

July 8, 2022

Dr. Michal Ilana Freedhoff
Assistant Administrator
Office of Chemical Safety and Pollution Prevention
U.S. Environmental Protection Agency
1200 Pennsylvania Ave, NW
Washington, DC 20460

Re: EPA's Proposed Rule "Asbestos Part 1: Chrysotile Asbestos; Regulation of Certain Conditions of Use under Section 6(a) of the Toxic Substances Control Act," Docket ID # EPA-HQ-OPPT-2021-0057

Request to Withdraw Or Modify Proposed Restrictions On Diaphragms In The Chlor-Alkali Industry, Sheet Gaskets In Chemical Production, and Other Gaskets Contained In Proposed § 751.X05

Dear Assistant Administrator Freedhoff:

The organizations signing on to this request appreciate the opportunity to comment on the referenced proposal issued by the Environmental Protection Agency.

Chlorine chemistry is an integral part of the goods and products Americans use every day. The computer screen – or paper – on which you are reading this letter was made using products that are derived from chlorine and co-product sodium hydroxide chemistry. The chlor-alkali process, which utilizes chrysotile asbestos safely to manufacture chlorine and sodium hydroxide, or caustic soda, is also used to treat drinking water. In addition to water treatment, chlorine from this same process helps to ensure the safety of consumer goods, medical equipment, medications, and other life-enhancing products. We, the undersigned organizations, urge you to reconsider the need for the U.S. to transition completely away from targeted and safe uses of chrysotile asbestos in the proposed Toxic Substances Control Act (TSCA) Risk Management Rule.¹ An abrupt ban would affect one-third of America's chlorine capacity and impact many industries. It would also affect a large number of chemical manufacturing sites using sheet gaskets across the country that would additionally impact supply of other needed chemistries to downstream users. At a time when the United States is facing inflation and supply chain issues, we respectfully urge the Biden-Harris Administration not to risk severely reducing the ability of Americans to have access to clean drinking water and essential products that rely on chlorine.

Chlorine and sodium hydroxide are critical building block chemicals, and the chlor-alkali sector supports a broad range of essential uses that are key to the U.S. economy. Industry has maintained safe use of asbestos diaphragms for over five decades and this chlorine chemistry technology is important to

¹ 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. 21706 (April 12, 2022).

public health. The interruption to the domestic chlorine market that would result if EPA finalized the current proposal could set in motion a catastrophic chain-reaction for many industries and would negatively impact a large portion of the population. It is important to note that EPA based its risk elimination proposal on an estimated worker subpopulation of 100 highly trained and protected workers in the entire chlor-alkali industry, which numbers in the thousands. EPA made the incorrect assumption that these workers handle asbestos without using personal protective equipment (PPE). It ignored that asbestos use in the chlor-alkali process is heavily regulated by the Occupational Safety and Health Administration (OSHA), which requires the use of PPE, and that the asbestos handling takes place under highly controlled conditions. The chlor-alkali industry has provided substantial evidence in the administrative record during the risk evaluation phase on how it safely uses asbestos diaphragms with appropriate engineering and administrative control measures, and there is no risk posed to the general public or surrounding communities.

According to the Chlorine Institute, 33% of the U.S. chlorine capacity depends on the use of asbestos diaphragms, and therefore, the proposed rule by the EPA for the chlor-alkali sector will have harmful supply chain and economic consequences. The subsequent sections highlight the necessity of chlorine and its byproducts in the following sectors:

Chemical and Basic Materials Production Sector

Many products of the chemical industry depend on chlorine chemistry. A major use of chlorine is that it is used to produce various other chemicals such as propylene oxide, chlorates and organic compounds like carbon tetrachloride and synthetic rubber.

Chlorine is also one of the basic feedstocks used to make durable and versatile materials like polyvinyl chloride (PVC), which is essential to the future drinking water, sewerage, irrigation, and electric vehicle charging infrastructure of the U.S. PVC is also critical to the medical community since it is used in many life-saving products, including many medical devices, such as blood bags, medical tubing, oxygen masks and ventilators. If this Proposal is enacted, that would lead to shortages of these products. This would mean that pipe, conduit, and other products that are key to the successful roll-out of the Infrastructure Investment and Jobs Act (IIJA) would be made with alternatives that are less environmentally friendly than PVC resin that is made in America.

Manufacturing Sector

Not only is chlorine critical as a building block for consumer goods, but the chlor-alkali industry directly employs more than 20,000 Americans and another 245,000 are employed by chlor-alkali-related industries.² Chlorine chemistry is used to manufacture processors that power smart phones, digital tablets and computers along with hybrid car batteries.³ Chlorine chemistry is an integral part of the goods and products Americans use every day. The EPA's economic justification and analysis of the likely costs and benefits of the proposed ban on Chrysotile Asbestos manufacture, importation or use in commerce is cleverly presented in a manner that disguises much of the real economic significance of the matter.

² Fisher, Dan. Dixon Valve, Chlor-Alkali: State of the Market in 2020. Available at https://www.dixonvalve.com/sites/default/files/Chlor-Alkali-State-of-the-Market-2020_0.pdf

³ ChemicalSafetyFacts.org, Chlorine, American Chemistry Council, 2022. Available at <https://www.chemicalsafetyfacts.org/chlorine/>

Energy Sector

Chlorine is an essential component to the energy sector. In both solar and wind energy, chlorine chemistry is used in the manufacturing of solar panel chips and wind turbine blades. In addition, some plastic foam insulations and vinyl windows manufactured that utilize chlorine chemistry increase the efficiency of home heating and air-conditioning systems and reduce greenhouse gas emissions.⁴ The current Administration has put forth ambitious greenhouse gas guidelines, which rely on the ability to use low emission refrigerants, and these refrigerants are based in chlorine chemistry. Chlorine is also a component in lightweight materials that are needed to produce lower emission vehicles as well as items that increase household energy efficiency, like spray foam insulation. Many items that are needed to help our country move towards lower carbon intensity are based in the essential chemical chlorine.

