Written Testimony of

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Chairman Babin, Ranking Member Lofgren, and members of the Committee, thank you for holding this important hearing and giving me the opportunity to testify on "*Chemistry Competitiveness: Fueling Innovation and Streamlining Processes to Ensure Safety and Security.*"

My name is Charlotte Bertrand, I am Senior Director of Chemical Management, Regulatory Policy & Strategy at the American Chemistry Council (ACC). I recently joined ACC following 28 years of federal service, including senior executive roles at the National Aeronautics and Space Administration (NASA) and the U.S. Environmental Protection Agency (EPA).

I am honored to appear here today representing more than 150 ACC member companies engaged in the business of chemistry that meets the nation's most demanding challenges. For more than 37 years, our members have demonstrated their commitment to health and safety through ACC's Responsible Care® program. ACC has also long advanced scientific understanding and fostered innovation in chemical safety through its Long-Range Research Initiative, reflecting decades of leadership in responsible chemistry.

America's Success depends on American Chemistry.

At its core, the business of chemistry is all about science, science aimed toward innovations in products and services that can make people's lives better, healthier, and safer. Chemistry is foundational to virtually every industry and modern-day life, providing the materials, processes, and molecular building blocks that enable modern manufacturing and technology.

- More than 96 percent of all manufactured goods are touched by products of chemistry.
- Critical new semiconductor manufacturing relies on more than 500 highly specialized chemicals to manufacture a single chip[1].
- Advanced materials such as lightweight composites for aircraft, specialized coatings for stealth applications, and chemical propellants for space and missile systems demonstrate chemistry's strategic importance to our nation.

American chemistry is a $673 billion-dollar industry that supports more than a half-million well-paying American jobs[2]. In 2024 alone, the U.S. chemical industry invested 14.8 billion dollars

[1] ACC, Semiconductor: Chemistry Critical to National Priorities: https://www.americanchemistry.com/chemistry-in-america/chemistry-creates-america-competes/resources/semiconductor-chemistry-critical-to-national-priorities
[2] https://www.americanchemistry.com/chemistry-in-america/data-industry-statistics/the-business-of-chemistry-by-the-numbers

directly into research and development helping scientific discoveries move efficiently from the laboratory to practical application.

Over the last decade, Congress and successive Administrations have rightfully focused on American's competitiveness, onshoring critical supply chains and rebuilding America's manufacturing base[3]. None of that is possible without chemistry and getting the regulatory environment right is vital.

Nearly 10 years ago, Congress updated the Toxic Substances Control Act (TSCA) for the first time in decades. However, EPA's implementation of the Act is challenging chemical manufacturing and use in the United States.

Evaluations of existing chemicals already in commerce have not consistently applied a risk-based, "best available science" approach required under the statute. EPA has relied on methodologies that have raised scientific questions, such as its use of Integrated Risk Information System (IRIS) hazard assessments and layered conservative modeling assumptions in place of real-world data. A risk-based approach should characterize actual risk using the best available science, including high-quality, real-world data evaluated for quality and relevance, such as study design, fitness for purpose, replicability, and transparency.

The outcome of this approach can have meaningful consequences that may jeopardize the manufacture and use of chemistries, including those that are needed for national security and critical infrastructure[4]. These outcomes are reflected in EPA's initial risk management rules that imposed broad use prohibitions, allowing narrow, often time-limited, exemptions for certain essential national security and critical infrastructure applications (e.g., aircraft and spacecraft sealants, rocket engine cleaning, essential aerospace components, naval electronic equipment and combat systems, military ordnance testing[5]), though these exemptions may have limited practical effect if prohibitions reduce domestic chemical manufacturing viability.

