Written Statement of

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Before the

U.S. Senate Committee on Environment and Public Works

Subcommittee on Chemical Safety, Waste Management, Environmental Justice, and Regulatory Oversight

Regarding: Legislative Hearing on S. 4244

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TESTIMONY OF ROBERT J. SIMON
ON BEHALF OF THE
AMERICAN CHEMISTRY COUNCIL

Chairman Merkley, Ranking Member Wicker, and members of the Subcommittee: My name is Robert J. Simon and I serve as the Vice President for Chemical Products and Technology at the American Chemistry Council (ACC). Prior to my current role, I served as the Managing Director of ACC's Chlorine Chemistry Division.

I am here today to reinforce our industry's commitment to the safe management of chemicals and provide information on the use of chrysotile asbestos in chlor-alkali manufacturing.

As noted in the Environmental Protection Agency's (EPA) recent risk evaluation, commercial uses of asbestos are limited to a very small number of applications of the chrysotile fiber. The most notable of these is in the diaphragms for the production of chlorine and caustic soda. As part of its original rulemaking on asbestos in 1989, the Agency banned asbestos use in a wide variety of applications as well as any new use of any of the fiber types. EPA subsequently issued a significant new use rule (SNUR) covering an additional 19 use categories in 2019.

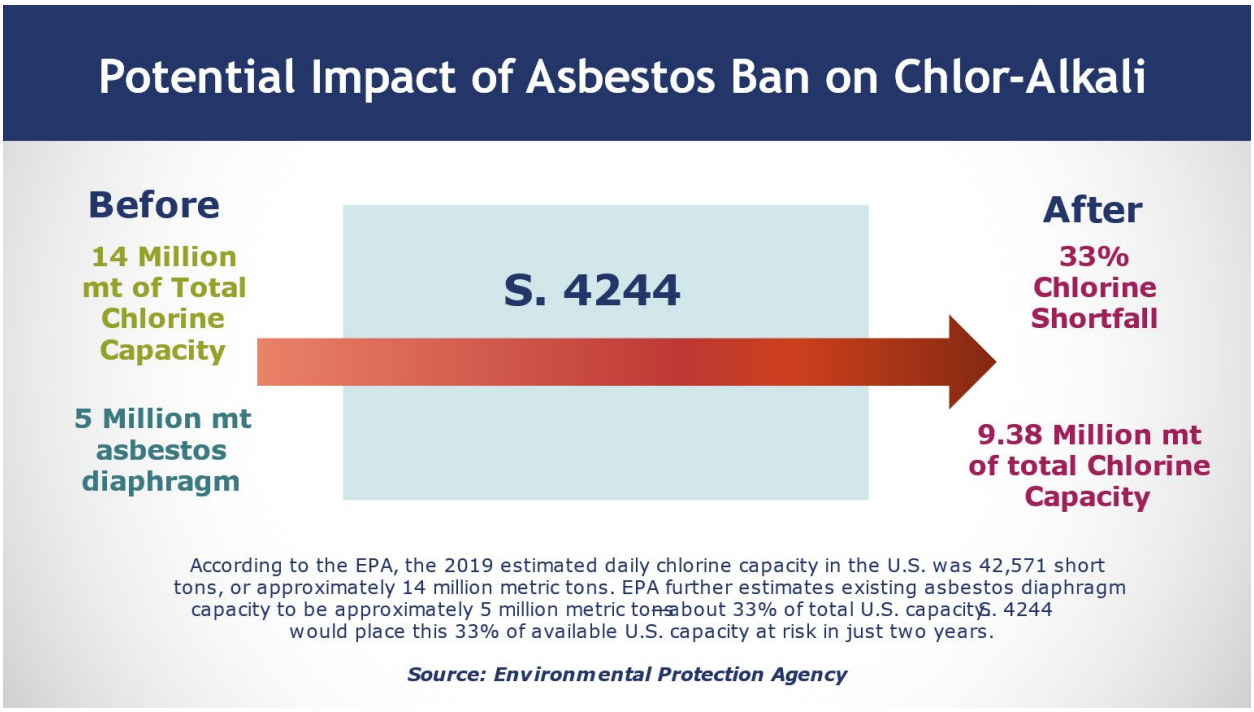
ACC supports the responsible use of chrysotile asbestos for chlor-alkali manufacturing. Chlorine, and its co-product caustic soda, are produced through a chemical reaction using salt, water and electricity. One of the processes to separate the chlorine molecules from sodium hydroxide and hydrogen involves flowing the molecules through a membrane or diaphragm. Today, nearly one-third of the chlorine manufactured in the U.S. is produced using diaphragms containing chrysotile asbestos.

The use of chrysotile asbestos in chlor-alkali manufacturing is highly regulated and has been safely and narrowly used for this purpose for decades. While a variety of regulations generally cover hazard communication, release reporting, and waste management, for the use of chrysotile asbestos in the chlor-alkali industry, the Federal government has issued two specific rules that govern the safety of workers and the protection of the environment. These are the Occupational Safety and Health Administration's (OSHA) Standard for Toxic and Hazardous Substances, Asbestos (29 CFR § 1910.1001) and EPA's National Emission Standard for Hazardous Air Pollutants (NESHAP), National Emission Standard for Asbestos (40 CFR § 61.140). Additionally, the industry follows the procedures set forth by Chlorine Institute Pamphlet 137, "Guidelines: Asbestos Handling for the Chlor-Alkali Industry."