Food and Agriculture Sector

The need for chlorine extends far beyond the chemical production and manufacturing sectors of our economy. Chlorine is a building block chemical in the crop protection supply chain. In addition, chlorine-based products are used in commercial food preparation for sanitizing and disinfecting equipment and food contact surfaces, destroying food-borne bacteria and in manufacturing packaging to prevent contamination and keep food fresh.⁵ As climate change increasingly strains farm management practices, more and more agricultural producers are moving to some form of irrigation,⁶ with a heavy reliance on indoor growing facilities that need PVC pipe to operate.

Healthcare and Public Health

Chlorine has become increasingly important in recent years as we have witnessed the rise of COVID-19. Chlorine is a main component of bleach, disinfectants, medical tools and devices, as well as serving as the foundation for 85% of pharmaceuticals.^{7,8} As people mitigate public health risks in a post-COVID world, chlorine is in demand now more than ever.

Water and Wastewater

For over 100 years, drinking water chlorination has been used and is a major factor in preventing cholera and other waterborne diseases.⁹ Approximately 98% of public drinking water treatment facilities use some form of chlorine-based disinfectant, according to American Water Works Association. Residual chlorine in drinking water is mandated through the National Primary Drinking Water Regulations. A series of events between March 2021 and June 2021 nearly led to boil water notices in multiple cities due to sudden chlorine production reductions. While drastic measures were taken to avoid boil water notices, these events go to show how any unplanned restrictions of chlorine can immediately generate a supply shortage.

⁴ ChemicalSafetyFacts.org, Chlorine, American Chemistry Council, 2022. Available at <https://www.chemicalsafetyfacts.org/chlorine/>

⁵ Sustainable Progress, World Chlorine Council, 2017. Available at https://worldchlorine.org/wp-content/uploads/2018/10/WCC_Sustainable-Progress_Version-3-2017.pdf

⁶ Irrigation and Water Use, USDA, 2022. Available at <https://www.ers.usda.gov/topics/farm-practices-management/irrigation-water-use/>

⁷ ChemicalSafetyFacts.org, Chlorine, American Chemistry Council 2022. Available at <https://www.chemicalsafetyfacts.org/chlorine/>

⁸ What is Chlorine Used For?, March 2021. Available at https://www.medicinenet.com/what_is_chlorine_used_for/article.htm

⁹ Drinking Water Chlorination: A Review of Disinfection Practices and Issues. Available at <https://waterandhealth.org/wp-content/uploads/2017/04/dwwp.pdf>

Sheet Gaskets and Other Gaskets

In addition to the chlor-alkali industry, asbestos has widespread use in sheet gaskets and other gaskets in chemical plants and refineries as a mechanical seal to prevent leakage from or into objects under compression and other challenging conditions. These gaskets prevent liquids and vapors from being released from joints called flanges in pipes and other equipment. The number of asbestos gaskets remaining in use across industry in chemical plants and refineries is suspected to be in the hundreds of thousands and potentially the millions, as the gaskets are durable can be safely utilized for decades (typically trapped between two pipe flanges) before needing to be replaced.

The chemical plant and refining industry produces energy, essential fuels, pharmaceuticals, sanitizing agents, and other chemicals. Replacing the asbestos gaskets in the short timeframe EPA has suggested would cause plants and refineries to shut down from weeks to years at a time. This is not the time for the nation to shut down essential infrastructure for extended periods of time to remove and replace gaskets in the chemical plant and refining industry, leading to further supply chain disruptions beyond those that the nation is already facing. Premature removal is likely to have a debilitating effect, resulting in shortages of fuels, energy, and other essential chemicals, including sanitizing agents.

We encourage EPA to consider the impacts a severe and abrupt reduction in chlorine production would have on the supply chain and the economy as well as the unintended consequences of forcing chemical plants, refineries, power plants and pharmaceutical companies to close for extended periods of time to replace sheet and other gaskets. We urge the Administration to think about these drastic economic and environmental impacts the proposed rule will have on American lives. It is our hope that EPA will work with industry to ensure there is no shortfall in the availability of domestic chlorine, fuel or other critical supplies by recognizing that asbestos in these applications has been and can continue to be used safely. TSCA provides EPA with a variety of risk management tools short of a complete ban on these conditions of use. We urge EPA to re-propose this rule and avoid the disruptive public health, economic, and social consequences that are likely to flow from the agency's proposed approach.

Sincerely,

American Chemistry Council
American Forest & Paper Association
American Fuel and Petrochemicals Manufacturers
American Petroleum Institute
Chemical Fabrics & Film Association
Chemical Industry Council of Delaware
Chemical Industry Council of Illinois
Chemistry Council of New Jersey
Council of Producers and Distributors of Agrotechnology
The Chlorine Institute
The Fertilizer Institute

Georgia Chemistry Council
Flexible Packaging Association
Industrial Mineral Association—North America
Louisiana Chemical Association
Manufacture Alabama
Massachusetts Chemistry & Technology Alliance
Michigan Chemistry Council
National Association of Chemical Distributors
New York State Chemistry Council
North American Millers' Association
Ohio Chemistry Technology Council
Pennsylvania Chemical Industry Council
Plastics Industry Association
Pool & Hot Tub Alliance
South Carolina Chemistry Council
Texas Chemistry Council
U.S. Chamber of Commerce
Vinyl Institute
Virginia Chemistry Council
Water Mission
West Virginia Manufacturer Association