American Public Health Association
RESOLUTION
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Calling on the U.S. Congress to restructure the Toxic Substances Control Act and implement a modern, comprehensive chemicals policy.

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SECTION ENDORSEMENT: Occupational Health and Safety

Whereas, APHA has established prior policy in the area of chemical safety for workers and the general public;[1-6] and

Whereas, the global scale of industrial chemical production is immense and is expected to grow four-fold by 2050;[7, 8] and

Whereas, the U.S. chemical industry is a critical economic sector that designs, produces, and imports the substances that constitute the material base of society; and

Whereas, the U.S. chemical industry produces or imports a total of 42 billion pounds of chemical substances per day for use in industrial processes and commercial products;[9] and

Whereas, many of these substances that are useful to society are also known to be hazardous to human biology and ecological systems; and

Whereas, the Toxic Substances Control Act (TSCA) of 1976 (P.L. 94-469) is the federal statute that is broadly intended to enable regulation of chemicals both before and after they enter commerce;

Whereas, analyses conducted by the National Academy of Sciences (1984),[10] the U.S. General Accounting Office (1994),[11] the Congressional Office of Technology Assessment (1995),[12] Environmental Defense (1997),[13] the U.S. EPA (1998),[14] former EPA officials (2002),[15] the U.S. Government Accountability Office (2005),[16] and the University of California (2006)[17] have concluded that TSCA has fallen short of its objectives and has not served as an effective vehicle for the public, industry, or government to *assess* the hazards of chemicals in commerce or *control* those of greatest concern, and that, as a consequence, the statute has not served to motivate industry investment in cleaner technologies; and

Whereas, these analyses point to three overarching “gaps” that have emerged in the United States chemical management program as a consequence of TSCA:[17]

- A “data gap,” because TSCA does not require producers to generate and disclose information on chemical hazards to the public, government, or downstream businesses and industries;
- a “safety gap,” because TSCA requires government to meet an excessively high standard of proof before acting to protect public environmental health, even for well-established chemical hazards; and
- a “technology gap,” because the lack of both market and regulatory drivers has dampened investment, research, and education in green chemistry: the design, manufacture, and use of chemicals that are safer for biological and ecological systems;[17-19] and

Whereas, as a consequence, chemicals are marketed in the United States primarily on the basis of their function, price, and performance, with much less attention to their toxic and ecotoxic properties; and

Whereas, these conditions in the chemicals market are reflected in chemistry teaching and research in the United States and have produced an array of problems for workers, the public, ecosystems, government, businesses, and industry that will broaden and deepen in coming years, concomitant with expanding global chemical production; and

Whereas, these problems include the projected need for over 600 new hazardous waste sites each month in the United States leading up to 2033, with estimated clean-up costs of $250 billion;[20, 21] the appearance of hundreds of industrial chemicals in human tissues and fluids, including those of infants; the development of chronic diseases and premature death among thousands of Americans as a consequence of chemical exposures in the workplace;[17] and disproportionate risks due to chemical exposures among members of minority, immigrant, and low-income communities, both as residents and workers; and

Whereas, sweeping changes in public environmental health policy in the European Union are driving global interest in cleaner technologies, including green chemistry, and a growing number of downstream businesses are calling for greater transparency and accountability on the part of chemical suppliers and producers;[22] and

Whereas, in light of these changes, the United States has a unique opportunity to correct long-standing federal chemicals policy weaknesses and implement a modern, comprehensive approach to chemicals policy that will build the foundation for new productive capacity in green chemistry;[17] and

Whereas, a modern, comprehensive chemicals policy could position the United States to become a global leader in green chemistry innovation; and

Whereas, on the current trajectory, the U.S. could become a market for hazardous substances no longer permitted for sale in the European Union

and other regions that are taking steps to implement modern chemicals policies;[23]

Therefore, be it resolved:

That the American Public Health Association calls upon the U.S. Congress to fundamentally restructure the Toxic Substances Control Act such that it:

(1) requires the generation, disclosure, and distribution by chemical producers of comprehensive chemical production, use, hazard, and exposure information in forms that are appropriate for use by the public, workers, industry, small businesses, and government;
(2) requires chemicals now in commerce to be assessed to identify both those that pose potential or actual risks to human health and the environment and those that may serve as safer substitutes for chemicals posing risks to public environmental health;
(3) serves as a vehicle for expanding the capacity of federal and state agencies to efficiently assess the hazards of chemicals in commercial use and steadily reduce the production and use of those of greatest concern to public environmental health, and;
(4) introduces other mechanisms to motivate investment in the industrial and commercial application of green chemistry, and in green chemistry research, technology development and diffusion, education, and technical assistance.

That the APHA calls upon state legislatures to address chemicals policy at the state level, for similar purposes, and with similar goals.

