

Keith Corkwell Testimony

US House Science, Space and Technology Committee

Preliminary Comments

Chair Babin, Ranking Member Lofgren thank you for the invitation to appear and testify today. It is an honor and a privilege.

My name is Keith Corkwell, and I represent 7500 proud employees of The Lubrizol Corporation, headquartered in Wickliffe, Ohio. I am the President of Lubrizol's Additives Division.

Lubrizol is a global specialty chemical manufacturer with over twenty-six labs, manufacturing sites, and offices here in the US. We are proud that our largest manufacturing site for Lubrizol's Additives division, in fact the largest lubricant additives manufacturing site in the world, has been in Deer Park, Texas since 1951. Combined with a sister site in Bayport, Texas, Dr. Babin, I am especially proud to be here today representing more than six hundred Lubrizol employees working good jobs in your district.

We are also grateful for the support of Congressman Miller, who represents the Ohio district where our Engineered Polymer and Surface Solutions headquarters are located, and where more than four hundred Ohioans work. Thanks to both of you for your representation of these important districts over the years.

As a specialty chemical company, Lubrizol's brilliant scientists formulate combinations of chemistry that are targeted to specific uses. Typically, we do not make commodity chemicals. Instead, customers come to Lubrizol to solve specific challenges that help them to improve the performance of their technology.

Chemistry and innovation are the heart of what we do. My message to you today is that regulation plays a significant role in our ability to safely innovate and manufacture the chemistry that improves our daily lives, as well as help our customers with new chemistry that makes their products more efficient, safer, and cleaner.

To continue to survive and grow as a business – and continue to bring the world the science and innovation for another one hundred years – Lubrizol needs to do two basic things:

- **Develop** new chemistry that will improve lives and advance progress and
- **Deliver** that new chemistry for use when and where it is needed.

When we and our peers in the chemical industry get that right, the results are transformational for all of us and for the American economy.

For Lubrizol, regulation is essential for protecting people and the world we live in. When regulation is science-based and implemented efficiently, it provides the clarity needed to bring new, life-improving technologies to market quickly and responsibly. This enables innovation to be deployed safely and effectively, helping America strengthen its position as a global leader in manufacturing, transportation, and other critical sectors.

The Lubrizol Corp

Lubrizol started small - in 1928 in a garage in Cleveland, Ohio. Our founders saw that the right chemistry added to lubricants like oil or grease, could improve the performance not only the lubricant, but the engine as well and speed the progress of engine design in the emerging vehicle transportation sector. Initially, Lubrizol innovated a combination of lubricant additives to quiet the noisy leaf springs on the early Model T passenger cars. It didn't take long to figure out that the right combinations, when added to a lubricant, could solve other problems experienced in early vehicle engines, like overheating, metal parts sticking, excessive wear and tear leading to short engine life and carbon building up in the engine.

Over the last century, Lubrizol's additives innovation enabled car companies to advance engine design, making cars more durable, efficient, and cleaner. Lubrizol's additive technology has contributed to extended vehicle engine life from 3,000 miles to 300,000 miles, doubled miles per gallon from 12mpg to 26mpg and reducing average environmental emissions by half.

Today, Lubrizol's additive innovation brings these same advancements to the transportation, agricultural and industrial sectors. We need fire engines, emergency vehicles, tractors, combines and industrial machinery to be dependable, durable, and efficient if America is to lead in core sectors like transportation, agriculture, construction and manufacturing. Lubrizol's lubricant additives play a vital role in making that happen.

Chemistry and Innovation Matter

Chemicals are foundational technology that can improve every aspect of our lives. When we can deliver innovative chemistry and new chemicals, economies grow stronger.

As we sit here today, innovation in chemistry delivers:

- Expanded energy access from all sources: solar, wind, oil and gas, hydrogen and nuclear and more efficient energy storage and transmission.
- Advancement of rapidly evolving sectors like aerospace and aviation that are key to our national security.
- Faster, cooler, and more efficient server farms and AI data centers.

- Lubrizol has invented a dielectric fluid that allows for immersion cooling of chips and servers, significantly reducing the electricity needed for data centers versus traditional air cooling.
- Life-saving medicines and pharmaceuticals that deliver targeted healing, requiring fewer active ingredients.
 - Lubrizol recently invented a polymer that is used as an inactive ingredient for pharmaceuticals and increases solubility of the active ingredient by 50,000-fold, requiring less active pharmaceutical ingredient for more targeted treatment.
- Medical devices that are implantable and alleviate the need for major surgery.
- During the pandemic, it was polymer technology invented by Lubrizol that enhanced the effectiveness of sanitizing hand gel.
- Advances in fire suppression – the fire sprinkler systems in federal buildings right here in Washington DC are protected by Lubrizol’s heat-resistant polymer technology and this same technology protects homes, factories, labs, and office buildings all over America.

Every cellphone, laptop and camera in this room relies on chemistry to continue to create and deliver more powerful devices at our fingertips. If you used shampoo, body wash, lotion, or hair gel this morning, you used chemistry. Today, Lubrizol is innovating ingredients for personal care products like these to make them biodegradable and safe for the marine environment.

When you brush your teeth before going to bed tonight and plug in our cellphone to charge, thank chemistry.

