban on future importation and use of all known forms of asbestos and additional uses of chrysotile asbestos, an unfortunate consequence of the self-limiting nature of the Chrysotile Asbestos FRE. Thus, the rule would manage only one type of asbestos—chrysotile—and six uses associated with chrysotile asbestos. However, we urge EPA to consider banning or severely restricting all uses of chrysotile asbestos and of the five other known forms of asbestos¹¹ in future rulemaking and to take a closer look at the rule and the final risk evaluation to determine whether a broader ban in the Management Rule is appropriate.

Also, given EPA’s recognition that asbestos may be found as an impurity in various consumer and industrial products, including vermiculite and talc, the Attorneys General support EPA’s commitment to evaluate exposures from asbestos impurities in products within the agency’s jurisdiction during its ongoing Part 2 rulemaking. We urge EPA to use information

Fed. Reg. 29,460, 29,467 (July 12, 1989); see also *Corrosion Proof Fittings v. EPA*, 947 F.2d 1201, 1217 (5th Cir. 1991) (“The EPA . . . [in issuing the rule] believed that there was no asbestos exposure level for which the risk of injury or death was zero.”).

⁷ See *Corrosion Proof Fittings*, 947 F.2d at 1211 n.9 (noting that EPA did not need to convene panel of experts for its asbestos rulemaking because it already had sufficient information regarding risks).

⁸ 54 Fed. Reg. at 29,468-69.

⁹ See *Designation of Ten Chemical Substances for Initial Risk Evaluations Under the Toxic Substances Control Act*, 81 Fed. Reg. 91,927 (Dec. 19, 2016).

¹⁰ See *Asbestos Part 1: Chrysotile Asbestos; Regulation of Certain Conditions of Use Under Section 6(a) of the Toxic Substances Control Act (TSCA)*, 87 Fed. Reg. 21,706 (Apr. 12, 2022).

¹¹ EPA must complete a final Part 2 risk evaluation for legacy uses of asbestos and associated disposals, other types of asbestos fibers in addition to chrysotile, and conditions of use of asbestos-containing talc by December 2024. The other types of asbestos include tremolite asbestos, actinolite asbestos, anthophyllite asbestos, amosite asbestos and crocidolite asbestos.

collected through its proposed update to asbestos reporting requirements¹² to ensure that the Part 2 risk evaluation properly considers the full scope of asbestos exposures.

The Attorneys General are also concerned about the suggestion in the Management Rule that the agency anticipates that the ban of the use of asbestos in fabricating diaphragms for use in the chlor-alkali industry may lead to an increase in the use of “forever” per- and polyfluoroalkyl substances (PFAS) as a substitute for the chrysotile asbestos currently used in the industry’s production process for making such diaphragms.¹³ The risks associated with exposures to PFAS are well documented and such a substitution would create unacceptable, regrettable externalities. The Attorneys General support EPA’s anticipated efforts promptly to gather additional information regarding viable alternatives to asbestos, PFAS technologies, and the consequences to public health and the environment that likely would result from PFAS substitutions for asbestos. This would help inform the agency’s decision making about an appropriate trajectory—no more than the two-year period currently proposed—for the chlor-alkali industry to convert from asbestos diaphragms. The agency also should consider providing incentives for the development of alternative technologies, and during any delay in implementing the ban, EPA should ensure that industry employs measures to ensure worker and public safety.

In sum, we encourage EPA to finalize the Chrysotile Asbestos Management Rule promptly and consider additional bans of uses of chrysotile asbestos consistent with the final risk evaluation, while also following through on its commitment to address, in its second part of the asbestos risk evaluation, risks from the other known forms of asbestos, asbestos unintentionally present in articles such as talc, and the significant risks of harm from legacy asbestos.

These comments proceed as follows. In Part I, we provide background on EPA’s prioritization of managing asbestos risks under TSCA. In Part II, we provide a summary of our states’ interests with regard to the management of asbestos. In Part III, we analyze EPA’s work identifying the health benefits and co-benefits supporting the Management Rule and provide support for our call for EPA to expand the scope of its asbestos prohibitions to include the full range of known asbestos chemicals and uses. In particular, EPA should consider expanding the reach of the proposed bans, address the presence of asbestos in talc and other consumer products and mind the need to minimize the amount of time provided to the chlor-alkali industry to transition away from asbestos while avoiding embracing potentially harmful substitutions, such as instead relying on toxic “forever” PFAS.

I. Prioritizing Risk Management of Chrysotile Asbestos Under TSCA

Under TSCA, as amended, EPA must prioritize chemical substances for regulatory review, assess the risks posed by the chemicals identified as priorities, and for those chemicals

¹² EPA recently published a new Chemical Data Reporting rule, requiring asbestos reporting, including with respect to asbestos as an impurity, in response to an order of the United States District Court for the Northern District of California (Chen, U.S.D.J.). The case, *California v. EPA*, Case No. 19-CV-03807, challenged EPA’s failure to require asbestos reporting necessary for proper regulation and was litigated by many of the undersigned Attorneys General, together with a group of NGOs led by the Asbestos Disease Awareness Organization. *See Asbestos; Reporting and Recordkeeping Requirements Under the Toxic Substances Control Act (TSCA)*, 87 Fed. Reg. 27,060 (May 6, 2022).

¹³ *Id.* at 21,707, 21,719.

that present an unreasonable risk to health or the environment, manage those risks.

