ABA Section of Environment, Energy, and Resources
AMERICAN BAR ASSOCIATION

Pesticides, Chemical Regulation, and Right-to-Know Committee Newsletter

Vol. 15, No. 1 **November 2013**

FROM THE CHAIR

Martha Marrapese

Green chemistry is a hot topic in the 2013–2014 Pesticide, Chemical Regulation, and Right-to-Know (PCRRTK) Committee Action Plan. According to the U.S. Environmental Protection Agency (EPA) (http://www2.epa.gov/green-chemistry), green chemistry is "the design of chemical products and processes that reduce or eliminate the use or generation of hazardous substances." The momentum that green chemistry has taken on is so notable that we are taking the unusual step of devoting a special issue of the PCRRTK Newsletter to this exciting and groundbreaking topic. Read on for exploration and coverage of such topics as the Federal Trade Commission's (FTC) enforcement of the Green Guides, EPA's Design for the Environment program, Toxic Substances Control Act (TSCA) Reform, and the Green Chemistry Movement, and the role of public disclosure policies in the selection of greener chemistries.

This timely special issue provides you with the essential knowledge you should have about California's Safer Consumer Products Regulations (SCPR). This rule took effect on October 1, and heralds a new era of chemical regulation at the state level. The SCPR is designed "to reduce toxic chemicals in consumer products, create new business opportunities in the emerging safer consumer products economy, and reduce the burden on consumers and businesses struggling to identify what's in the products they buy for their families and customers."

These initiatives highlight a significant direction in environmental law and policy that is dedicated to speeding the adoption of green chemistry by industry and academia. It is "Earth Day meets the Masters," and California is presenting Mother Nature with the "green jacket." Granted, the use of technology-forcing initiatives to spur innovation in pollution control to better protect public health and the environment is not new. The greater novelty is that these initiatives are promoting efficiency and competitiveness as their by-product. Can we really have it all? There are those that think so. On EPA's webpage, the agency prominently refers visitors to a 2011 Pike Research report concluding that green chemicals will save industry $65.5 billion by 2020 (http://www.navigantresearch.com/research/green-chemistry).

As we begin a new ABA Section of Environment, Energy, and Resources year, I would like to introduce our 2013–2014 team of PCRRTK vice chairs:

Committee Newsletter
- Lynn L. Bergeson, Bergeson & Campbell, P.C.

Electronic Communications
- Freedom Smith, Ice Miller LLP

Membership
- *Firm and Regional Membership*: Lori Warner, Jackson Gilmour & Dobbs, PC
- *Public Sector Participation*: Pat Sims, U.S. Environmental Protection Agency

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Vol. 15, No. 1, November 2013
Lynn L. Bergeson, Editor

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AMERICAN BAR ASSOCIATION
SECTION OF ENVIRONMENT, ENERGY, AND RESOURCES

CALENDAR OF SECTION EVENTS

January 24-26, 2014
Winter Council
The Sanctuary
Scottsdale, AZ

March 20-22, 2014
43rd Spring Conference
The Grand America Hotel
Salt Lake City, UT

April 10-11, 2014
ABA Petroleum Marketing Attorneys' Meeting
The Ritz-Carlton Hotel
Washington, DC

June 4-6, 2014
32nd Annual Water Law Conference
The Red Rock Resort, Casino and Spa
Las Vegas, NV

For full details, please visit www.ambar.org/EnvironCalendar

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• *Student and Young Lawyer Membership*: Shai Sahay, Arnold & Porter, LLP
• *In-House Membership*: Karyn Schmidt, American Chemistry Council
• *Nongovernmental Organization (NGO) Membership*: Baskut Tuncak, Center for International Environmental Law

Programs
• Larry Culleen, Arnold & Porter, LLP
• Irene Hantman, Verdent Law PLLC

Social Media
• Kirk Tracy, Washington, DC

Special Projects Vice Chair
• Joanne Thelmo, American Cleaning Institute

The Year in Review
• Claudia O'Brien, Latham & Watkins LLP
• Alicia Edwards, GableGotwals

At-Large Vice Chairs
• Mark Duvall, Beveridge & Diamond, PC
• Charles Franklin, Akin Gump Strauss Hauer & Feld LLP
• Herb Estreicher, Keller and Heckman LLP
• Brandon Barnes, McDermott, Will & Emery
• Warren Lehrenbaum, Crowell & Moring LLP

We kicked off our TSCA modernization briefing paper project in October, with project groups developing legal analyses on confidential business information, private rights of action, state chemical regulation, standard of review for risk assessments, and a TSCA 101 backgrounder.