We do this by investing hundreds of millions of dollars in innovation, R&D, and testing. The innovation process for even a single new molecule can take years, requiring the best that our brilliant chemists can bring, R&D for performance and safety testing and collaboration with customers and market players who are anticipating the advances our chemistry will enable.

Lubrizol and companies like us cannot continue to make this scale of investment if regulation prevents us from getting innovation to market before the market moves on and our innovation becomes obsolete or that restricts the use for which it was created.

Reasonable Regulation Will Fuel American Competitiveness

To be clear, Lubrizol – and the industry - fully support regulation that puts science first and protects people and the environment. To stay competitive, the US must adopt science-

based, risk-based regulations that will incentivize the development of new chemistry that meets the needs of the market at the speed required.

Regulatory predictability and certainty are essential to our ability to innovate. Without a return on investment, innovators like Lubrizol cannot continue to plan, invest, and grow their businesses in the US; innovation will begin to move overseas.

That is the reality we face today. The Environmental Protection Agency's (EPA) current approval process under the Toxic Substances Control Act (TSCA) is holding back introduction of new chemistry to our markets and negating millions of man hours, resources, and investment in American innovation.

The current process creates two barriers to introduction of new chemicals:

- Delays in approval of new chemistry – oftentimes more than allowed under the statute; and
- Restrictions on the use of new chemicals based on overly conservative estimates that do not represent a risk-based evaluation grounded in science.

At Lubrizol, we have experienced the painful consequences of both.

Delay In Approval

Lubrizol has experienced delays of up to 5 years in the review of new chemistry, even though TSCA prescribes a 90-day review period for new chemistry. These delays have real-world consequences. To sustain the level of investment required to support American competitiveness, companies like Lubrizol must rely on the timetables dictated by TSCA. We cannot place our investment and trust in a timetable that has no accountability. When simple deadlines are not met, Lubrizol has seen customers walk away from new technology and face the loss of years and millions of dollars invested in innovation and R&D, testing and capital investment.

In one example, Lubrizol invented a new molecule that would provide next-level prevention from wear as part of an industrial gear oil additive package. Anti-wear agents are important, especially in industrial settings, because they keep expensive industrial machinery running cooler and cleaner, reducing maintenance costs, and extending engine life.

EPA's review of the new molecule resulted in a delay of 3 years before Lubrizol could offer it to our customers. Due to this delay, Lubrizol's customers went elsewhere and settled for an older technology from a competitor.

In another example, Lubrizol invested ten years of innovation resources and time and over \$10M dollars to create a next generation transmission additive that would advance

performance of off-road heavy-duty vehicles, like agricultural machinery. This new additive package not only made the lubricant more effective, but we also believe it is safer for the environment. The EPA review for this additive started in 2020. We are still waiting for EPA's final new use rules that would apply to this additive.

As Dr. Bertrand and ACC can attest, these delays are caused by an approach to review that can ignore good science. More than once, Lubrizol has invested millions of dollars in toxicology test data that we have submitted with a new chemistry, only to have EPA use "read across" data from other chemistry. Sometimes, despite the test data being submitted, EPA will make repeated requests for redundant data, delaying review. Reviewing new chemicals as part of a chemical group, rather than the specific chemistry submitted, often means EPA spends valuable time analyzing risks that do not apply to the specific molecule or application.

Use Restrictions

And it is not only the delay in review. On more than one occasion for Lubrizol, EPA's risk review resulted in restrictions placed on the manufacture and/or use of the new chemistry that are so conservative as to render it unusable, blocking promising technology from reaching the intended market.

In one example, after a 5-year delay in review, the EPA restricted a fast-drying coating chemistry designed for use in roof construction. The new polymer was designed to increase productivity by allowing the polymer to spread evenly when sprayed. EPA's risk review restricted use of the polymer from spray applications. That restriction undermined the purpose of the innovation. Lubrizol lost the core customer it had been innovating for and all ten potential customers.

Restrictions on use can also prohibit new chemistry from becoming a substitute for an older technology. Lubrizol frequently looks to substitute newer, more effective molecules in our existing technology.

In a recent case, Lubrizol identified a new molecule invented by another company, as a more environmentally friendly substitute to upgrade eight different projects. But the approval process for the new chemistry took over 5 years and the stringent restrictions placed on use of the molecule rendered it too expensive and impractical to produce.

Often, rather than reviewing the data and assessing the risks for which chemistry is intended, EPA will place the most conservative restrictions on new chemistry without assessing real-world conditions. For example, we have also seen EPA place the most conservative restrictions on the manufacturing of new chemistry, even when the restrictions conflict with regulations from other agencies like OSHA.

Opportunity and Call to Action

The EPA can empower American innovation and strengthen our competitiveness, while also protecting human health and the environment under TSCA.

Congress can exercise its oversight and support the new administration by requiring that EPA regulations under TSCA be grounded in good science and are risk (not hazard) based. By using the most up-to-date science and realistic exposure scenarios, including safety protocols that are already in place, EPA can strike the necessary balance.

The United States cannot lead, or even keep up with, the speed of innovation required by tomorrow's technology using EPA's current approach to scientific reviews. We urge this panel and congress to provide the guidance necessary to ensure that EPA is using the best available science and the weight of the scientific evidence to underpin its risk-based regulation in a timely review process for chemicals based on real world conditions, including the existence of existing regulations from other agencies that further support the safety of our employees, our communities and our environment.