It has long been known that there is no safe level of exposure to asbestos, regardless of the type of asbestos or the size of the fiber. Indeed, EPA concluded more than three decades ago that asbestos is a potential carcinogen at all levels of exposure.¹⁴ Section 6 of TSCA requires EPA to systematically prioritize for risk evaluation, and to evaluate the potential risks presented by, the manufacture, processing, distribution in commerce, use, or disposal of chemical substances or mixtures.¹⁵ By December 19, 2016, EPA was required to begin risk evaluations on ten chemical substances drawn from the agency's *TSCA Work Plan for Chemical Assessments: 2014 Update* (the 2014 TSCA Work Plan Update)¹⁶ and to publish the list of chemical substances.¹⁷ And on December 19, 2016, EPA designated the Initial Ten TSCA Chemicals, with asbestos among the ten priority substances.¹⁸

Under Section 6(b)(4)(A), EPA then had to conduct a risk evaluation for each of the Initial Ten TSCA Chemicals determine whether the

. . . chemical substance presents an unreasonable risk of injury to , health or the environment, without consideration of cost or other nonrisk factors, including an unreasonable risk to a potentially exposed or susceptible subpopulation identified as relevant to the risk evaluation by the Administrator, under the conditions of use.¹⁹

And under Section 6(b)(4)(D), EPA was required to publish the scope of the risk evaluation to be conducted for each of the Initial Ten TSCA Chemicals within six months after the initiation of the risk evaluation.²⁰ On July 7, 2017, EPA published its asbestos risk evaluation scoping document.²¹

¹⁴ See *Final Rule: Asbestos; Manufacture, Importation, Processing, and Distribution in Commerce Prohibitions*, 54 Fed. Reg. 29,460, 29,460-29,461 (July 12, 1989); see also *Corrosion Proof Fittings v. EPA*, 947 F.2d 1201, 1217 (5th Cir. 1991) (“The EPA . . . [in issuing the rule] believed that there was no asbestos exposure level for which the risk of injury or death was zero.”).

¹⁵ 15 U.S.C. § 2605.

¹⁶ In 2012, EPA identified 83 chemicals for assessment as part of its chemical safety program. According to EPA, the screening process for identifying the chemicals was based on a combination of hazard, exposure (including via uses), and persistence and bioaccumulation characteristics, and in developing the 2014 Update the agency continued to use the process, which focused on chemicals that meet one or more of the following factors: (i) potential concern for children’s health (for example, because of reproductive or developmental effects); (ii) neurotoxic effects; (iii) persistent, bioaccumulative and toxic; (iv) probable or known carcinogens; (v) used in children’s products or in products to which children may be highly exposed; and (vi) detected in biomonitoring programs. See *TSCA Work Plan for Chemical Assessments: 2014 Update*, https://www.epa.gov/sites/production/files/2015-01/documents/tsca_work_plan_chemicals_2014_update-final.pdf.

¹⁷ 15 U.S.C. § 2605(b)(2)(A).

¹⁸ See *Designation of Ten Chemical Substances for Initial Risk Evaluations Under the Toxic Substances Control Act*, 81 Fed. Reg. 91,927 (Dec. 19, 2016). The other nine substances are: 1-Bromopropane, 1,4-Dioxane, Carbon Tetrachloride, Cyclic Aliphatic Bromide Cluster (also known as HBCD), Methylene Chloride, N-Methylpyrrolidone (NMP), Pigment Violet 29, Tetrachloroethylene (also known as Perchloroethylene), and Trichloroethylene (TCE).

¹⁹ 15 U.S.C. § 2605(b)(4)(A).

²⁰ *Id.* § 2605(b)(4)(D).

²¹ See *Notice of Availability for the Scopes of the Risk Evaluations To Be Conducted for the First Ten Chemical Substances Under the Toxic Substances Control Act*, 82 Fed. Reg. 31,592 (July 7, 2017).

On January 6, 2021, EPA published its Final Risk Evaluation for Asbestos, Part 1: Chrysotile Asbestos, finding unreasonable risks to human health for those uses of chrysotile asbestos the agency identified as ongoing uses.²² The Chrysotile Asbestos Management Rule is EPA’s proposed regulatory response to mitigate the unreasonable harm under certain conditions of use, determined in the Final Risk Evaluation, Part 1.²³ EPA’s data generated in developing the Management Rule and its technical analysis provides more than a sufficient basis for its regulatory action—in this case banning the manufacture and distribution of chrysotile-containing friction products and, after a two-year moratorium, banning its use in making diaphragms for the chlor-alkali industry.

II. The Interests of the Participating States

Our states have significant interests in ensuring that EPA’s regulatory response to mitigate the unreasonable risks of harm to human health caused by chrysotile asbestos for the specific conditions of use is conducted in accordance with TSCA.²⁴ EPA determined that numerous uses of chrysotile asbestos pose an unreasonable risk of harm to human health. Thus, the consequences for our states’ residents of a federal failure to adequately address these may be dire, with the potential for greater risk to potentially exposed or susceptible subpopulations.²⁵

EPA’s past conclusions about the unreasonable risks asbestos poses to human health and the environment are well supported. In 1989, EPA found that asbestos is a potent carcinogen at all levels of exposure, regardless of the type of asbestos or the size of the fiber, i.e., that there is no level of exposure that is safe for a human,²⁶ and it is well-recognized that EPA possesses ample information with respect to asbestos disease risks.²⁷ EPA’s findings regarding the disastrous human health effects caused by exposure to asbestos are set forth in EPA’s *Asbestos: Manufacture, Importation, Processing and Distribution in Commerce Prohibitions; Final Rule*.^{28,29}

²² 86 Fed. Reg. 89 (Jan. 4, 2021).