Finally, our monthly teleconferences will resume the last week of each month on Mondays at 11:00 a.m. Eastern. You should have received an outlook invite for these calls on your calendar, as we send the invite out to the entire PCRRTK list serve.

Martha E. Marrapese *is a partner with Keller and Heckman LLP in Washington, D.C.*

2013- 2014
ABA Section of Environment, Energy, and Resources

Membership Diversity Enhancement Program

The Membership Diversity Enhancement Program (MDEP) is designed for lawyers who have been under-represented in our Section membership. The program's goal is to have its programs, publications, and other activities reflect the diverse perspectives and interests of all lawyers who practice in the environmental, energy, and natural resource law areas.

Successful applicants will have opportunities to actively participate in the Section committees of their choice, publish in committee newsletters, engage in public service projects, and assist in Section program planning.

The MDEP program is open to minority lawyers, women lawyers, lawyers with disabilities, and differing sexual orientation and gender identification that are:

- Young lawyers (lawyers admitted to practice for less than five years or who are under 36 years old),
- Government lawyers,
- Public interest lawyers,
- Academics, or
- Solo practitioners

See our website for full details and restrictions.

Application deadline: January 6, 2014

www.ambar.org/EnvironMDEP

FTC CONTINUES ENFORCEMENT ON "VOC-FREE" CLAIMS

Emilee Mooney Scott

A growing market exists for products with levels of volatile organic compounds (VOC) below mandated thresholds, as a stroll through any home improvement store will reveal. In particular, the markets for low-VOC and VOC-free furnishings, building materials, and architectural coatings are growing due to a focus on green building and concerns over indoor air quality. As consumers increasingly demand products low in (or even free of) VOCs and other substances thought to be harmful, producers will continue to focus on such attributes in their marketing. In the year since the Federal Trade Commission (FTC) released revised guidelines on environmental marketing statements, enforcement activity in this area has focused on such VOC-free claims.

FTC's *Green Guides*

FTC is charged with protecting consumers from deceptive marketing and other trade practices, including claims related to environmental attributes. The *Guides for the Use of Environmental Marketing Claims* (the *Green Guides*) provide guidance on the types of environmental marketing claims that FTC will consider deceptive. While the *Green Guides* themselves are not directly enforceable, they illustrate the marketing practices that FTC considers deceptive under the Federal Trade Commission Act. Entities engaging in such deceptive conduct may face injunctions and monetary penalties.

In October 2012, FTC released a major revision of the *Green Guides* that had last been revised in 1998. The revised *Green Guide*s added or refined guidance on a number of green marketing practices, including claims that products are free of a particular substance thought to be harmful (called "free-of" claims in the *Green Guides*).

It is considered deceptive to "misrepresent, directly or by implication" that a product is free of a substance of concern like formaldehyde or chlorine. Even if the product is actually free of the substance, it is deceptive to *highlight* that fact if it uses an alternative substance with similar environmental impacts. For example, it is considered deceptive to tout the use of a non-chlorine bleaching agent when it causes the same harms as chlorine bleach.

On the other hand, FTC allows products to be marketed as "free of" a substance even if a "trace amount" of the substance is present if the following conditions are met:

- The level of the specified substance is no more than that which would be found as an acknowledged trace contaminant or at background levels;
- The substance's presence does not cause material harm that consumers typically associate with that substance; and
- The substance has not been added intentionally to the product.

FTC notes that the terms "trace contaminant" and "background level" are imprecise, subject to a case-by-case analysis depending upon the substance at issue. FTC further emphasizes that application of the test should vary depending on the circumstances by using the words "depending on the context" to introduce the test.

"Green" Paint

In settlements proposed last November and issued in final in March 2013, FTC applied its interpretation of the expanded "free-of" guidance for the first time. Both matters concerned the marketing of paint as VOC-free. PPG Architectural Finishes, Inc. (PPG, the maker of Pittsburgh Paints) called its Pure Performance paint "'green' in any color" and free of VOCs. The Sherwin-Williams Company prominently featured children in marketing for its Dutch Boy Refresh paint, saying that "little noses won't be bothered" by its zero VOC formulation. Both companies used plain white base

paints that were indeed VOC-free. Once the base paint had been tinted to a Bird Song Blue or an Eclectic Plum, however, the finished paint contained VOCs.

In both instances, FTC alleged that the VOC-free claims were false or misleading, and that the companies had provided distributors with the means and instrumentalities to disseminate the misleading claims. While the Dutch Boy paint cans and other promotional materials contained an inconspicuous statement that "[s]ome colors may not be Zero VOC after tinting with conventional colorants," FTC nonetheless concluded that "any reasonable consumer . . . would likely be deceived" about the paint's true VOC content.