Suggested Action Steps:

(1) APHA to send letters calling for legislation at the federal level that would implement the proposed changes in the Toxic Substances Control Act;
(2) APHA to send letters calling for legislation at the state level that would implement state-level changes in chemicals policy in support of the proposed goals;
(3) APHA to send letters that will encourage similar action by other professional organizations in the U.S.;
(4) APHA to communicate with state APHA Chapters to encourage and support their engagement in chemicals policy activities in support of these goals.

1. APHA Policy 200011: The precautionary principle and children's health.
2. APHA Policy 20008: Affirming the importance of regulating pesticide exposures to protect public health.
3. APHA Policy 20009: Support for international action to eliminate persistent organic pollutants.
4. APHA Policy 2002-5: Preserving right-to-know information and encouraging hazard reduction to reduce the risk of exposure to toxic substances.
5. APHA Policy 2005-5: Protecting human milk from persistent toxic chemical contaminants.

6. APHA Policy 96-06: The precautionary principle and chemical exposure standards for the workplace.
7. American Chemistry Council. Guide to the Business of Chemistry, p 37. Arlington, Virginia: American Chemistry Council (2003).
8. Organization for Economic Cooperation and Development (OECD). Environmental Outlook for the Chemicals Industry (http://www.oecd.org/dataoecd/7/45/2375538.pdf) (accessed February 8, 2006). pp. 34-36 (2001).
9. National Pollution Prevention and Toxics Advisory Committee (NPPTAC), Broader Issues Work Group. How can EPA more efficiently identify potential risks and facilitate risk reduction decision for non-HPV existing chemicals? (2005).
10. National Academy of Sciences Commission on Life Sciences. Toxicology Testing: Strategies to Determine Needs and Priorities. Washington, D.C.: National Academy of Sciences Press (1984).
11. United States General Accounting Office. Toxic Substances Control Act: Legislative Changes Could Make the Act More Effective (GAO/RCED-94-103). Washington, D.C.: U.S. Government Printing Office (1994).
12. Congress of the United States Office of Technology Assessment. Screening and Testing of Chemicals in Commerce: Background Paper. Washington, D.C.: U.S. Government Printing Office (1995).
13. Roe D, Pease W, Florini K, Silbergeld E. Toxic Ignorance: The Continuing Absence of Basic Health Testing for Top-Selling Chemicals in the United States (http://www.environmentaldefense.org/pdf.cfm?ContentID=243&FileName=toxicignorance.pdf) (accessed February 12, 2005). Environmental Defense, Washington, D.C. (1997).
14. U.S. Environmental Protection Agency. Chemical Hazard Data Availability Study (http://www.epa.gov/opptintr/chemtest/hazchem.htm) (accessed June 15, 2005). Washington, D.C.: U.S. Government Printing Office (1998).
15. Goldman L. Preventing pollution? U.S. toxic chemicals and pesticides policies and sustainable development. Environmental Law Review 32:11018-11041 (2002).
16. United States Government Accountability Office. Chemical Regulation: Options Exist to Improve EPA's Ability to Assess Health Risks and Manage its Chemicals Review Program. Washington, D.C.: U.S. Government Printing Office (2005).
17. Wilson M, Chia D, Ehlers B. Green Chemistry in California: A Framework for Leadership in Chemicals Policy and Innovation (http://coeh.berkeley.edu/news/06_wilson_policy.htm) (accessed March 15, 2007). Special Report to the California Legislature. University of California Policy Research Center, Office of the President (2006).
18. Anastas P, Warner J. Green Chemistry: Theory and Practice. New York:Oxford University Press (1998).
19. National Academy of Sciences, National Research Council, Board on Chemical Sciences and Technology. Sustainability in the Chemical Industry: Grand Challenges and Research Needs – A Workshop Report (http://www.nap.edu/books/0309095719/html (accessed October 24, 2005) Washington, D.C.:National Academy Press (2005).
20. United State Environmental Protection Agency. Cleaning up the Nation's Waste Sites: Markets and Technology Trends (http://www.clu-in.org/download/market/2004market.pdf) (accessed May 18, 2005) pp. vii - x. (2004).
21. United States Environmental Protection Agency. Superfund Program. New Report Projects. Number, Cost and Nature of Contaminated Site Cleanups in the U.S. over the Next 30 Years. (http://www.epa.gov/superfund/news/30years.htm) (accessed May 18, 2005). (2004).
22. Ambachtsheer, Kron, Liroff, Little, Massey. Fiduciary Guide to Toxic Chemical Risk. (http://www.iehn.org/) (Accessed June 15, 2007). The Investor Environmental Health Network. (2007).
23. Dension R. Not That Innocent: A Comparative Analysis of Canadian, European Union, and United States Policies on Industrial Chemicals. (www.environmentaldefense.org/go/chempolicyreport) (accessed June 10, 2007) Environmental Defense, Washington D.C. (April 2007).