²³ See 15 U.S.C. § 2605(c)(2).

²⁴ See *Comments of the Attorneys General of Massachusetts, California, Hawai’i, Illinois, Maine, Maryland, Minnesota, New Jersey, New York, Oregon, Rhode Island, Vermont, Washington, and the District of Columbia on the Draft Risk Evaluation for Asbestos* (June 2, 2020), <https://www.regulations.gov/comment/EPA-HQ-OPPT-2019-0501-0077>.

²⁵ “Potentially exposed or susceptible subpopulation” means a group of individuals within the general population identified by the Administrator who, due to either greater susceptibility or greater exposure, may be at greater risk than the general population of adverse health effects from exposure to a chemical substance or mixture, such as infants, children, pregnant women, workers, or the elderly. See *id.* § 2602(12).

²⁶ See *Asbestos: Manufacture, Importation, Processing, and Distribution in Commerce Prohibitions; Final Rule*, 54 Fed. Reg. 29,460, 29,467 (July 12, 1989), 40 C.F.R. Part 763; see also *Corrosion Proof Fittings*, 947 F.2d at 1217 (“The EPA . . . believed that there was no asbestos exposure level for which the risk of injury or death was zero.”).

²⁷ See *Corrosion Proof Fittings*, *supra*, 947 F.2d at 1211 n.9 (noting that EPA did not need to convene panel of experts for its asbestos rulemaking because it already had sufficient information regarding risks).

²⁸ 54 Fed. Reg. 29,460 (July 12, 1989), 40 C.F.R. Part 763.

²⁹ In *Corrosion Proof Fittings*, the Fifth Circuit remanded the Asbestos Ban Rule to EPA for further proceedings based on the Court’s having found that EPA failed to satisfy the “least burdensome” requirement imposed on the agency under the then-applicable language of TSCA for banning asbestos, without challenging EPA’s findings regarding the unreasonable risks posed by asbestos absent regulation. See *Corrosion Proof Fittings*, *supra*, 947 F.2d at 1207-1208, 1211 n.9; see also EPA’s 2014 IRIS Assessment of Libby Amphibole Asbestos (concluding that asbestos “is carcinogenic to humans”), *available at*: https://cfpub.epa.gov/ncea/iris/iris_documents/documents/toxreviews/1026tr.pdf.

Indeed, asbestos' potential for substantial harm to public health and the environment is the reason why it was among the first candidates for risk evaluation. The consequences of a federal failure to adequately identify and eliminate those unreasonable risks is correspondingly high to our states and their residents, with the potential for even greater risk to susceptible subpopulations, where the failure to perform a full analysis may have the most severe adverse impact for environmental justice communities, which are already subject to socioeconomic and health stressors and other types of pollution (*see, infra*, Section III(A)). In the absence of sufficient national regulation of asbestos, our states face continued ongoing costs of state-subsidized medical care for diseases caused by asbestos exposure, including pulmonary fibrosis (asbestosis), lung cancer, and mesothelioma, as well as lost productivity resulting from those diseases. Asbestos exposure is a known cause of mesothelioma, a rare and highly fatal cancer of the chest or abdominal lining caused by exposure to asbestos fibers.³⁰ From 2015–2019, the CDC reports there were a total of 15,485 new cases of mesothelioma in the U.S., resulting in 12,431 deaths, of which 6,134 new cases of mesothelioma, resulting in 4,743 deaths, were in our states.³¹

A failure to properly regulate at the federal level would also harm our states and district (States) by increasing their own regulatory and enforcement costs. Many of our States have regulations prohibiting various uses of asbestos/asbestos-containing products. For example, Massachusetts and Oregon comprehensively regulate the handling, transport, and disposal of asbestos in its borders through a set of overlapping state and delegated federal programs involving multiple state agencies.³² California regulates exposure to asbestos in construction work,³³ general industry,³⁴ shipyards,³⁵ and has prohibited the sale of brake pads with asbestiform fibers above .1% weight.³⁶ New Jersey also regulates exposure to asbestos in construction work and general industry in the public sector and regulates the asbestos abatement industry through a series of comprehensive regulations administered by multiple state agencies.³⁷ The District of Columbia regulates the removal and abatement of asbestos through its own licensing and permitting requirements to ensure the safe removal and disposal of asbestos-containing material and the safety of asbestos abatement workers and the surrounding community.³⁸ And New York regulations protect the public from exposure to asbestos fibers,

³⁰ See Roelofs, CR, Kernan, GJ, Davis, LK, Clapp, RW, Hunt, PR, “Mesothelioma and Employment in Massachusetts: Analysis of Cancer Registry Data 1988-2003,” *American Journal of Industrial Medicine* 2013 Sep; 56(9):985-92.

³¹ See <https://gis.cdc.gov/Cancer/USCS/DataViz.html> (last accessed July 13, 2022).

³² See e.g., Massachusetts Clean Air Act, M.G.L. c. 111, §§ 142A-O, and the federal Clean Air Act, 42 U.S.C. §§ 7401, *et seq.*, which authorize the Massachusetts Department of Environmental Protection (“MassDEP”) to prevent air pollution by regulating asbestos handling, transport, and disposal; M.G.L. c. 21E by which MassDEP requires notice and remediation of releases of asbestos to the environment as a hazardous material under the state’s “superfund” law; M.G.L. c. 111, § 150A under which MassDEP regulates disposal of asbestos under the Massachusetts Solid Waste Management Act; and M.G.L. c. 149, through which Massachusetts Department of Labor Standards (“DLS”) ensures worker safety in Massachusetts by licensing asbestos-related work and requiring the use of proper work practices and safety equipment; *see also* Or. Admin. R. 340-248.

