

Risk Policy Report

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California Report Cites TSCA As Green Chemistry Barrier, Urges New Law

http://coeh.berkeley.edu/docs/news/2008-1-22_rpr.pdf

By Matt Shipman

A new report on green chemistry commissioned by California regulators finds that the Toxic Substances Control Act (TSCA) — the federal law for managing toxic chemical risks— is a highly flawed barrier to green chemistry and is largely responsible for the costly adverse health effects the report associates with current chemical controls. The report recommends a new legal framework for California that takes a different approach from TSCA.

The findings come as California is in the midst of developing the nation's first-ever Green Chemistry Initiative that is being closely watched by industry and activists as a likely precedent for such initiatives in other states and possibly at the federal level.

The report, written by a University of California (UC) panel, calls for California to take the necessary legislative and regulatory action needed to implement its precedentsetting "comprehensive" green chemistry policy.

The report's criticism of TSCA will likely support environmentalists' and environmental health experts' arguments that California EPA's (Cal/EPA) Green Chemistry Initiative should pursue a different direction from the federal chemical statute, which critics say is too weak to spur progress in finding safer chemical substitutes. But chemical industry representatives are arguing that the California initiative should hew closely to TSCA requirements.

Observers who view the Cal/EPA program as a potential bellwether for similar efforts elsewhere are closely tracking California's debate, including the just-released report. Federal lawmakers, activists and EPA are among the interested groups tracking California's efforts because they are interested in green chemistry as a way to design chemicals with relatively benign properties, posing less risk to human health and the environment than chemicals designed without considering green chemistry principles.

The report, *Green Chemistry: Cornerstone to a Sustainable California*, says data, safety and technology "gaps" are preventing the "adequate regulation of chemicals" and are discouraging investment in green chemistry research and development. It says these gaps stem largely from "weaknesses" in TSCA. The report was commissioned by Cal/EPA and jointly issued by UC Berkeley and UC Los Angeles. Over 120 UC professors signed

the report, which was released Jan. 17. *The report is available on InsideEPA.com. See page 2 for details.*

The new findings come as the Green Chemistry Initiative's science advisory panel held its first meeting Jan. 10, and Cal/EPA staff members are in the process of cataloging comments garnered from public hearings on the initiative last year, a state source says. The Cal/EPA initiative is expected to examine and make recommendations on how to best evaluate chemical risk, reduce exposure to substances and encourage less-toxic processes in the manufacturing of chemicals.

A source tracking the issue says the report drives home that "California has to take the lead" on green chemistry, due to "a lack of leadership in the U.S. administration." The source hopes that the report will drive action in California and says there is "no question" that it is also relevant to chemical regulations and statutes at the federal level.

One of TSCA's weaknesses, the report says, is that it does not require chemical producers to "investigate or disclose information about the hazardous properties of their chemicals and products." Any "comprehensive chemicals policy" pursued in California should require chemical producers and product manufacturers "to provide hazard and tracking data as a condition of use or sale" in the state, the reports says. It also calls for the identification of the best toxicity testing methods; research and development into new testing methods; and the creation of an independent panel to define those hazard traits that should be used as the scientific basis for decisionmaking.

TSCA and other statutes do not require chemical producers to "assume full responsibility for the health effects and environmental consequences that can occur over the lifecycle of their products . . . there is little impetus to minimize the potential hazards associated with the manufacture, use or disposal of chemicals and products," the report notes.

To address this so-called "safety gap," the report suggests a "new legal framework" is necessary to give California agencies the necessary tools to "efficiently identify, prioritize and mitigate chemical hazards" in any instance where there are "reasonable grounds for concern" — even if "complete hazard or tracking data [are] not yet available."

Last year the European Union adopted a new regulatory program — Registration, Evaluation & Authorization of Chemicals (REACH) — that requires all chemicals manufactured or imported into EU countries to be tested for health and safety effects. Some activists regard the REACH approach as a model to be copied in the United States because it forces industry to provide data on the chemicals used in commercial products.

Besides recommending a new legal framework, the Cal/EPA-funded report calls for California to do more to "support green chemistry research, education and implementation." Currently, the "transition from concept to commercial application" can require expensive research and development efforts by industry, which may serve as a disincentive to investment in green chemistry ventures, the report notes. It says this is

resulting in a “technology gap” that could place California, and the U.S., at a competitive disadvantage in the international marketplace.

The source tracking the issue says the report makes the argument that California “can’t afford to do nothing” on green chemistry. For example, the report says preventable childhood disease attributable to chemical exposures cost California \$1.2 billion in 2004, and that preventable diseases related to workplace chemical exposures amounted to an additional \$1.4 billion in 2004.

The source adds that, if California does adopt a comprehensive green chemistry approach, it could attract investment to the state, making it a leader in the green chemistry sector.

But much will hinge on the direction Cal/EPA’s Green Chemistry Initiative takes as state officials resolve the disagreements raised in the heated debate among stakeholders. In arguing for the program to be consistent with TSCA, one industry source says the federal law is “strong and protective of public health and the environment.” But environmentalists and some health researchers say TSCA is deeply flawed, and they will likely use the new UC report to support their arguments (*Risk Policy Report*, Oct. 9, p3).

In Congress, legislation to create a federal green chemistry research program is stalled in the Senate. The House passed H.R.2850, the Green Chemistry Research and Development Act of 2007, in September, sending it to the Senate where it was referred to the Committee on Commerce, Science and Transportation. A Senate source says it is unclear whether the committee will take up the bill this year.

The bill would create a federal program to provide interagency coordination on discovering and disseminating in commerce environmentally benign chemicals and substances. If passed, the bill would have made EPA research chief George Gray a co-chair of the working group responsible for implementing the effort (*Risk Policy Report*, Sept. 11, p10).