ACC was one of the leading proponents for the Lautenberg Chemical Safety Act, a bipartisan 2016 law that modernized the Toxic Substances Control Act (TSCA). The 2016 amendments reinforced our country's risk-based approach to chemicals management, established enhanced processes for the assessment of new and existing chemicals, and required that EPA have sufficient information to make affirmative regulatory decisions on chemicals in an open and transparent way. EPA is currently evaluating historical and current uses of asbestos under this new law. Our industry has worked constructively with EPA in its evaluation of asbestos use in the chlor-alkali industry. This has included providing significant data and testing information,

coordinating facility tours, and sharing industry's practices for the management and use of chrysotile asbestos in chlor-alkali manufacturing.

According to EPA, the 2019 estimated daily chlorine capacity in the U.S. was 42,571 short tons, or approximately 14 million metric tons annually.[1] EPA further estimates existing asbestos diaphragm capacity to be about 5 million metric tons—about 33% of total U.S. capacity.[2] S. 4244 would place this 33% of available U.S. capacity at risk in just two years. It is simply not workable and would cause economic harm and limit supply to the vast array of products and uses for chlorine chemistry and caustic soda.



Production of chlorine and caustic soda using asbestos diaphragms relies upon closed-system diaphragm cells that separate the chlorine from the sodium hydroxide while remaining contained in the cell. Human exposures are prevented by federal standards including the required use of personal protective equipment (PPE), as well as appropriate engineering controls, maintenance, and rigorous training. Federal regulations also mandate specific requirements for the disposal of spent asbestos diaphragms.

Manufacturers are committed to the safety of our workers. But the U.S. should avoid policy that could result in shortages, cost increases and supply chain disruptions of the many critical products dependent on chlorine and caustic soda. The two-year timetable in S. 4244 resulting in

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[1] Economic Analysis of the TSCA Section 6 Proposed Rule for Asbestos Risk Management (Office of Pollution Prevention and Toxics, April 2022), Docket ID No. EPA-HQ-OPPT-2021-0057-0008.

[2] 2016 IHS economics report retained by ACC on the benefits of chlorine chemistry in the U.S. and Canada.

the elimination of one-third of the US chlor-alkali industry within two years of passage is just not reasonable. By contrast, in Canada and the European Union (EU), the governments worked with producers to establish timetables that allow for the continued safe production of chlorine and its co-products during this transition. Canada's ongoing phaseout period is 11 years for a single plant and the EU has provided its industry 25 years.

Chlorine is essential to ensuring access to safe drinking water for millions of American families, lifesaving healthcare and pharmaceutical products, energy resources like solar panels and wind turbines, and much more. Chlorine is also a critical element in the production of products necessary to achieve our climate and sustainability goals.

According to IHS Markit, now Chemical Market Analytics by OPIS, a Dow Jones Company, U.S. demand for chlorine currently exceeds available supply.[3] A two-year prohibition to ban the use of asbestos diaphragms in the chlor-alkali industry, and thus eliminate one-third of chlorine production, could adversely impact public health, contribute to already strained supply chains, and further, increase prices for a wide range of vital consumer goods. In addition to supplying 98% of public drinking water facilities, chlorine chemistry is essential to the manufacture of 88% of the top-selling pharmaceuticals (both over-the-counter medicine and prescription medicine) and 89% of the top-selling crop protection products that are used by U.S. farmers to make food more available and affordable. The reduction in the production of caustic soda would similarly negatively impact the supply of this important chemical. Caustic soda is used in the manufacture of hundreds of consumer products, including aluminum, paper products, adhesives, detergents, pharmaceuticals, food additives, soaps, shampoos, auto parts, phones, fuel cells and disinfectants.

This is particularly relevant today given critical supply chain dynamics in our economy. For evidence of this, we need look no further than shortages caused by the loss of 15% of the chlor-alkali production capacity in 2021 due to Winter Storm Uri, Hurricane Ida and other unplanned events. The result was severe supply shortages, leading several drinking water systems to seek the EPA's assistance to source the chlorine necessary for water treatment.

In response, EPA Administrator Michael Regan highlighted the importance of reliable and sustainable sources of chlorine and the public health dangers a shortage would bring, noting -

> *If drinking water systems cannot obtain a sufficient and reliable supply of gaseous chlorine, sodium hypochlorite and calcium hypochlorite [derived from chlorine], they will be unable continue to provide safe drinking water to their communities.*[4]

Administrator Regan further noted –

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[3] ACC has retained IHS Markit, now Chemical Market Analytics by OPIS, a Dow Jones Company to analyze U.S. chlorine capacity and associated trends.

[4] Letter from EPA Administrator Michael S. Regan to Chemical Industry Partners, June 30, 2021.

> *Similarly, if wastewater systems lack adequate chlorine supplies, they will be unable to disinfect treated wastewater prior to discharge to surface waters, potentially leading to an increase in the concentration of pathogens in the surface water. A loss of drinking water or wastewater services, even for short durations, would have cascading impacts on hospitals, manufacturing, government facilities, private offices and restaurants - essentially all of the critical services necessary to sustain a community.*[5]

Chlorine consumers felt the effects of limited supply acutely from these extreme weather events and more broadly because of the COVID-19 pandemic. In addition, on July 1, chlorine manufacturers will need to incorporate a new excise tax on every ton of chlorine, instituted by the 2021 infrastructure law. It is imperative that any further consideration of proposed, additional regulation in this space consider these important points.

ACC supports effective regulation of asbestos, but for the reasons summarized above opposes S. 4244. This legislation duplicates existing and ongoing federal regulatory processes and would set an unfortunate precedent for legislating risk management actions on substances subject to the amended TSCA bypassing established regulatory authorities. Imposition of a blanket ban on asbestos use without the benefit of information on risk management measures appropriate to conditions of use like chlorine production will lead to misguided policies and will have a negative impact on public health and the economy.

Thank you for the opportunity to provide this testimony, and I look forward to your questions.

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[5] *Id.*