³³ California Code of Regulations (“Cal. Code Regs.”), tit. 8, § 1529.

³⁴ *Id.* tit. 8, § 5208.

³⁵ *Id.* tit. 8, § 8358.

³⁶ California Health and Safety Code, § 25250.51.

³⁷ N.J.A.C. 8:60, Asbestos Licenses and Permits; N.J.A.C. 5:23-8, Asbestos Abatement Subcode; N.J.S.A. 34:6A-30, Adoption of Standards (adopting federal standards); N.J.A.C. 7:26, Solid and Hazardous Waste Regulations.

³⁸ See 20 DCMR § 800.1, *et seq.*

regulate the training of employees who work in the asbestos abatement industry, and regulate the transportation and disposal of debris and materials generated from an asbestos abatement and removal project.³⁹ Absent adequate federal regulation, these states will continue to bear the increasing costs of their present reactive approach to protecting their citizens' health from asbestos-caused disease and may be required to promulgate and enforce additional regulations.

III. Analysis

As discussed in this section, the undersigned Attorneys General strongly support the Management Rule as well supported by EPA's analysis of the health benefits and co-benefits, and we urge EPA to expand the scope of its asbestos prohibitions to include the full range of known asbestos chemicals and uses, where feasible in this rulemaking and in future rulemakings.

A. EPA's Chrysotile Asbestos Management Rule Generates a Range of Benefits and Co-Benefits Well Supported By The Data

Under TSCA, EPA is required to prepare an economic analysis of the Management Rule (Economic Analysis) to analyze the potential costs and benefits⁴⁰ associated with the proposed rule,⁴¹ while satisfying TSCA's "best available science" standard for the quality of data it must consider and the statute's "weight of scientific evidence" standard for decision making under Section 2605.⁴² In calculating health benefits for the Management Rule, EPA appropriately based its analysis on current, reliable data linking asbestos exposure pathways to cancer risks.⁴³ In addition, while not quantified for the Economic Analysis, EPA appropriately recognized the many unquantified co-benefits that will be generated by the rule.⁴⁴ Here, EPA both appropriately considered the different types of benefits to be achieved through the rule and well supported its findings with reliable data.

First, EPA calculated benefits from avoided cases of cancer (including lung cancer, mesothelioma, ovarian cancer, and laryngeal cancer) due to reduced asbestos exposures to workers, occupational non-users, and Do-It-Yourself-ers (DIY) from implementation of the Management Rule's requirements for chlor-alkali diaphragms, sheet gaskets for chemical production, and aftermarket brakes.⁴⁵ The agency found that the combined national calculated benefits of avoided cancer impacts associated with those specific products is \$1,200 to \$3,100 per year, depending on the discount rate used.⁴⁶ Ample, reliable data demonstrates the link

³⁹ See, e.g., 12 N.Y.C.R.R. Part 56; 10 N.Y.C.R.R. Part 73; 6 N.Y.C.R.R. Part 360; 6 N.Y.C.R.R. Part 364.

⁴⁰ See *Corrosion Proof Fittings*, *supra* (regulation struck down based on defective cost-benefit analysis).

⁴¹ 15 U.S.C. § 2605(c)(2)(A)(iv).

⁴² *Id.* §§ 2625(h) ("Scientific standards In carrying out section [2605] of this title . . . the Administrator shall use scientific information, technical procedures, measures, methods, protocols, methodologies, or models, employed in a manner consistent with the best available science . . .") and 2625(i) ("Weight of scientific evidence The Administrator shall make decisions under section [2605] of this title based on the weight of the scientific evidence").

⁴³ *Asbestos Part 1: Chrysotile Asbestos; Regulation of Certain Conditions of Use Under Section 6(a) of the Toxic Substances Control Act (TSCA)*, 87 Fed. Reg. 21,706, 21,708 (Apr. 12, 2022); E.P.A. Off. of Pollution Prevention & Toxics, *Economic Analysis of the TSCA Section 6 Proposed Rule for Asbestos Risk Management, Part 1* (Apr. 2022).

⁴⁴ 87 Fed. Reg. at 21,708.

⁴⁵ *Id.*

⁴⁶ *Id.*; see also *Asbestos (Part 1: Chrysotile Asbestos); Final Toxic Substances Control Act (TSCA) Risk Evaluation; Notice of Availability*, 86 Fed. Reg. 89 (Jan. 4, 2021).

between these pathways of exposure and the benefits from avoided cancer cases, and EPA properly included these quantified benefits in its Economic Analysis.⁴⁷

Second, EPA properly recognized a range of additional unquantified benefits and co-benefits from reducing asbestos exposures related to other uses and exposure pathways. The Office of Management and Budget (OMB) has cautioned agencies against ignoring unquantifiable benefits, because the most efficient rule may not have the “largest quantified and monetized . . . estimate” and directed agencies to consider values that are difficult to qualify.⁴⁸ And Executive Order 12,866 requires agencies to assess “qualitative measures of costs and benefits that are difficult to quantify, but nevertheless essential to consider.”⁴⁹

