



## American Chemical Society

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OFFICE OF THE PRESIDENT  
Catherine T. Hunt  
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1155 SIXTEENTH STREET, N.W.  
WASHINGTON, D.C. 20036  
Phone 202-872-4461  
Fax 202-872-6338

June 14, 2007

Maureen Gorsen  
Director, Department of Toxic Substances Control  
California Environmental Protection Agency  
1001 I Street  
Sacramento, CA 95812-2815

Dear Director Gorsen:

I recently learned about the California Green Chemistry Initiative, and I would like to offer several comments and observations about the initiative from the perspective of the American Chemical Society (ACS)—the world's largest scientific society. Nearly 17,000 of our more than 160,000 members reside in California. Our mission is to advance the broader chemistry enterprise and its practitioners for the benefit of Earth and its people.

The American Chemical Society applauds California's interest in principles of green chemistry and particularly the California Environmental Protection Agency's (CalEPA's) interest in encouraging innovation in this arena. However, as a long-time practitioner and promoter of green chemistry, ACS is concerned that the design of the program may *not* be optimized to advance the established goals of green chemistry or increase green technology development.

The Society is pleased to offer several recommendations to help ensure that CalEPA's program is successful. We would also respectfully request that CalEPA consider renaming its Initiative to avoid confusing a definition with a brand that has been developed and fostered over the last decade and that has led to significant environmental improvement.

Our understanding is that the California Green Chemistry Initiative was established to assess existing programs, expertise, and approaches to

- Evaluate the health and environmental effects of toxic chemicals and their sources;
- Identify gaps in the prevention or control of exposure to toxic chemicals; and
- Analyze multi-media impacts.

The Society, in cooperation with the U.S. Environmental Protection Agency and other stakeholders, has worked for over a decade to establish green chemistry as an innovative, non-regulatory approach to environmental issues that focuses on the design and use of technology to avoid pollution. As understood by our organization, the broader research community, and the U.S. Environmental Protection Agency, the term "green chemistry" differs from the way it is being used by CalEPA. CalEPA's activities appear to be linking the term, "green chemistry," to what ultimately may become a significant regulatory effort.

*ACS Vision: Improving People's Lives through the Transforming Power of Chemistry*

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*The American Chemical Society — with more than 160,000 members — is the largest scientific society in the world. ACS is a nonprofit membership organization chartered by the U.S. Congress and a global leader in providing access to chemistry-related research.*

Efforts to understand the health impacts of exposure and use of toxic chemicals are well within the purview of CalEPA. However, ACS has a clear interest in ensuring that the CalEPA program does not inadvertently redefine a highly successful, research-driven effort into a regulatory program. The list of speakers for your June 19, 2007, conference and other materials prepared by CalEPA suggest that the full scope of green chemistry and engineering is not represented in your current outreach and planning.

ACS believes that green chemistry programs are most effective when done in cooperation with industry and other relevant stakeholders as a complement to traditional command-and-control regulatory programs. Green chemistry approaches unleash the creativity and innovation of our scientists and engineers in designing and discovering the next generation of chemicals and materials so that they provide increased performance and increased value while meeting all goals to protect and enhance human health and the environment. In this way, environmental and economic goals from various stakeholders in the chemical enterprise can be aligned.

Currently, significant barriers impede investment in, and adoption of, sustainable technologies. Although the long-term economic benefits of sustainable technologies, such as reduced regulatory and waste disposal costs, can be significant, businesses can be placed at a near-term competitive disadvantage because of potentially prohibitive, up-front costs.

To effectively address this dilemma, ACS believes that governments should provide incentives for the implementation of sustainable technologies, including

- Regulatory flexibility for the superior environmental performance obtained when clean technologies are employed;
- Enhanced tax incentives that allow businesses to justify spending on research, development, and adoption of new technologies and processes to accomplish pollution prevention;
- Grants in support of the research and development of new environmentally benign processes and technologies by universities, industry, and government;
- Programs to facilitate sharing of information and ideas about preventing pollution and applying new technologies;
- Preferential government purchasing of safer technologies; and
- Award programs that recognize businesses that incorporate pollution prevention into their overall goals, objectives and every day operations.

The ACS Green Chemistry Institute<sup>SM</sup> (ACS GCI) advances green chemistry and green engineering principles throughout the chemical enterprise. The Institute focuses on advancing research, industrial implementation, communication, and education on green chemistry. Major support for ACS GCI is provided by government, foundations, and individual companies. More information about ACS GCI is available at [www.chemistry.org/greenchemistryinstitute](http://www.chemistry.org/greenchemistryinstitute).

ACS would be pleased to work with you to understand how applications of green chemistry ultimately might be successfully adopted in California, to explore the positive contribution that might be made by your program to the advancement of green chemistry, and to develop a more appropriate name for the CalEPA Initiative. I have asked Dr. Tamara Nameroff, acting director of the ACS Green Chemistry Institute<sup>SM</sup>, ([t\\_nameroff@acs.org](mailto:t_nameroff@acs.org) or 800/227-5558 X 4523) to contact you. We are anxious to continue this dialogue and explore ways that we can work together to improve environmental performance and sustainability.

Sincerely,



Catherine T. Hunt, Ph.D.  
President