

# **The Dow Chemical Company**

**STATEMENT FOR THE RECORD**

**SUBCOMMITTEE ON SUPERFUND, TOXICS,  
AND ENVIRONMENTAL HEALTH  
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS**

**U.S. SENATE HEARING ON**

**Business Perspectives  
on Reforming US Chemical Safety Laws**

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**Submitted By:  
Neil C. Hawkins, Sc.D.  
Vice President, EH&S and Sustainability**

## **Introduction**

The Dow Chemical Company is pleased to offer our comments relating to the March 9, 2010 Subcommittee hearing, “Business Perspectives on Reforming US Chemical Safety Laws”.

Dow was founded in Michigan in 1897 and is one of the world’s leading manufacturers of chemicals and plastics. We supply products to customers in 160 countries around the world, connecting chemistry and innovation with the principles of sustainability to help provide everything from fresh water, food, and pharmaceuticals to paints, packaging, and personal care products.

Dow is committed to sustainability. Our ambitious 2015 sustainability goals underscore this commitment<sup>1</sup>, along with our actions to ensure product safety (see Appendix).

As a global company, Dow complies with multiple regulatory programs across different countries and regions, has developed and adheres to its own high standards for product safety<sup>2</sup>, develops and adheres to voluntary industry initiatives<sup>3</sup> including Responsible Care®, and leads in international efforts (e.g., the UNEP Strategic Approach to International Chemicals Management) to improve the safe management of chemicals. We have a management system in place to ensure that each of our products is safe for its intended use and meets or exceeds the requirements of our customers. Furthermore, we have adopted and published principles upon which product safety legislation or regulation should be based.<sup>4</sup> For many years now, these principles have guided our efforts and our advocacy. As a global company, Dow is working to ensure its principles are adopted around the world in ways that enhance chemical safety.

## **Reform TSCA**

The United States needs a strong and effective federal program for ensuring that chemicals in commerce are safe for their intended uses. Such a federal program would be complementary to, and coordinated with, chemical management systems at all levels of government and also with voluntary programs designed to promote the safety of chemical products. Ideally, such a coordinated system would foster public confidence, create a level playing field among chemicals in commerce, and provide certainty for business investment, while maintaining the benefits for society associated with the use of chemical products.

Toward that end, Dow believes that Congress should reform the Toxic Substances Control Act (TSCA). We are not alone; there is an emerging consensus among

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<sup>1</sup> To learn more about Dow’s commitment to sustainability, go to our website at <http://www.dow.com>

<sup>2</sup> To learn more, go to <http://www.dowproductsafety.com>

<sup>3</sup> For an example, go to <http://www.icca-chem.org/en/Home/ICCA-initiatives/Global-product-strategy/>

<sup>4</sup> To learn more, go to <http://www.dow.com/commitments/goals/principles.htm>

stakeholders that reform is necessary. The American Chemistry Council has developed principles for modernizing TSCA, and Dow has worked actively within ACC in development of these principles, and we fully support them.

As a company, we have learned the importance of undertaking a dialogue with stakeholder groups, especially in the context of public policy. Therefore, as Congress begins the process of taking a hard look at TSCA, we stand ready and willing to engage with other stakeholders centered around a discussion draft as we jointly work toward meaningful reform. Toward that end, we would like to offer our perspective on an ideal federal chemical safety program to serve as a model for TSCA. This perspective reflects Dow's commitment to sustainability, to our customers, and to our shareholders.

We urge the Subcommittee to create a federal chemical safety program that (1) creates a level playing field for all chemicals in commerce, (2) is objective in its evaluation of safety using the best available scientific information, (3) is both timely and effective, (4) provides incentives for innovation in sustainable chemistry, and (5) enhances the competitiveness of US companies.