Third, courts have supported EPA’s consideration of co-benefits in its rulemaking decisions.⁵⁰ For example, in *U.S. Sugar Corporation v. EPA*, the U.S. Court of Appeals for the D.C. Circuit found that EPA had acted within its legal authority when it relied on co-benefits, including “reductions in emissions of other pollutants” to justify enforcing a stricter standard on reducing hydrogen chloride emissions from boilers, process heaters, and incinerators.⁵¹

In its proposal, EPA identified health benefits associated with reducing acute exposures from the other uses of chrysotile asbestos, including oilfield brake blocks, other vehicle friction products or other gaskets.⁵² EPA also noted additional avoided non-cancer health effects from reduced asbestos exposure, including respiratory effects as well as adverse effects to the immune and lymphoid systems.⁵³ In addition, EPA properly recognized that the proposed rule would generate significant benefits by improving air quality and noted that chlor-alkali production is “one of the most energy-intensive industrial operations.”⁵⁴ The rule’s eventual prohibition of asbestos diaphragms cells will require the chlor-alkali industry to rely on more energy efficient technologies.⁵⁵ While the transition to these new energy efficient technologies will result in costs

⁴⁷ See E.P.A. Off. of Chem. Safety & Pollution Prevention, EPA-740-R1-8012, *Risk Evaluation for Asbestos Part 1: Chrysotile Asbestos* (2020); *Economic Analysis for Chrysotile Asbestos*, *supra* at 2.

⁴⁸ Off. of Mgmt. & Budget, Circular A-4, at 2 (2003). *available at* https://obamawhitehouse.archives.gov/omb/circulars_a004_a-4/.

⁴⁹ Exec. Order No. 13,563 § 1, 76 Fed. Reg. 3821, 3821 (Jan. 21, 2011) (affirming Exec. Order No. 12,866; *See, e.g.*, 87 Fed. Reg. 10,805–02, 10,812 (Feb. 25, 2022) (describing how FEMA must account for co-benefits that “may not be easily quantifiable” related to “disadvantaged communities; cultural, historic, and sacred sites; and subsistence-related resources and activities” when evaluating grants); 69 Fed. Reg. 38,958, 39,138–39 (June 29, 2004) (evaluating all effects of regulating emissions from non-road diesel engines and “not just those benefits and costs which could be expressed [] in dollar terms”); 64 Fed. Reg. 52,828, 53,023 (Sept. 30, 1999) (considering the “real, but unquantifiable, benefits” of section 112 standards for hazardous waste combustors).

⁵⁰ *See e.g., Am. Trucking Assns, Inc. v. EPA*, 175 F.3d, 1027, 1051-52 (D.C. Cir. 1999), *rev’d on other grounds sub. nom., Whitman v. Am. Trucking Assns*, 531 U.S. 457 (2001) (finding that the Clean Air Act’s protective public health purpose required EPA to consider all beneficial health effects when setting National Ambient Air Quality Standards, rather than only “half of a substance’s health effects”); *United States Sugar Corp. v. EPA*, 830 F.3d 579, 591, 625 (D.C. Cir. 2016).

⁵¹ 830 F.3d at 625.

⁵² 87 Fed. Reg. at 21,708.

⁵³ *Id.*

⁵⁴ *Id.*

⁵⁵ Chrysotile asbestos is used in the chlor-alkali industry for making semi-permeable diaphragms which are used in the production of chlorine and sodium hydroxide. The Management Rule’s prohibition will require facilities to transition to alternative technology, such as membrane cells or non-asbestos diaphragm cells. EPA expects industry

to the industry, the chlor-alkali plants will be using less energy, and therefore, receive direct benefits in the form of energy cost savings.⁵⁶ In addition to reducing electricity consumption, this transition will also reduce associated pollutants such as carbon dioxide, particulate matter, sulfur dioxide, and nitrogen oxides. Reducing pollutants emitted by industrial activities and improving air quality will result in further health, economic as well as climate-related benefits.⁵⁷

Another important benefit of the Chrysotile Asbestos Management Rule is its benefit to communities with environmental justice concerns. During environmental justice stakeholder meetings related to the Management Rule, commenters expressed concerns about exposure to chrysotile asbestos for those individuals who live near these facilities and auto workers.⁵⁸ EPA noted that environmental justice communities are disproportionately exposed to the toxins associated with asbestos and suffer the resulting health consequences.⁵⁹ In particular, six chlor-alkali facilities in Louisiana and Texas in communities with large Black and Latino populations suffer disproportionately high cancer risks from exposure to toxic chemicals.⁶⁰ There are also elevated non-cancer respiratory risks associated with two of these facilities.⁶¹ And, the Management Rule will benefit the environmental justice communities located near these facilities by reducing their exposure to toxic releases, improving regional air quality, and protecting the health of community members.

As EPA's analyses of quantified and unquantified benefits demonstrate, the Management Rule accomplishes much in the way of protecting public health. As noted below, however, we urge EPA to impose additional restrictions on the use and importation of asbestos in future rulemakings and to identify non-PFAS alternatives, actions that would generate additional public health benefits and prevent unintended consequences associated with PFAS substitutions.

B. To Adequately Protect Public Health, As Required by TSCA, EPA Should Impose A More Expansive Ban On Asbestos and Its Uses

While the Management Rule advances public health, its scope should be expanded and should result in an across-the-board ban on future importation and use of all forms of asbestos. The Management Rule manages only one type of asbestos—chrysotile asbestos—and six uses associated with chrysotile asbestos. However, given the significant risks of exposure to asbestos in any use, we urge EPA to ban additional uses of chrysotile asbestos and ban or severely restrict the five other known forms of asbestos.

