



AMERICAN INDUSTRIAL HYGIENE ASSOCIATION

**INTEGRATING STEWARDSHIP
SUSTAINABILITY CONSIDERATIONS IN
CHEMICAL MANAGEMENT REFORM
AND
INNOVATION**

**Position Statement
Adopted: November 6, 2011**

American Industrial Hygiene Association

Position Statement on Integrating Stewardship Sustainability Considerations in Chemical Management Reform and Innovation

Purpose: To provide industrial hygienists a common vision and perspective regarding their role to support and advocate for science-based chemical management policies and innovations toward the goal of safe use of chemicals in the workplace, products, and supply chain.

The American Industrial Hygiene Association (AIHA) is an internationally recognized organization that supports protection of worker health. The AIHA is comprised of occupational and environmental health and safety professionals with members from industry, business, academia, government, unions, and other non-governmental organizations (NGO's). As a profession, we share common commitments that support effective chemical management policies and product development initiatives to promote environmental stewardship and the protection of worker health and safety. This position statement describes AIHA's vision and advocacy regarding integrating stewardship and sustainability considerations into chemical management policies and innovation. The AIHA supports innovations in chemical development to advance sustainable and safer products. AIHA supports regulatory policies and voluntary or consensus guidelines which increase the body of scientific knowledge to more effectively anticipate, recognize, evaluate and control potential exposures and impacts.

Chemical Regulatory Policy Reform

AIHA recognizes that workers around the world have the potential to be exposed to hazardous chemicals in the workplace and within their communities. The scientific body of knowledge, and processes to evaluate chemical impacts, needs to increase in order to enhance the safe and sustainable use of these chemicals while ensuring that potential substitutes provide a truly safer alternative.

Although the number and volumes of chemicals in use continues to grow, the principal chemicals statute in the United States, the Toxic Substances Control Act of 1976 (TSCA) has not been thoroughly reviewed since its passage. Regulatory reform can provide for uniform and consistent improvements across the chemicals industry. Many parties, including leading chemical companies and chemical trade associations agree the time has come for TSCA reform and reauthorization. Globally, there are many regulatory reform initiatives to improve the available scientific evidence by requiring producers to provide standard toxicity and health risk information to downstream users (e.g. the European

REACH regulation (Register, Evaluation, Authorization, and Restriction of Chemical Substances), The Canadian Chemical Management Plan (CMP), The Japanese Chemical Substances Control Law (CSCL), etc.) The AIHA advocates the development of science-based public policy to better inform the potential risks and benefits of chemicals to manufacturers, employers, workers and the public. Regulatory policy reform should be developed in a way that promotes informed decision making in the production and uses of existing and new chemicals while not stifling innovation.

Innovation through Sustainable Chemical Development and Product Life Cycle Assessment

The AIHA supports the integration of sustainable chemical development and product life cycle considerations during the creation of new chemical products and processes. Sustainable chemical development involves the design of new chemistries that strive to minimize the negative impacts to human health and the ecosystem during production, use and disposition of chemical compounds. These sustainable considerations are evaluated during the R&D phase and early stage gates of product development. Life Cycle Assessment is a methodology used to evaluate potential environmental and health impacts in the course of the product's life-span to make informed risk based decisions through comparative analysis of chemicals and substitutes. This responsible evaluation is necessary to assure that burdens are not simply shifted or result in unintended consequences that can be associated with making decisions based solely on chemical toxicological properties without consideration of the product life cycle and application. The approach of integrating risk analysis upstream presents a significant opportunity for the field of industrial hygiene to influence the outcome of chemical development in a way that can potentially minimize negative health effects and/or worker exposures.

The successful adoption of sustainable chemical development hinges on the integration of knowledge in chemistry and engineering, an understanding of the health and ecosystem impacts of chemicals, and the ways in which public policy and law guide industrial innovation. The AIHA believes that professionals in the field of industrial hygiene are uniquely qualified to play an active part in advancing sustainable chemistry, product life cycle assessment and chemical policy reform.

AIHA believes that:

- The practice of industrial hygiene and the protection of workers will benefit from new approaches to chemicals policy. These approaches seek to improve the information in supply chains on chemical ingredients in products, measures of toxicity, and measures of exposure potential during the life cycle of a chemical or product.
- New approaches, such as sustainable chemical development and product life cycle assessment, are beneficial to the design of chemistries and the assessment of health and environmental risks. Informed decision making should consider

- chemical lifecycle management perspectives that evaluate potential adverse health or safety impacts on people and environment.
- Certified Industrial Hygienists are uniquely trained to offer expertise across these disciplinary boundaries, particularly in the linkages among chemistry, engineering, toxicity, exposure, public policy, and industrial design.
- Chemicals policy should (1) increase the generation and disclosure of relevant toxicity end-points for chemical substances or categories of substances and provide information to assist in exposure assessment and safe handling; (2) promote sharing of information throughout the supply chain to enable chemical uses to reduce the potential for negative impact on human health or the environment; and (3) expand investments in life cycle assessment education, research, and development.
- A consistent approach to chemicals policy and regulation will be most effective in promoting global innovation and adoption of life cycle assessment for the purpose of ensuring the protection of human and environmental health.

AIHA supports:

- The development and implementation of improved approaches to chemicals policy through collaborative alliances between industry, public and private sectors to drive innovation in sustainable chemistry development and life cycle assessment in order to ensure a safe and healthful workplace.
- Chemical policy reform which drives effective prioritization of chemical risks based not exclusively on their intrinsic hazards, but also on the potential for occupational exposures in the workplace, during consumer use, and through “end-of-life” management or disposal.
- Accredited industrial hygiene programs need to recognize that the role of their graduates is expanding to include aspects of stewardship and sustainability. Curriculum should be updated to integrate content areas such as product stewardship, industrial design, life cycle assessment, public policy, business economics, and law with the traditional industrial hygiene core competencies and accreditation requirements.
- Member engagement in their organizations to promote a leadership advocacy role in applying sustainable chemistry and life cycle assessments in the conceptualization, design, production, use and end-of-life disposition of chemicals, materials, and products.
- Participation by members in local and national chemicals policy developments by offering expertise and support for balanced science based policy proposals by governmental bodies.

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