During my time at NASA, I had the privilege of working closely with the Agency's brilliant engineers and scientists to assess whether proposed regulations on chemistries used by the Agency, including those that had been qualified for use through decades of rigorous testing, could raise mission-related concerns. Many space- and defense-related chemistries, including those in EPA's regulatory process, are selected because they are best suited for research or are compatible with

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3 U.S. Department of Defense, "Assessing and Strengthening the Manufacturing and Defense Industrial Base and Supply Chain Resiliency of the United States," Report to President Donald J. Trump by the Interagency Task Force in Fulfillment of Executive Order 13806, (September 2018), The White House, "Building Resilient Supply Chains, Revitalizing American Manufacturing, and Fostering Broad-Based Growth," 100-Day Reviews under Executive Order 14017 (June 2021)

4 90 Fed. Reg. 51027 (Nov. 14, 2025)

5 89 Fed.Reg. 39254 (May 8, 2024); 89 Fed.Reg. 102568 (Dec. 17, 2024); 89 Fed.Reg. 103560 (Dec. 18, 2024)

other materials and have demonstrated resilience, reliability, and predictable performance in harsh environments and extreme conditions within complex engineering systems.

As an example, while at NASA I learned certain chemicals are integral to batteries that were used by NASA and had been part of missions from Mercury, Gemini, and Apollo to the Space Shuttle, the International Space Station, and the Mars Rovers. These batteries also are used to supply power for military munitions and mission systems and satellites currently in orbit.[6] These systems depend on the use of chemistries with unique, irreplaceable properties that enable reliable performance in harsh environments, extreme temperatures, and high shock and vibration conditions; capabilities that cannot be replicated by alternatives. However, one of EPA's final TSCA rules broadly prohibits most of the uses of one of the chemicals essential to those batteries. In doing so, manufacturers have raised concerns regarding the economic viability of operating chemical plants in the United States[7].

U.S. chemical companies have also communicated to EPA that these TSCA risk management requirements do not simply affect the domestic production of the regulated substance but may also have broader implications across integrated manufacturing sites where multiple other chemistries are produced. When a single production unit becomes uneconomic or is shut down, it can affect the operation of other domestic chemical production that depends on shared infrastructure, utilities, and processes.

The regulatory environment is also impeding the development and commercialization of new innovative chemistries in the U.S. that may be key to next-generation technologies. EPA is required to complete new chemical reviews within 90 days, yet more than 90 percent of active reviews exceed that statutory deadline, over 60 percent remain pending for more than a year, and some extend for several years. As of November 1st, 460 new chemicals were under EPA review, with more than 88% exceeding the 90-day deadline[8].

This delay and uncertainty discourage domestic R&D investment and increasingly drives companies to commercialize new chemistries overseas, where regulatory pathways are more predictable. Delays in meeting new chemical review timelines can limit U.S. innovation and provide a competitive advantage to foreign producers.

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[6] https://www.regulations.gov/comment/EPA-HQ-OPPT-2016-0743-0124; https://www.regulations.gov/comment/EPA-HQ-OPPT-2020-0465-0214
[7] https://www.regulations.gov/comment/EPA-HQ-OPPT-2020-0465-0192
[8] https://www.americanchemistry.com/better-policy-regulation/chemical-management/toxic-substances-control-act-tsca/tsca-new-chemicals-tracking

Once the global leader in chemical manufacturing, the United States has ceded ground to China. Over the past 20 years, China's output has surged and has risen from 11% to 50% of world chemical sales while the US has dropped to 10%[9].

To reverse this trend America needs practical, risk-based policies grounded in best available science that protect the environment and human health and support innovation, jobs, and America's competitiveness[10].

We recognize and appreciate EPA's recent steps to reconsider certain restrictions and enhance the utilization of science in its decision-making. ACC supports these efforts as a positive first step; however, more work needs to be done.

ACC asks this Committee to work with EPA to:

- Put best available science first in chemical evaluations;
- Drive predictable, transparent, practical, fact-based policies; and
- Create a regulatory environment that fosters domestic innovation.

[9] CEFIC
[10] See TSCA Sections 2(b)(3) and 2(c)