Peer Review of Proposed Regulations, R-2010-05

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The following represent my opinions on the proposed regulations regarding Safer Consumer Product Alternatives. They are based on my careful reading of the text of the proposed regulations, with particular attention to the portions dealing with chemicals of concern, priority products, and alternatives analysis. I have also reviewed the Initial Statement of Reasons document for these regulations.

1. **Use of chemical properties, toxicological information, volume of the chemical in commerce, and adverse impact to sensitive subpopulations, public, and the environment to develop supporting rationale and prepare Chemicals Under Consideration and Priority Chemicals lists.**

The Department of Toxic Substances Control (DTSC) was mandated under AB 1879 to adopt regulations to establish a "process to identify and prioritize those chemicals or chemical ingredients in consumer products that may be considered as being a chemical of concern." The DTSC's approach of defining first Chemicals Under Consideration (CUC) and then Priority Chemicals (PC, CUC and PC together being Chemicals of Concern) is very logical and sensible from a regulatory standpoint and from the standpoint of efficient use of department resources. CUC designation provides appropriate warning to manufacturers, marketers, and consumers. The process for listing and delisting chemicals as CUC is straightforward and transparent. The factors and criteria for selection of Priority Chemicals from the CUC list are appropriate.

The DTSC's inclusion of chemical and physical properties, chemical volume in commerce, and adverse impacts to sensitive subpopulations, potential for exposure in a consumer product, and adverse impact to the environment is not only consistent with this mandate, but necessary to meet it. The specific metrics for evaluating chemicals against each of these prioritization criteria are quite complete. My sole concern is that for the majority of chemicals quantitative data exist for only a small subset of these criteria and metrics. This should not be taken as a criticism of the proposed regulations, but rather as a statement of the need for more data. These regulations will provide incentives and a framework for the gathering of such data.

2. **Use of consumer product marketing, potential for exposure of the Priority Chemical in the consumer product to the public or contamination to the environment, to develop supporting rationale and prepare a list of Products Under Consideration and Priority Products.**

Section 25253 of the Health and Safety Code directs the DTSC to adopt regulations that "establish a process for evaluating chemicals of concern in consumer products." The designation of products (as opposed to chemicals) as Products Under Consideration (PUC) is the next logical step in this process. General criteria here appropriately focus on marketing data (sales, volume of product, distribution, etc.) and factors influencing the potential for exposure to the public or contamination of the environment. Here again, the metrics for each of these criteria appear to be quite complete. I am especially pleased to see that product life-cycle considerations are central to these evaluations. I note particularly that life-cycle segments that are regulated by other agencies or authorities are exempted here.

As with chemicals, Priority Products (PP) are selected from the PUC list based on the relative threat posed by the product, the availability of reliable data to substantiate that threat, the availability of an Alternative Assessment (considered below), and Department resources. Specific determination meets the standard criteria for defining risk, that is, the potential for exposure and the potential for harm resulting from exposure. The approach for evaluating these potentials is scientifically sound.

3. Use of human health and environmental impacts of the Priority Chemical in the Alternatives Assessment to develop safer consumer products.

The factors listed for evaluation of alternative chemicals (69305.5 (a)(b) and (c)) are consistent with guidelines detailed in the Health and Safety Code and consistent with methodologies to assess risk. Specifically, they evaluate potential impact and likely exposure of the chemical through the life cycle of the product that may contain them. This list of factors and criteria appears to be quite complete and sufficient to ensure that alternative chemicals substituted in a product for a priority chemical meet accomplish the goal of minimizing risk to the public, at risk populations and to the environment. The changes in the current (September 14, 2010) draft effectively clarify the parallel relationship of the Alternative Assessment (Tier IIA & B) to the designation of Priority Chemicals and Priority Products.

The Big Picture

Overall, I find these regulations to be consistent with accepted scientific principles and process. Priorities are set based on a quantitative assessment of risk (exposure probability and potential consequence of exposure to the public, sensitive groups and the environment). The emphasis on evaluation of full life cycle is important. The exemptions of segments of product life cycle are clearly spelled out, with one exception. I may have missed it, the regulations to not specify jurisdiction for those life cycle segments such as resource extraction or product disposal that may not occur in California. The emphasis on green chemistry principles in the regulatory process is also consistent with the science and best practices overall.