

CCS-CHAS Policy Statement Writing Team

This team began its work in December 2015. A draft of a proposed public policy statement entitled “Safety in the Chemistry Enterprise” was completed in May. This draft is being distributed to CCS and CHAS for review at the Philadelphia meeting. Once the document has been approved by both groups, CCS will present the statement to the ACS Board of Directors for its approval.

This statement is intended to serve the ACS as an underlying policy statement on safety. The audience for this public policy statement is regulators and policymakers. This statement is a general statement (no specific issue or problem discussed) that would address the Society’s general position about laws and regulations dealing with issues in chemical safety.

The Writing Team will work next on a guideline statement discussing the promotion and practice of lab safety. The intended audience for the guideline statement includes chemists, chemical engineers, and support professionals who work with them.

1 Safety in the Chemistry Enterprise – May 24, 2016

2 The study and implementation of chemistry can produce many valuable social and economic
3 improvements, such as improved living conditions, public health, and overall quality of life. The
4 chemistry enterprise creates high-skill and high-wage jobs. The practice of chemistry from concept
5 through research, development, manufacture, use, and disposal must be done safely so as to minimize
6 impacts to human health and the environment.

7 The American Chemical Society believes recognition of the ethical obligations to the safety and health of
8 both individuals and the environment is essential for those working with chemicals. Chemists
9 understand working with chemicals and developing new materials and chemical processes involves
10 some degree of risk.

11 A thoughtful and educated approach must assess the overall lifecycle and risk/benefit analysis for each
12 area of the chemical enterprise. What are the potential impacts of our activities? This process of
13 minimizing the risk while increasing the benefit should continue throughout the investigation,
14 development, implementation, use, and appropriate recycling or ultimate disposal of products and
15 byproducts. Ethics and safety issues should be considered by all stakeholders when planning or
16 evaluating the funding of science, education of chemists, technological development, and recognition of
17 scientific achievement.

18 Chemical research and development must follow all applicable regulations and incorporate best safety
19 practices regarding use, storage, and disposal of materials. Ongoing reviews of scientific literature,
20 experimental procedures and developing processes will minimize risks. We must alert the end-users of
21 our products and processes to the potential consequences of misuse or failure to follow product
22 recommendations.

23 The ACS supports policies and processes which:

- 24 1) Assure the use of both sound science and risk-based criteria in the promulgation of chemical
25 safety regulations and public policy.
- 26 a) Authors of regulations, guidance documents, and operating procedures should regularly
27 review documents based on current, generally accepted, scientific and technical input to
28 address risk to people or the environment.
- 29 b) Subject matter experts need to be consulted to identify potential unintended
30 consequences of regulation or public policy.
- 31 2) Develop information regarding best practices, risks, use, and disposal throughout the
32 development of public policy and regulatory processes.
- 33 3) Resolve inconsistencies between various state, federal, and local regulatory agencies that cause
34 implementation conflicts.

35 Chemical management and regulatory policy should encourage technological innovation and a
36 globally competitive US chemical industry. Advancing research and applying appropriate green and
37 sustainable principles will lead to economically viable technical innovations. To this end, ACS
38 supports the government implementation of:

- 39 • An expedited, rigorous treatment to regulatory applications of inherently safer chemical
40 products and processes. The government should work with industry, academia, scientific

- 41 organizations, public interest groups, and other stakeholders to develop guidelines for use in
42 such a regulatory process.
- 43 • Continued support for research and development by universities, industry, government
44 laboratories, and other stakeholders to make safer alternatives available and encourage their
45 adoption.
 - 46 • Support for the training and education of chemical scientists and engineers to include toxicity
47 issues and exposure risks associated with chemicals.

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