The Management Rule addresses only six chrysotile asbestos conditions of use found in the Chrysotile Asbestos FRE to present unreasonable risks. These conditions of use do not comprise the full range of currently imported chrysotile-containing products. “[I]mport records and other information provide evidence of current importation of knitted fabrics (woven

to make this transition over the coming decades, but the rule would accelerate that transition. *Economic Analysis for Chrysotile Asbestos*, at ES-4-ES-7.

⁵⁶ *Id.* at ES-4-ES-24.

⁵⁷ *Id.*; *id.* at ES-10-ES-13 (noting that converting asbestos diaphragms cells to membrane cells could yield tens of millions of dollars per year in environmental and health benefits from reduced air pollution).

⁵⁸ 87 Fed. Reg. at 21,715.

⁵⁹ See *Economic Analysis for Chrysotile Asbestos*, at ES-15.

⁶⁰ *Id.*

⁶¹ *Id.*

products), asbestos cement products, compressed asbestos fiber jointing paper, millboard and felt, building materials and yarn and thread.”⁶² We urge EPA to restrict these identified uses of chrysotile asbestos in the Management Rule based on the agency’s findings in the Chrysotile Asbestos FRE with respect to the documented risks associated with chrysotile asbestos exposures.

To effectively safeguard public health, EPA should perform a robust Part 2 risk evaluation—as it has stated it will—and consider prohibitions on the other five forms of asbestos fibers⁶³ that are as hazardous as chrysotile asbestos, as well as legacy asbestos uses (e.g., asbestos that has been used for decades in building materials) and uses where asbestos is unintentionally present as an impurity. It is undisputed that all forms of asbestos pose harmful health and environmental risks;⁶⁴ therefore, all forms should be restricted. Additional restrictions on asbestos can be informed and developed utilizing the information and data gathered through the proposed Chemical Data Reporting rule (CDR Rule) which will require comprehensive reporting on asbestos imports, use and disposal.⁶⁵ We anticipate the proposed CDR Rule will result in a more complete and accurate collection of information necessary to comprehensively understand the scope of asbestos risk and exposure to effectively protect the public. We thus urge EPA to utilize the CDR data to evaluate and manage all forms and conditions of use of asbestos, including legacy uses and uses where asbestos is present as an impurity.

C. EPA Should Fully Address Asbestos Impurities in the Regulatory Process

The agency has acknowledged that asbestos impurities may occur in a variety of consumer and industrial products, including vermiculite and talc.⁶⁶ The Attorneys General support EPA’s commitment to evaluate exposures from asbestos impurities in products within the agency’s jurisdiction during its Part 2 rulemaking and urge EPA to use information collected through its new CDR Rule to ensure that its Part 2 risk evaluation considers the full range of potential exposures from uses associated with asbestos as an impurity.

The CDR Rule would require manufacturers (including importers) and processors of asbestos and substances where asbestos is “known or reasonably foreseen” to occur as an impurity to report the quantity of asbestos manufactured, imported, or processed.⁶⁷ The CDR Rule reasonably focuses on vermiculite and talc—two substances with a demonstrated history of asbestos impurities. Talc is a widely used ingredient in consumer products including ceramics,

⁶² Asbestos Disease Awareness Org., *ADAO: Frequently Asked Questions about EPA’s Part 1 Risk Management Rule for Chrysotile Asbestos Under TSCA* (Apr. 18, 2022) (referring also to SACC expressing the same concerns in its review of the Draft Risk Evaluation); ADAO Pl.’s Combined Opp. to Def. Mot. Summ. Judgment & Reply in Supp. of their Summ. Judgment Mot., *Asbestos Disease Awareness Organization, et al. v. E.P.A.*, 2020 WL 5868881 (N.D.Cal. 2020); TSCA Sci. Advisory Comm. on Chems., *Final Report for the TSCA Science Advisory Committee on Chemicals* (June 8-11, 2020).

⁶³ The five other forms of asbestos are crocidolite, amosite, anthophyllite, tremolite, and actinolite.

⁶⁴ Agency for Toxic Substances & Disease Registry, *Toxicological Profile for Asbestos* (Sept. 2001); Nat’l Toxicology Program, U.S. Dep’t of Health & Human Servs., Public Health Serv., *Asbestos In: Report on Carcinogens* (14th Ed. 2016).

⁶⁵ *Asbestos; Reporting and Recordkeeping Requirements Under the Toxic Substances Control Act (TSCA)*, 87 Fed. Reg. 27,060 (May 6, 2022).

⁶⁶ Chrysotile Asbestos Management Rule at 21,790.

⁶⁷ See CDR Rule at 27,061.

cosmetics, baby powders, and plastics, and talc also has a number of industrial applications, raising the risk that workers and the general public could be exposed to asbestos as an impurity. Common industrial uses of talc include as a filler for the manufacturing of plastics, and paints, as an application aide for roofing materials, a component of ceramics, a high-temperature lubricant, and as a carrier for insecticides.⁶⁸ Talc deposits are often geologically associated with asbestos and asbestos impurities have frequently been observed in talc-containing products.⁶⁹ While studies of asbestos in talc-based products tend to reveal higher levels of anthophyllite and tremolite asbestos, chrysotile asbestos has also been found in such products.⁷⁰ Chrysotile asbestos has also been detected in children's toys, crayons, and cosmetic products.⁷¹

