



*Advancing public policy to  
improve the health and safety  
of workers and the community.*

July 13, 2009

Mr. Maziar Movassaghi  
Director, Department of Toxic Substances  
P.O. Box 806  
Sacramento, CA 95812-0806

**Subject: Green Chemistry Initiative—Response to Straw Proposal**

Dear Mr. Movassaghi:

You may recall that the California Industrial Hygiene Council (CIHC) first submitted a letter to you in April, 2009 with some very preliminary thoughts about its general support, views and expectations for the Green Chemistry Initiative, as well as some concerns it requested you consider in your deliberations moving forward.

By way of background, the CIHC was founded in 1990 to establish a legislative presence in California to represent the Industrial Hygiene profession. The field of Industrial Hygiene is dedicated to the anticipation, recognition, evaluation, and control of occupational and environmental health hazards. CIHC, representing the five Local Sections of AIHA in California, views its mission as bringing good science to the legislative and/or regulatory table which impacts the health of both workers and the public. It is affiliated with the National American Industrial Hygiene Association (AIHA), a 12,000 member organization, as well as the International Occupational Hygiene Association (IOHA), which represents the global community of Occupational Hygiene organizations in over 26 countries.

After attending numerous meetings, hearings and conferences with the designers of this Initiative, as well as reviewing the recent draft straw proposal and status report available on DTSC's website, we would like to comment on the following specific issues our membership has identified as being of value and, in some cases, posing some challenge and concern:

- The general concept of an overarching Initiative that attempts to streamline chemical policy has value. While the 1976 U.S. Toxic Substances Control Act (TSCA) endeavored to do some of this, it fell short of actually requiring a comprehensive understanding of a chemical's life cycle and its exposure implications (occupational, consumer, community and disposition). In retrospect, while more might have been done in the 1970s to strengthen broad based regulations (such as TSCA), the country was truly on the front end of promulgating significant federal regulations and still fairly inexperienced as to how best to accomplish this.
- As a word of caution so as to enable effective implementation, the Initiative should avoid reaching an end product that is heavily bureaucratic and/or unreasonably controlling and rigid. It needs to be "user friendly" in order to achieve its goals.
- The Cal EPA Green Chemistry Initiative has endeavored to be a transparent and stakeholder driven process. Even with that, the stakeholder input (professionals, public and manufacturers alike) remains more sparse than should be expected given the Initiative's broad, and potentially significant, impact.
- A clarification around "chemicals of concern," their potential uses, and what constitutes a "consumer product" is critical, for this triggers the risk assessment process. Furthermore, "acceptable risk" needs to be well defined early on and not evolve as the process moves along for deliberation. Criteria to determine whether a chemical moves onto a list of "chemicals of concern" must be clear and scientifically and technologically sound, with clarity in the criteria employed to make this initial determination. The simple existence of a chemical on a governmental list of lists (this appears to be the case in the existing draft straw proposal), whether domestic or international, should not drive the initial candidate list determination of scientific reliability. Also, a process to add or delete chemicals from this list should also be defined.

More specifically, the definition of a "consumer product", while reasonably defined in the draft straw proposal, should be further clarified to exclude certain items such as raw materials, by-products and permitted releases. Furthermore, manufacturers, processing intermediaries and distributors should also be specifically excluded because they do not fall within the scope of consumer product purchasers.

- While the Workshops and draft regulatory text have been heavily oriented to ecosystem and environmental risks, the draft straw proposal addresses the Initiative's intent to encompass worker health and safety issues in a life cycle assessment. It is critical, however, that the existing regulatory architecture be relied upon to determine potential occupational health exposure and risk and not be left up to some new process.
- All "lifecycle assessments" should be affirmatively coordinated with all state agencies and be posted on DTSC's website for broader consumption, evaluation and input. This is

certainly in keeping with the transparency thrust DTSC has assumed since the beginning. The draft straw proposal appears to remain silent on this.