### **Create a Level Playing Field**

An ideal federal chemical safety program would screen all chemicals in commerce to determine further information needs in a tiered, risk-based fashion. An approach that focuses on initial screening for all chemicals based on existing information and a tiered approach to gather additional hazard and exposure information needs will allow the development of necessary and appropriate safety information in a way that informs regulatory action, conserves resources, and accelerates the evaluation process. Because a typical chemical has multiple uses/applications, each posing a unique safety profile, the focus should be on those chemical uses/applications where exposures could be expected to be higher.

There should be a systematic gathering of available valid hazard and exposure information to be used in chemical management decisions. This includes utilizing information gathered on similar chemicals though the use of validated non-animal test methods, computer modeling and/or quantitative structure-activity relationship (QSAR) activities.

Chemicals that have strict controls and have limited exposure and environmental release potential (e.g., intermediates in a chemical process) or limited potential to enter commerce are likely to require less information.

There should be a cooperative effort among producers, distributors, and users of chemicals (e.g., appropriate sharing/compensation systems) that ensures the information necessary in chemical safety assessment is developed, shared as appropriate, and applied.

## **Ensure a Scientifically Objective Evaluation of Safety**

An ideal chemical safety program would base its decisions on a consistent scientific evaluation of both hazard and potential exposure (an evaluation of risk), using a weight-of-evidence approach. The Presidential/Congressional Commission on Risk Assessment and Risk Management, in a 1997 report required under the Clean Air Act, concluded that “a good risk management decision is based on a careful analysis of the *weight of scientific evidence* [italics added] that supports conclusions about a problem’s potential risk to human health and the environment.” The importance of a weight-of-evidence approach was further explained in the EPA’s report on reference dose and reference concentration processes in 2002. “A weight of evidence approach ... requires critical evaluation of the entire body of available data for consistency and biological plausibility.” The report further states that “If the mechanism or mode of action is well characterized, this information is used in the interpretation of observed effects in either human or animal studies.” In other words, the cornerstone of a weight-of-evidence approach is to use all available scientific information.<sup>5</sup>

Studies conducted and funded by Dow are necessary and valuable contributions to the understanding of potential public health and environmental effects related to the manufacture and use of its products. Our scientists have expert knowledge of the chemicals we manufacture, especially as this relates to the development and interpretation of the science needed to comply with governmental requirements around the world. Research should be judged on the basis of scientific merit, without regard for funding source or where the studies are conducted (e.g. academia, government, or industry). A number of practices and procedures are in place by which policymakers and the public can be assured that studies performed by or funded by Dow and the rest of industry meet high scientific standards.

## **Allow EPA to Take Timely and Effective Action**

An ideal chemical safety program would ensure a role for cost/benefit analysis in risk management decisions. If warranted, substitution should be considered only after a comparison of substances based on performance, health, environmental and socio-economic aspects in the relevant applications. Precautionary action to protect human health and the environment, as set out in Principle 15 of the Rio Declaration on Environment and Development, and as amended at Johannesburg and agreed at Dubai, should be proportional to the objective being pursued, provisional, and should employ the least burdensome option to provide adequate protection from the risk.

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<sup>5</sup> In a 2007 memorandum, the Office of Science and Technology and the Office of Management and Budget asked each federal agency to employ the best reasonably obtainable scientific information to assess risks to health, safety, and the environment. Pursuant to the 1996 amendments to the Safe Drinking Water Act, EPA is directed to use the best available, peer-reviewed science and supported studies conducted in accordance with sound and objective scientific practice.

To instill public confidence and provide regulatory certainty for business planning purposes, it is important that appropriate risk management actions be taken expeditiously.

### **Include Incentives for Sustainable Chemistry**

An ideal chemical safety program would provide incentives for sustainable chemistry. Dow uses the term “sustainable chemistry” to describe our cradle-to-cradle concept that drives us to use resources more efficiently, to minimize our footprint, provide value to our customers and stakeholders, deliver solutions for customer needs and enhance the quality of life of current and future generations.<sup>6</sup>

We believe that chemical policy should provide incentives for investments in sustainable chemistry. Such incentives could include, but not be limited to, government support for research and development and for lifecycle assessment to promote sustainable chemistry, and government priority given to new products and processes that represent a significant improvement in sustainability over existing products and processes.