While no monetary penalties were included in the consent orders, FTC directed both companies to discontinue the deceptive marketing. Both consent orders provide that unqualified VOC-free representations are only permissible if the final, tinted paint is actually VOC-free or contains only a "trace level" of VOCs, with "trace level" defined through a tailored test discussed below. Otherwise, the VOC-free representation must be joined by a disclosure that the paint's VOC level may increase with the color choice. If the VOC content in the tinted paint reaches or exceeds a specified level, the disclosure must state that the VOC level may increase "significantly" or "up to [the highest possible VOC level after tinting]," depending on the color choice. The consent orders also provide that any representations concerning VOC levels or other environmental attributes must be backed up by "competent and reliable scientific evidence that substantiates the representation."

Memory Foam Mattresses

In July, FTC continued its enforcement efforts on "free-of" claims by announcing proposed settlements with three mattress companies: Relief-Mart, Inc. (Relief-Mart), Essentia Natural Memory Foam Company, Inc. (Essentia), and Ecobaby Organics, Inc. (Ecobaby). All three mattress companies prominently featured claims of environmental and health benefits in their marketing materials, with a focus on the asserted absence of VOCs. Ecobaby touted its product as "free of chemicals . . . providing you with a clean, non-toxic, and restful sleep." Essentia asserted that competitor mattresses "can emit up to 61 chemicals" and that its product was "free from all those harmful VOCs."

All three of FTC's draft complaints against the mattress companies allege that the VOC-free claims were unsupported. FTC also took issue with Essentia's odor-free claims, stating that reasonable consumers are likely to "interpret representations that a mattress has '[n]o chemical off-gassing or odor' or that a mattress 'does not emit chemical fumes or odors' to mean that the mattress is free of VOCs." As with the paint settlements, the proposed mattress settlements provide that unqualified VOC-free representations are only permissible if the product is actually VOC-free or contains only a "trace level" of VOCs. Further, any claims as to VOC content, or any other health or environmental benefit, must be supported by "competent and reliable scientific evidence" that substantiates the claim.

The Ecobaby settlement raises a *Green Guides* issue not raised by the paint settlements—claims related to third-party certifications. Ecobaby had represented that its mattresses were certified by the National Association of Organic Mattress Industry (NAOMI). It turned out that NAOMI was not an independent certifying body, but was fully controlled by Ecobaby. FTC flagged this practice as deceptive, and ordered it to stop. Ironically, Ecobaby's marketing materials reveal a strategy of casting doubt on the Certified Organic and Green Guard labels and stating that its products were more pure ("[b]eware of so called certifications").

Public comment was accepted on the proposed settlements until late August, and the final versions are not yet available.

Application of Trace Amount Test

In the *Green Guides*, FTC stated that it intends for its three-part trace amount test to be tailored to the

specific product in question. FTC's tailoring of the test to the VOC-free paint and mattress claims shows FTC's focus on consumer expectations. First, FTC omitted the "acknowledged trace contaminant" concept from the first prong of the test, so that only background levels of VOCs are permissible in paints or mattresses marketed as VOC-free. This is in line with consumer concerns about ambient air quality and expectations that the use of a "zero VOC" paint or mattress would not raise the VOC levels in the air that they are breathing. Where the substance in question is not normally present at background levels in the environment (as VOCs are), we might instead expect an analysis of the substance as a "trace contaminant."

Further, in the "material harm" prong, FTC specifically referenced harms "including but not limited to, harm to the environment or human health." As FTC noted in an enforcement statement following the paint orders, "consumers find both the environmental and health effects of VOCs material in evaluating VOC-free claims for architectural coatings." For products that raise only environmental concerns, or perhaps additional concerns, we may expect to see the concept of "material harm" modified accordingly.

Emilee Mooney Scott *is a member of the Environmental and Utilities Practice Group of Robinson & Cole, LLP.*

TSCA REFORM AND THE GREEN CHEMISTRY MOVEMENT

Lawrence E. Culleen and Peggy Otum

Enthusiasm for reform of the Toxic Substances Control Act (TSCA) has been reinvigorated in both the Senate and House as well as within the business and nongovernmental organization (NGO) communities, brought about in large measure by the recent introduction of the Lautenberg-Vitter Chemical Safety Improvement Act (CSIA, S. 1001) in the U.S. Senate. That bill surprisingly emerged mere weeks after Senator Lautenberg had reintroduced a more partisan TSCA reform bill called the Safe Chemicals Act (SCA, S. 696). (S. 696 is essentially the same legislation introduced by Senator Lautenberg as the Safe Chemicals Act of 2011 (S. 847).) If TSCA reform is to be realized any time soon, it is possible it would be through movement to the Senate floor of an amended version of one of these two bills. If so, how likely is it that the amended legislation will reflect the aspirations of the Green Chemistry Movement?