Vermiculite is similarly prone to carrying asbestos impurities. It is used as a soil conditioner and fertilizer carrier for agricultural products, as loose-fill insulation, and as thermal insulation in building materials.⁷² Asbestos impurities at one of the country's leading vermiculite mines contributed to the spread of asbestos containing insulation during the 20th Century.⁷³

The CDR Rule could provide a telling snapshot of the prevalence of asbestos impurities in commercial and industrial products and allow EPA to regulate in a manner that sufficiently protects public health from asbestos impurities. EPA's ability to control the risk of asbestos exposure is intimately tied to its consideration of asbestos impurities in raw materials as well as consumer and industrial products and must be a major part of the Part 2 regulation.⁷⁴ Accordingly, EPA should also clarify that the Part 2 rulemaking will address all types of asbestos as they occur as impurities, including chrysotile asbestos. The Attorneys General urge EPA to consider the prevalence of all types of asbestos as impurities while conducting its Part 2

⁶⁸ See USGS, *U.S. Talc – Baby Powder and Much More* at 2, <https://pubs.usgs.gov/fs/fs-0065-00/fs-0065-00.pdf>.

⁶⁹ See Gordon, et al., *Asbestos in commercial cosmetic talcum powder as a cause of mesothelioma in women*, *International Journal of Occupational and Enviro Health*, vol. 20, 2014, at 5. Chrysotile asbestos has also been detected in children's toys, crayons, and cosmetic products. See e.g. Walker and Lunder, *EWG Action Fund Tests Find Asbestos in Kids' Crayons, Crime Scene Kits*, 2015, http://1yllvogavjh3f7wbx1l1bxebx.wpengine.netdna-cdn.com/wp-content/uploads/2015/07/Asbestos_in_Kids_Crayons_Crime_Scene_Kits.pdf (tremolite and chrysotile present in crayons); U.S. PIRG, *Safer School Supplies: Shopping Guide*, Fall 2018, https://uspirgedfund.org/sites/pirg/files/reports/Copy%20of%20USP_Toxics-report_Fall2018_PRINTv1b.pdf (tremolite present in crayons); Stoiber, et al., *Asbestos Contamination in Talc-Based Cosmetics: An Invisible Cancer Risk*, *Environmental Health Insights*, Vol. 14:1-3 2020 (tremolite in cosmetics).

⁷⁰ See e.g., *id.* (noting occurrence of chrysotile asbestos in baby powder and crayons).

⁷¹ See e.g. Walker and Lunder, *EWG Action Fund Tests Find Asbestos in Kids' Crayons, Crime Scene Kits*, 2015, http://1yllvogavjh3f7wbx1l1bxebx.wpengine.netdna-cdn.com/wp-content/uploads/2015/07/Asbestos_in_Kids_Crayons_Crime_Scene_Kits.pdf (tremolite and chrysotile present in crayons); U.S. PIRG, *Safer School Supplies: Shopping Guide*, Fall 2018, https://uspirgedfund.org/sites/pirg/files/reports/Copy%20of%20USP_Toxics-report_Fall2018_PRINTv1b.pdf (tremolite present in crayons); Stoiber, et al., *Asbestos Contamination in Talc-Based Cosmetics: An Invisible Cancer Risk*, *Environmental Health Insights*, Vol. 14:1-3 2020 (tremolite in cosmetics).

⁷² Agency for Toxic Substances and Disease Registry (ATSDR). Summary Report: Exposure to Asbestos-Containing Vermiculite from Libby, Montana, at 28 Processing Sites in the United States. U.S. Department of Health and Human Services, Agency for Toxic Substances and Disease Registry, Atlanta, GA, 2008, at 3, https://www.atsdr.cdc.gov/asbestos/sites/national_map/Summary_Report_102908.pdf.

⁷³ *Id.* (discussing impurities from vermiculite mine in Libby, Montana and the spread of raw materials across the country).

⁷⁴ We also urge the agency to consider addressing such impurities in the Management Rule based on the agency's findings in the Chrysotile Asbestos FRE with respect to the documented risks associated with chrysotile asbestos exposures.

analysis.

The Attorneys General also ask EPA to clarify that it will evaluate asbestos that is present in talc as an impurity during the Part 2 rulemaking, rather than conducting a separate talc-specific risk evaluation. While we understand EPA does intend to include asbestos impurities in its Part 2 process, EPA suggested, when responding to comments on the Part 1 Risk Evaluation, that it might defer the evaluation of asbestos impurities in talc to a separate rulemaking.⁷⁵ Such an approach would further delay crucial regulatory action to address asbestos in talc products and unnecessarily segment a major route of consumer exposure to asbestos from the Part 2 analysis.

D. EPA Should Seek to Minimize the Amount of Time Provided for the Chlor-Alkali Industry to Transition Away from Asbestos Diaphragms and Avoid Substitution of PFAS and other Toxics in the Industry's Production Process

The Management Rule provides a two-year period for the chlor-alkali industry to transition away from asbestos diaphragms.⁷⁶ The Attorneys General urge EPA to consider shortening this transition period given the significant health risks identified in the Part 1 Risk Evaluation associated with uses by the chlor-alkali industry. However, the Attorneys General are concerned that such a transition may result in the industry switching to technologies that rely on chemistries that include “forever” PFAS or other toxic substitutions. Accordingly, the Attorneys General support EPA’s anticipated efforts to gather additional information regarding viable alternatives to both asbestos and PFAS technologies—and the consequences to public health and the environment that likely would result from PFAS substitutions for asbestos—to better inform the agency’s decision making about an appropriate trajectory, but not longer than the currently proposed two-year period for the chlor-alkali industry to convert from asbestos diaphragms. The agency should also consider providing incentives for the development of alternative technologies; and during any delay in implementing the ban, EPA should ensure that industry employs measures to ensure worker and public safety. We urge EPA to proceed with caution in this regard and consider carefully the requirements for exemptions imposed by TSCA Section 6(g).⁷⁷