This transparency suggestion also applies to “alternative analyses”. Those who understand the operational and functional issues surrounding the use of one chemical over another need to be actively engaged in the alternative analysis process; otherwise, alternatives suggested are simply a conceptual exercise with little chance for success. And finally, alternatives should be flexible in their inclusion of other than “substitution” options to mitigate product risk. At this time, the draft straw proposal appears to lean heavily towards redesign and substitution as the options of choice.

- The discussions surrounding the Toxic Clearinghouse focus on an inventory of chemicals that is comprehensive and accessible by all. The required eco/tox/epidemiological information that manufacturers and governments alike will be responsible for providing should leverage existing scientific data sets that are internationally available and recognized as being scientifically reliable. The existence of chemicals on any available international list should not be construed as the base list from which determinations should be made. Sound professional judgement must also play a role. Otherwise, the Toxics Clearinghouse becomes a master list of lists with little ability to decipher sound science from that which is sub-optimized.

Furthermore, some decisions will need to be made about how one addresses data for the same chemical that is not aligned from one data base to another or even non-existent. Some question also remains about having a Clearinghouse that is not staffed by experts who can interpret the data for those using the database. Data absent an interpreter (or at least someone who can scientifically guide the understanding of its importance) is not very useful and a disservice to those who need to rely upon the reliability of the scientific information.

- The discussions and regulatory language proposed suggest that the mere presence of a chemical is cause for concern. The central principle of the science of toxicology is that the degree of toxicity is dependent upon the dose. USEPA, like the Centers for Disease Control and Prevention (CDC), readily acknowledges that there are dose levels that are without any appreciable risk of deleterious effects over a lifetime of exposure, including exposures of sensitive subgroups.
- The Green Chemistry Leadership Council has been broadened to assist the DTSC in prioritizing and identifying chemicals, reviewing regulations to analyze alternatives for making decisions on chemicals of concern, and evaluating significant adverse impacts to health and environment. The expanded Council appears to be missing the presence of a key California Directorate whose charter is to protect the health, safety and well being of its workforce, Cal-OSHA. We assume this is simply an oversight.

In summary, the California Green Chemistry Initiative (and its companion regulations) has the potential to strengthen efforts geared to protecting California workers and the public. Broad stakeholder input (risk-related professionals, manufacturers and the public) on the definitions and scope of “chemicals of concern”, “lifecycle assessment” and “ alternative analyses” is important in leveraging learning, expectations and ultimate implementation—DTSC may want to consider an affirmative outreach process (and not simply stakeholder collaboration, to quote the draft straw proposal) to include all three groups (risk-related professionals, manufacturers and the public) which, thus far, appears to be limited.

The California Industrial Hygiene Council (CIHC), comprised of members dedicated to the anticipation, identification, evaluation and control of occupational and environmental health risks, is available to assist in the scientifically sound development of this Initiative’s goals. At the end of the day, our charters remain the same—to protect our workers and the public!

Sincerely,

Howard Spielman, PE, CIH, CSP, REHS  
President, CIHC  
hspielman@healthscience.com  
P: (714)-220-3922  
Hspielman@healthscience.com

Sincerely,

Chris Laszcz-Davis, MS, CIH, REA  
Vice-President, CIHC  
ChrisLD@EQ-Organization.com  
P: (925)-330-1774  
[ChrisLD@EQ-Organization.com](mailto:ChrisLD@EQ-Organization.com)

cc. Linda Adams, Cal EPA  
Jeff Wong, DTSC  
Don Owen, DTSC  
Kathy Barwick, DTSC  
Rick Brausch, DTSC  
Peggy Harris, DTSC

---

2220 Capitol Avenue • Sacramento, CA 95816 • (916) 447-7341 fax 448-3848  
e-mail: [CIHC@sacadvocacy.com](mailto:CIHC@sacadvocacy.com) [www.CIHConline.org](http://www.CIHConline.org)