What Is Green Chemistry?

Green chemistry is the design of chemical products and processes in a way that is intended to reduce or eliminate the use or generation of hazardous substances—taking into consideration the entire life cycle of a chemical product, including its design, manufacture, use, and ultimate disposal. (*See generally* EPA Green Chemistry webpage at http://www2.epa.gov/green-chemistry/basics-green-chemistry#definition.) In many instances, the goal of green chemistry is the quest for "safer alternatives" that are "drop-in" or near drop-in replacements for substances that present greater risks to human health and/or the environment.

How Are Green Chemistry Principles Applied?

One way to apply the principles of green chemistry is to train chemistry students from the outset to have

an awareness of the health and environmental effects of chemical substances and to encourage (e.g., through regulatory and/or market incentives) innovators to design "less-risky" chemical alternatives. Thus, finding so-called safer chemicals to replace more risky existing chemicals in certain technologies is perhaps the most obvious of the goals of the innovative side of green chemistry. Arguably, one of the most difficult aspects of green chemistry is the part that involves taking into consideration the entire life cycle of a chemical substance when considering potentially "safer" alternatives, as doing so can reveal some of the ambiguities of green chemistry.

For example, if a new substance B is marginally less toxic to humans than existing substance A, is equally persistent in the environment as A, yet is slightly more toxic to aquatic organisms than A, then B might be considered a "safer" alternative to A in applications in which no environmental exposures or releases occur (e.g., as a chemical intermediate in manufacturing processes). B, however, might not be a suitable substitute for substance A in laundry detergents and hard-surface cleansers or other scenarios in which routine, low-level releases to surface waters would be predicted to occur. Thus, a full awareness of all of the uses to which a substance can be put is a critical factor in assessing the suitability of a substitute. Yet this example assumes that substances A and B *function* equally well in all applications. If it is determined that the use of substance B in a manufacturing operation rather than substance A leads to certain inefficiencies (e.g., results in greater energy consumption), the risk/trade-off calculations become even more complicated. Moreover, it is not clear how other more distantly related factors should be taken into account in safer alternatives evaluations, such as the environmental impacts associated with transportation that could result if the supplier of substance B is farther away from the downstream user than the supplier of substance A. Clearly, legislating that green chemistry and a preference for "safer" alternatives be part of the regulatory decision-making framework is not a simple undertaking.

Treatment of Green Chemistry and Safer Alternatives in TSCA Reform Legislation

Two pieces of TSCA reform legislation were introduced this year thus far in the Senate, and none in the House. The following examines the ways in which the Senate bills address green chemistry and the pursuit of safe alternative chemicals.

SCA

The findings, policy, and goals provisions of SCA include specific terms addressing green chemistry concepts. Thus, SCA states that it is the policy of the United States to "promote the use of safer alternatives and other actions that reduce the use of and exposure to hazardous chemical substances and reward innovation toward safer chemicals, processes, and products." In addition, "encouraging the replacement of harmful chemicals and processes with safer alternatives" is asserted to be a goal of the United States.

In addition to addressing green chemistry within the laudatory language in the bill's introductory passages, SCA devotes an entire section (section 31) to the topic, entitled "Safer Alternatives and Green Chemistry and Engineering." The bill would require EPA to expedite review of new chemicals that are considered to be safer alternatives and to establish a recognition system for such substances and other incentive mechanisms for encouraging greener chemistries that the administrator considers appropriate. EPA also would provide funding for at least four green chemistry and engineering centers, to be located in various regions of the United States, to support the development and adoption of safer alternatives to chemical substances the agency targets for risk reduction action. EPA also would work with educational institutions to establish a workforce capable of pursuing greener chemistries to include industrial and scientific workers with skills relevant to the production and use of the safer alternatives, "including the design, manufacturing, use, and disposal of the alternatives."

CSIA

By comparison to SCA, the more recent CSIA does not contain a specific provision concerning green chemistry. Instead, the findings, policy, and intent

provisions state that "innovation in the development of new chemical substances, especially safer chemical substances, should be encouraged to reduce risk, provide improved products, stimulate the economy, create jobs, and protect interstate commerce." Congress would direct the administrator, in implementing an amended TSCA, to promote "innovation, including innovation in chemical substances that have reduced hazard, exposure, and risk patterns."