PFAS have been used to produce countless consumer products since the 1940s, including textiles with Scotchgard™; Teflon™ products, including non-stick cookware; food packaging; and waterproof clothing. Firefighting foam containing PFAS has also been used for decades by the U.S. military, airports, industrial facilities, and local fire departments. While PFAS are entirely human-made, they are estimated to be detectable in the blood stream of 99% of the U.S. population. Unfortunately, PFAS are highly toxic to humans and animals, they tend to bioaccumulate in organisms and migrate up the food chain, and they are extremely resistant to

⁷⁵ Compare EPA, *Summary of External Peer Review and Public Comments for Asbestos and Disposition for Asbestos Part 1: Chrysotile Asbestos, Response to Support Risk Evaluation for Asbestos Part 1: Chrysotile Asbestos*, December 2020 at 1.7 (pp. 28-29) (“considering the significant scope of evaluating the potential risks posed to individuals from exposure to talc, it would be more appropriate to evaluate talc (and any known or reasonably foreseen co-located asbestos therein) in a subsequent risk evaluation focused on talc.”) with Management Rule at 21,709 (“Where EPA identifies reasonably available information demonstrating the presence of asbestos in talc, where such talc applications fall under TSCA authority, those talc containing asbestos impurities will be evaluated in Part 2 of the risk evaluation for asbestos.”).

⁷⁶ Chrysotile Asbestos Management Rule, 87 Fed. Reg. at 21,720.

⁷⁷ *Id.* at § 2605(g).

degradation in the environment—that is why PFAS are known as “forever chemicals.”⁷⁸ Scientific knowledge regarding PFAS continues to develop, while PFAS are linked to serious adverse health effects in humans and animals. The two most studied types of PFAS are perfluorooctanoic acid/perfluorooctanoate, known as PFOA, and perfluorooctane sulfonic acid/perfluorooctane sulfonate, known as PFOS. Human health effects associated with exposure to PFOA include kidney and testicular cancer, thyroid disease, liver damage, and preeclampsia; exposure to PFOS is associated with immune system effects, changes in liver enzymes and thyroid hormones, and other conditions.⁷⁹ On June 21, 2022, EPA published new strict drinking water health advisories for various PFAS chemicals.⁸⁰

Many of our states face substantial threats to public health and the environment posed by PFAS. We are spending tens of millions of dollars to address contamination in drinking water sources—installing equipment to remediate PFAS contamination, providing alternative drinking water supplies, testing the blood of impacted communities, and investigating numerous areas of potential contamination, among other efforts.⁸¹ Other states are just beginning to investigate the extent of PFAS contamination within their borders. Contaminated sites include areas in or around military bases where firefighting foam was used, firefighting training centers, civilian airports, industrial facilities, landfills, and wastewater residuals disposal facilities. PFAS from many of these sites have migrated to contaminate nearby public and private drinking water supplies, at great costs to impacted communities and our states.⁸²

For EPA to carry out its TSCA mandate to regulate to protect the public health and environment from toxic chemicals, the agency must ensure the chlor-alkali industry does not substitute PFAS forever chemicals or other toxic chemicals, like mercury, for asbestos in their production process.

CONCLUSION

The Attorneys General appreciate this opportunity to comment on the proposed Chrysotile Asbestos Management Rule and strongly support the banning of chrysotile asbestos for the conditions of use addressed in the rule. We also support the agency’s broadening its efforts as set forth above, and we will make ourselves available upon request to assist the agency to implement even stronger regulations to protect the public from the risks posed by exposures to asbestos.

⁷⁸ See EPA’s *PFAS Strategic Roadmap: EPA’s Commitments to Action 2021–2024*, p. 6, available at: https://www.epa.gov/system/files/documents/2021-10/pfas-roadmap_final-508.pdf.

⁷⁹ See, e.g., C8 Science Panel, <http://www.c8sciencepanel.org/> (last updated January 22, 2020); U.S. Environmental Protection Agency, *Basic Information on PFAS, Are there health effects from PFAS?*, <https://www.epa.gov/pfas/basic-information-pfas#health>.

⁸⁰ See *Notice of Availability, Lifetime Drinking Water Health Advisories for Four Perfluoroalkyl Substances*, 87 Fed. Reg. 36,842 (Jun. 21, 2022).

⁸¹ See *Letter of the Attorneys General of Massachusetts, Connecticut, Delaware, Iowa, Maine, Maryland, Minnesota, New Mexico, New York, North Carolina, Oregon, Pennsylvania, Virginia, Wisconsin, and the District of Columbia, to the Senate In Support of PFAS Provisions in the Fiscal Year 2022 National Defense Authorization Act* (Nov. 24, 2021), available at: <https://www.mass.gov/doc/multistate-pfas-ndaa-letter-to-the-senate/download>. See also, e.g., *PFAS in the Commonwealth of Massachusetts: Final Report of the PFAS Interagency Task Force* (Apr. 2022), available at: <https://mbcc.org/wp-content/uploads/PFAS-Interagency-Task-Force-Report-2.pdf>.

⁸² *Id.*

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