



California Environmental Protection Agency

Air-Resources Board • Department of Pesticide Regulation • Department of Toxic Substances Control
Integrated Waste Management Board • Office of Environmental Health Hazard Assessment
State Water Resources Control Board • Regional Water Quality Control Boards



Linda S. Adams
Secretary for
Environmental Protection

Arnold Schwarzenegger
Governor

MEMORANDUM

TO: Chairpersons and Directors
Boards, Departments and Office

FROM: Linda S. Adams
Secretary for Environmental Protection *Linda S. Adams*

DATE: April 20, 2007

SUBJECT: CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
(CAL/EPA) GREEN CHEMISTRY INITIATIVE

To date, much of our environmental protection emphasis has been to identify, reduce and control pollutants, wastes, and discharges. Each of your boards, departments and office have been instrumental in developing innovative and successful regulatory programs to evaluate the risks posed and to address pollution in the various environmental media: the emission of pollutants into the air, the discharge of contaminants into water, the handling and disposal of solid and hazardous wastes, and the application of pesticides. You have also been successful at identifying and integrating multimedia approaches in a number of your efforts, a lesson learned from our past experience with Methyl tertiary-butyl ether (MTBE).

Recent attention, however, has begun to focus more directly on the relationship between health and environmental effects and exposures to toxic substances, both in the workplace and in our day-to-day lives. A growing body of science and literature is emerging identifying a variety of concerns and challenges regarding the use and regulation of chemicals. The European Union and the Canadian government have adopted measures to evaluate hazards and reduce exposures to toxic chemicals while encouraging greater manufacturer responsibility for the products they produce. With this attention has also come increasing legislative interest. This year alone, there are over 50 bills that in some way or another deal with the management of individual chemicals and/or products of concern to public health and safety and the environment. The bills use different approaches (e.g., bans, phase-outs, limitations on uses) and rely on different administering agencies to implement their provisions.

Many of you have already begun to turn your attention to these issues in your respective areas. While these efforts will continue, we need to continue to evolve our programs towards a consistent means to evaluate risk and reduce exposure to dangerous

substances, encourage cleaner and less polluting industrial processes, identify safer chemical and non-chemical alternatives, promote education on risk reduction successes, and ensure that the efforts of each of your programs are consistent and coordinated. This effort should allow us to collaborate and gain the full benefit of each others' work, as well as to clearly identify goals and objectives that we all can strive to achieve.

In the absence of a unifying approach, interest groups and policy makers have been attempting to take these issues on one-by-one. Product by product, chemical by chemical, and now even city by city approaches can often have unintended, even regrettable consequences, even with the best of intentions. I believe we need to develop a coordinated, comprehensive strategy designed to foster the development of information on the hazards posed by chemicals, ways to reduce exposure to dangerous substances, approaches that encourage cleaner and less polluting industrial processes, and strategies to encourage manufacturers to take greater responsibility for the products they produce. For us to be successful in developing this strategy, we must have a better understanding of the toxicological and environmental effects of the toxic substances in products, in processes, and in commerce. For California, it will be important to build upon the availability of information that is generated through our existing programs, and draw upon the best mechanisms that have been developed within our programs as well as those that have been proposed elsewhere, such as in other states, the European Union, and other countries. Our goal must be to significantly reduce public health and environment impacts, as well as costs, by affecting the redesign of product formulations and manufacturing processes. Our strategy, and the policy that it champions, must have at its core and be governed by sound science.

To this end, I have asked the Director of the Department of Toxic Substances Control (DTSC) to lead this team effort on my behalf, in collaboration with the Cal/EPA boards, departments and office (BDOs). As with the Enforcement Initiative that Cal/EPA and the boards and departments undertook beginning in 2004, DTSC will lead this effort in consultation with other government agencies, industry and affected stakeholders. The Cal/EPA Green Chemistry Initiative will include a baseline assessment of existing programs, expertise and approaches related to the health and environmental effects of toxic chemicals and their sources, the identification of missing elements or "gaps" in how exposure to toxic chemicals is prevented or controlled, and the analysis of multi-media impacts.

DTSC and the Cal/EPA BDOs will use the results of this baseline assessment to develop lists of options the state could consider in filling the gaps identified in the baseline assessment. The options being developed should, at a minimum, be able to answer questions related to the toxicity of chemicals found in products, processes and commerce, the physical and chemical properties of chemicals and their potential to leach or migrate from wherever they may be found, the fate and transport of the chemicals in the environment, the health and environmental risks posed by those chemicals, the economic and technical feasibility of chemical and non-chemical alternatives to the use of particular chemicals, and the health and environmental risks posed by alternatives to those chemicals.

The options should also include areas where investment in research and development may play a role, where innovative technologies or acceptance of alternatives may be needed, and where chemical use restrictions may be warranted.

Through these efforts, it is my goal to develop recommendations for a Cal/EPA Green Chemistry Policy. I have asked the Director of DTSC to submit the list of options to me by January 1, 2008 from which we intend to draw and propose recommendations on a final policy by July 1, 2008.

I request each of you to dedicate the necessary resources towards this very important goal, and to designate a lead staff member to work with DTSC on this effort. I am assigning Assistant Secretary for Legislation Patty Zwarts and Assistant Secretary Janice Yonekura to act as my liaisons in this effort. The list of options to be developed should not only draw on the approaches and expertise in each of your BDOs, but it should also identify ways to enhance cross-BDO and cross-media collaboration towards common goals.

cc: Brian Prusnek
Deputy Cabinet Secretary

John Moffat
Deputy Legislative Affairs Secretary

Patty Zwarts
Assistant Secretary for Legislation

Janice Yonekura
Assistant Secretary for Waste and Cleanup Programs