Forecast for Green Chemistry in TSCA Reform

Despite the clear interest in TSCA reform being demonstrated in the House by the handful of hearings undertaken during 2013, without a bill yet in play there, it is hard to predict whether a bill might specifically include a green chemistry section. (Rep. John Shimkus (R-IL), chair of the House Energy & Commerce Committee's Subcommittee on Environment and the Economy called a September 18 hearing to address chemical regulation and state preemption in TSCA, an issue that has spawned Senate debate over concerns that CSIA may preempt California's green chemistry programs.) Those familiar with the discussions addressing TSCA reform in Senate offices acknowledge that a version of CSIA that reflects some green "tweaks" stands a far better chance of getting serious consideration on the floor than the current CSIA. While it is widely believed that this will require the preemption terms being modified and some specific deadlines for chemical reviews being added, it is possible that a relatively non-controversial way to "green-up" the bill would be to enhance CSIA by slipping in certain passages from section 31 of SCA.

Lawrence E. Culleen *and* **Peggy Otum** *are partners at Arnold & Porter LLP where they each have active practices involving chemical-regulatory matters.*

DTSC RELEASES FINAL SAFER CONSUMER PRODUCTS REGULATIONS

Lisa R. Burchi

On August 28, 2013, California's Office of Administrative Law (OAL) approved the California Department of Toxic Substances Control (DTSC or department) Safer Consumer Products Regulations (regulations). The regulations took effect on October 1, 2013. The regulations are the much-anticipated regulatory implementation of California's Green Chemistry Initiative. The regulations and final statement of reasons are available at http://www.dtsc.ca.gov/SCPRegulations.cfm.

The scope of the regulations, including the four core elements of the regulations—candidate chemicals, priority products (PP), alternatives analysis (AA), and regulatory responses—is discussed below.

Scope of Persons and Products Subject to the Regulations

The regulations apply to "responsible entities": manufacturers, importers, assemblers, and retailers. The requirements for responsible entities are tiered, such that primary responsibility will lie with the manufacturer. The importer will have responsibility if the manufacturer fails to comply. Retailers will be required to comply only if the manufacturer and importer (if any) fail to comply and this information is posted on the failure to comply list on DTSC's Web site. Section 69501.2.

Under section 69501.1(a)(24)(A), a consumer product is defined as it is defined in Health and Safety Code Section 25251: "a product or part of the product that is used, brought, or leased for use by a person for any purposes." The regulations also state that a consumer product also means "[w]hen applicable, a component of an assembled 'consumer product.'"

The regulations apply only to consumer products placed into the stream of commerce in California.

Section 69501(b)(1). In addition to products not placed into the stream of commerce in California, the following products are exempt from the regulations:

- Products exempt from the definition of "consumer product" as specified in California Health and Safety Code Section 25251 (e.g., dangerous prescription drugs and devices; dental restorative materials; medical devices; pesticides; food; and packaging associated with dangerous prescription drugs and devices, dental restorative materials, and medical devices);
- Certain consumer products that DTSC determines are regulated by one or more federal and/or California State regulatory program(s), and/or applicable treaties or international agreements with the force of domestic law;
- A product that ceased to be manufactured prior to the date the product is listed as a PP; and
- A product previously owned or leased by someone other than the manufacturer, importer, distributor, assembler, or retailer of the product.

Sections 69501.1(a)(24)(B)-(C), 69501(b)(2)-(3).

DTSC to Develop a Candidate Chemicals List

DTSC must establish, within 30 days after the effective date of the regulations, a candidate chemicals list. DTSC released the list on September 28, 2013 (*see* http://www.dtsc.ca.gov/SCP/index.cfm). DTSC estimates the candidate chemicals list contains approximately 1200 chemicals of concern (COC). DTSC calls the list it released "informational."