### **Enhance US Competitiveness**

An ideal chemical safety program would ensure that chemicals are safe for their intended uses and would do so in a timely manner and with a minimum of additional resources. Such an ideal program would position the USA as a leader in chemical management and therefore would enhance the competitiveness of US companies.

Chemical policy impacts the competitiveness of businesses through the entire chain of commerce. Therefore, Congress should consider the views of all businesses that rely on chemical products to provide value to their customers. This hearing—with a range of business witnesses—represents a good start.

Under TSCA, EPA’s new chemical program has been largely successful in fostering innovation while providing EPA with the tools it needs to ensure safety. Dow urges Congress to maintain these attributes of the new chemical program, which is largely acknowledged to be a success story in the US chemical management system.

It is important that legitimate confidential business information (CBI) be protected under any chemical safety program that relies on information provided by commercial interests. Details that implicate proprietary interests, such as certain information on the ingredients in a product, should be protected as confidential business information to ensure stimulus for innovation.

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<sup>6</sup> Sustainable chemistry builds on the strong foundation of green chemistry and engineering (as developed by Warner and Anastas and supported by the American Chemical Society and EPA) to include social dimensions which recognizes the value of chemical products to enhance our quality of life and protected the environment.

An ideal federal chemical safety program should develop and support means to share relevant safety information with other governments, while protecting legitimate business interests in proprietary information.

If the information that is used to make a determination of safety is of commercial value, provisions should be made for protecting the commercial interest while ensuring public access to the information.

Companies that invest in the conduct of chemical, physical property or health and environmental safety testing should receive fair compensation from other companies who choose not to participate in such studies, but wish to use the information generated for registration or compliance purposes. Health and safety information such as would appear on a material safety data sheet or otherwise be used solely for risk management (not for registration purposes) should always be made publicly available.

### **Conclusion**

We urge the Subcommittee to reform TSCA so that it better reflects the ideal of a strong federal chemical safety program. We stand ready to assist Congress in its efforts to foster public confidence, create a level playing field among chemicals in commerce, and provide certainty for business investment, while maintaining the benefits for society associated with the use of chemical products.

## **Appendix: Dow Commitment to Product Safety**

At Dow, chemical safety is a top priority, and it always has been. Dow first established a toxicology laboratory in 1934 to evaluate chemical hazards, and we continue to be a global leader in this field today. Dow was a pioneer when it established a formal product stewardship program in 1970. In the 1980s, Dow led in development of Responsible Care®, which represents the chemical industry's commitment to continuous improvement in environmental, health, and safety performance. Most recently, our 2015 Sustainability Goals emphasize our commitment to continually improve the safety of our products throughout their lifecycle. For example, we have committed to conducting safety assessments for all of our products and making the information publicly available. In developing these safety assessments, we will address relevant gaps in hazard and exposure information. See [www.dow.com/productsafety/index.htm](http://www.dow.com/productsafety/index.htm) to better understand our processes by which we evaluate the safety of our products for their intended uses and to access these safety assessments. We are also committed to continuous improvement in our product safety assessment processes and to increased stakeholder scrutiny and dialogue on these topics.

Via our award-winning product stewardship program, we strive to develop, manufacture, transport and market our products in a safe and responsible manner. We work to ensure our products are handled safely and recycled or disposed of appropriately. Dow welcomes appropriate review by governments to maintain and enhance public acceptance of its operations and products.

If any party within the value chain identifies improper practices involving a product, it should work to improve those practices and, if, in the party's independent judgment, sufficient improvement is not evident, then the party should take further measures up to and including termination of product sale or use. Dow routinely refuses to sell products into applications where we don't believe the conditions for safe use can be met.

Dow believes there should be widespread support for the development of capabilities (competency) in nations that need to build their chemicals management framework to support the protection of human health and environment. We are actively working to assist small- and medium-sized companies and governments in developing countries to improve their capabilities to assess and manage chemicals safely.