Under section 69502.2(a), the candidate chemicals list includes those substances that exhibit a hazard trait and/or an environmental or toxicological end point (identified through the Office of Environmental Health Hazard Assessment's (OEHHA) development of a Toxics Information Clearinghouse pursuant to Health and Safety Code Section 25256.1) and that meet one or more of the following criteria:

- The chemical is included in one or more of 15 different lists already selected by other agencies and organizations. These include but are not limited to:
  - Substances "known" to cause cancer or reproductive toxicity under California's Proposition 65;
  - Chemicals classified as carcinogens, mutagens, or reproductive toxicants under the European Commission's (EC) Regulation (EC) 1272/2008, Annex VI, Category 1A and 1B chemicals;
  - Chemicals identified as "known to be" or "reasonably anticipated to be" a human carcinogen under the National Toxicology Program's (NTP) Report on Carcinogens; and
  - Chemicals identified as groups 1, 2A, and 2B Carcinogens by the International Agency for Research on Cancer.
- The chemical is identified as belonging to one or more specified types of chemicals. These include but are not limited to:
  - Chemicals for which notification levels have been established by the California Department of Public Health;
  - Chemicals for which primary maximum contaminant levels have been established in California; and
  - Chemicals identified as toxic air contaminants in California.

Section 60502.2(a).

Initial Candidate Chemicals List

Prior to January 1, 2016, DTSC will consider a limited scope of candidate chemicals when reviewing product-chemical combinations (i.e., a chemical listed on one or more of the authoritative organizations' hazard trait-based chemical lists specified in section 69502.2(a)(1), and that also appear on a chemical list that was developed based on potential exposure concerns and specified in section 69502.2(a)(2)). Section 69503.6(a). This

initial candidate chemicals list, which was released on September 28, 2013 (*see* http://www.dtsc.ca.gov/SCP/index.cfm), is significantly smaller than the 1200 substances listed in the full candidate chemicals list. The initial candidate chemicals list contains 164 substances, although there are in fact more substances than this because many of the substances listed are part of a group and there can be several individual members of a group or class of chemicals that met the regulatory criteria for inclusion on the initial candidate chemicals list

DTSC to Identify Priority Products

DTSC will evaluate and prioritize products that contain candidate chemicals to develop a list of priority products for which alternatives analysis must be conducted. To determine products of high priority, DTSC will evaluate the potential adverse health and environmental impacts posed by the candidate chemical(s) in each product based on several factors:

- The potential adverse impacts posed by the candidate chemicals (e.g., hazard traits, environmental fate properties) and potential exposures (e.g., market presence, types of uses) during the life cycle of the product;
- "[P]roduct uses, or discharges or disposals, in any manner that have the potential to contribute to or cause adverse waste and end-of-life effects associated with the Candidate Chemical(s) in the product";
- The "extent and quality of information that is available to substantiate the existence or absence of potential adverse impacts, potential exposures, and potential adverse waste and end-of-life effects";
- The extent to which other regulatory programs regulate the product; and
- "[W]hether there is a readily available safer alternative that is functionally acceptable, technically feasible, and economically feasible."

Sections 69503.2, 69502.3.

Once a candidate chemical becomes the basis for a product being listed as a PP, DTSC will designate that chemical as a chemical of concern for that product (i.e., it changes from being identified as a candidate chemical to being identified as a COC). Section 69503.5(b)(1)(B).

Alternatives Analysis Threshold (AAT)

DTSC defines the alternative analysis threshold (AAT) as the "Practical Quantitation Limit for a Chemical of Concern that is present in a Priority Product solely as a contaminant" or a concentration by weight as specified by DTSC. Section 69501.1(a)(12). This means there is no default threshold (e.g., 0.01 percent by weight). When listing a PP, DTSC also may specify an AAT for any COC that is an intentionally added ingredient.

Response to a PP Listing

Within 60 days after a product-chemical combination is placed on the PP list, responsible entities will be required to provide a PP notification to DTSC stating that they will conduct an AA unless they submit "alternative notifications."

Alternative notifications to the PP notification include:

- AAT exemption notification (where the COC is present only as a contaminant and the concentration does not exceed the practical quantitation limit, or does not exceed the AAT established by DTSC);
- Chemical removal notification (where the only change is the removal of the COC from the PP without use of a replacement chemical or otherwise adding other chemicals to the product);
- Product removal notification (if the PP will cease to be sold or distributed in California); and
- Product-chemical replacement notification (where the COC is removed from the PP and any replacement chemical meets certain criteria).

Sections 69505.2, 69505.3.

Initial PP List

Under section 69503.6, the initial PP list is limited to no more than five products. DTSC must release the initial PP list for public comment and review no later than 180 days after the effective date of the regulations, or by *March 30, 2014*. DTSC also must review the PP list at least once every three years.

Companies to Prepare Alternative Analysis

Responsible entities (generally, manufacturers) must perform an AA for the listed COC-PP combination to determine how best to limit potential exposures or the level of potential adverse public health and environmental impacts posed by the COC in the PP.

Under the regulations, AAs must be conducted in two stages. In the first stage, the responsible entity must:

- **Identify the PP's Requirements:** The responsible entity must identify the PP's functional, performance, and legal requirements that must be met for any potential alternative; the role of the COC in meeting the PP's function, performance, and legal requirements; and if the COC or any alternative replacement chemical is "necessary" to meet the PP's identified requirements.
- **Identify Alternatives:** The responsible entity must identify alternative(s) (e.g., remove a COC, reformulate or redesign, or reduce the concentration of a COC). Section 69501.1(a)(10).
- **Identify Factors Relevant for Comparison of Alternatives:** The responsible entity must identify "relevant" factors (e.g., those that make a "material contribution" to one or more adverse public health impacts, adverse environmental impacts, adverse waste and end-of-life effects, and/or materials and resource consumption impacts) for the comparison of the PP and the alternative(s) under consideration.
- **Evaluate and Screen Alternative Replacement Chemicals:** If applicable, the responsible entity must evaluate and compare each of the alternative replacement chemicals under consideration with the COC in the PP.
- **Consider Additional Information:** The responsible entity may consider other relevant information and data not specifically identified above.
- **Prepare Preliminary AA Report:** The responsible entity must prepare the preliminary AA report and develop a work plan and implementation schedule for completion of the second AA stage and preparation and submission of the final AA report.

Section 69505.5.

In the second stage, the responsible entity must:

- **Identify Factors Relevant for Comparison of Alternatives:** The responsible entity can reevaluate the identification of factors under consideration after completion of the first AA stage. Additional factors for consideration include product function and performance and economic impacts.
- **Compare the PP and Alternative(s):** The responsible entity must then evaluate and compare the PP and each of the alternative(s) under consideration with respect to each relevant factor and associated exposure pathways and life-cycle segments, if applicable, identified.
- **Select Alternative:** The responsible entity must select the alternative(s) that will replace the PP, unless the decision is to retain the PP.
- **Prepare Final AA Report:** The responsible entity must prepare a final AA report.

Section 69505.5.

DTSC and Public Review of AA Reports

Within 60 days of receiving a preliminary AA report, final AA report, or alternative reports, DTSC shall review the report for compliance and issue a notice of compliance, notice of deficiency,

notice of disapproval, or notice of ongoing review. Section 69505.9.

To provide a quality assurance mechanism for the AAs, DTSC will provide a public comment period for the final AA report and abridged AA report, review those comments, and then identify, no later than 30 days after the close of the public comment period, any issues that it determines need to be addressed by the responsible entity in an AA report addendum. Section 69505.8.

Trade Secrets

With respect to any documents or information submitted to DTSC, a person may assert a claim of trade secret protection. Section 69509. These claims will need to be substantiated by providing certain information to DTSC specified in the regulations and by providing a redacted copy of the documentation being submitted with the trade secret information removed.

The regulations provide that trade secret protection may not be claimed for any hazard trait submission or for any chemical identity information associated with a hazard trait submission. Section 69509(f). A limited exception will allow a responsible entity to mask temporarily the precise identity of a chemical that is the subject of a hazard trait submission "if that chemical is an alternative considered or proposed in an Alternatives Analysis, and a patent application is pending for the chemical or its contemplated use in the product." DTSC will allow the masking of chemical identity only until the information is made public through any means, and requires the person claiming the trade secret to notify DTSC within 30 days of the information being made public. Section 69509(g)(1).

DTSC to Identify and Impose Regulatory Responses on PP/COC Combinations

After evaluating the final AA report, DTSC is required to consider the appropriate regulatory response. In selecting regulatory responses, DTSC shall seek to "maximize the use of alternatives of least concern when such alternatives are functionally acceptable, technically feasible, and economically feasible." Section 69506(a).

Possible regulatory responses triggered by DTSC's findings and determinations include:

- **Product Information:** In general, product information (e.g., brand name, COC, adverse impacts) must be provided to consumers for: (1) PPs for which an alternative was not selected; (2) PPs that continue to be introduced into commerce in California pending development and distribution of an alternative product for longer than 12 months after DTSC issues a notice of compliance or notice of disapproval for an AA report; and (3) selected alternative products that retain COCs and/or contain any replacement candidate chemical(s).
- **Use Restrictions:** DTSC can impose use restrictions (e.g., restrict amount/ concentration of a COC) on one or more COCs or replacement candidate chemicals in a selected alternative, or COCs in a PP for which an alternative is not selected, or restrictions on the product itself that the department determines necessary. Section 69506.4.
- **Sales Prohibitions:** If a responsible entity decides in a final AA report to retain an existing PP or select an alternative that still contains a COC or replacement candidate chemical, this provision provides DTSC the opportunity effectively to override a responsible entity's decision based on a determination that a safer alternative exists that does not contain a COC or replacement candidate chemical of concern and is functionally acceptable, technologically feasible, and economically feasible. Section 69506.5.
- **Engineered Safety Measures or Administrative Controls:** The department "may require a manufacturer to engineer safety measures that integrally contain or control access to, and/or implement administrative controls that limit exposure

to, the Chemical(s) of Concern or replacement Candidate Chemical(s) in a selected alternative, or the Chemical(s) of Concern in a Priority Product for which an alternative is not selected, to reduce the potential for adverse impacts." Section 69506.6.

- **End-of-Life Management:** DTSC can require a responsible entity to establish, maintain, and fund (within one year) an end-of-life product stewardship program. Section 69506.7.
- **Research and Development (R&D):** DTSC also can require manufacturers to initiate R&D products or fund challenge grants to design a safer alternative, improve the performance of a safer alternative, decrease the cost of the safer alternative, or increase the market penetration of a safer alternative. Section 69506.8.

Analysis

And so it begins. With the release of the candidate chemicals list on September 28, 2013, the clock has begun running for DTSC to identify the first set of proposed PPs (180 days from the regulations' effective date—October 1, 2013). Companies with consumer products in the stream of commerce in California that are identified as PPs will need to notify DTSC that their product is a PP; perform an AA and prepare a preliminary AA report and final AA report (or use an approved alternative); and comply with any regulatory responses DTSC applies to its product. Considering the time frames provided, it will be years from the time the candidate chemicals list was released; the initial priority product list is released and then issued in final; the AA process is completed; and the regulatory responses are issued. Companies also may need to respond to information requests from DTSC, submit notifications to avoid AA responsibilities, substantiate claims when information is submitted as trade secret, and potentially utilize the dispute resolution procedures to dispute certain actions taken by DTSC (section 69507).

While there are indications that these regulations may be subject to litigation, a prudent initial step for any company doing business in California to consider is to review, when available from DTSC, the initial candidate chemicals list and determine if any of its consumer products contain one of those substances. It will also be important for companies with products identified as PPs to identify other entities similarly affected and determine the ability to consolidate efforts (e.g., through a consortium) in conducting an AA.

Lisa R. Burchi *is Of Counsel with Bergeson & Campbell, P.C. in Washington, D.C.*

ANNOUNCEMENT

Pesticide, Chemical Regulation and Right-to-Know Committee, Science & Technology Committee, and the American Cleaning Institute will host a "Friday Breakfast Forum" networking event.

DATE : Friday, December 6, 2013
SPEAKER: ***Jessica Rich***, Director for the Bureau of Consumer Protection, Federal Trade Commission
Accompanied by: ***James Kohm***, Associate Director for the Enforcement Division, Bureau of Consumer Protection, Federal Trade Commission
TIME: 8:30 a.m. – 9:30 a.m. (ET)
LOCATION: American Cleaning Institute
1331 L Street, NW Suite 650
Washington, DC 20005

We hope you and/or your colleague(s) can join us for this exciting morning program. There is no cost for attending either in-person or remotely.

Please send your RSVP to Joanne Thelmo at jthelmo@cleaninginstitute.org or (202) 662-2519.

EPA'S DESIGN FOR THE ENVIRONMENT PROGRAM: POISED FOR AN EXPANDED ROLE IN GREEN CHEMISTRY OF THE FUTURE?

Shailesh R. Sahay

The Design for the Environment (DfE) program is one of numerous ways that the U.S. Environmental Protection Agency (EPA) is pursuing "green chemistry." DfE is unique because it is a voluntary program that relies heavily on partnerships between various stakeholders, including industry, environmental, and government representatives. DfE is housed within EPA's Office of Pollution Prevention and Toxics.

According to EPA, the broad aims of its DfE program are to evaluate human health and environmental concerns associated with traditional and alternative chemicals and processes and reduce risk to people and the environment by reducing exposure to harmful chemicals (http://www.epa.gov/dfe/). The program is split into three broad areas of work:

(1) Recognition of safer products through the DfE label.
(2) Development of best practices for a variety of industrial and commercial processes, such as those related to lithium ion batteries and nail salons.
(3) Evaluation of safer chemicals and processes through alternatives assessment and life-cycle assessment.

Though EPA has made significant strides working with industry to advance green chemistry through each of these programs, this article focuses on the DfE label. In general, there is evidence that the DfE program is poised to play an increasingly prominent role in EPA's green chemistry efforts.

DfE Standard for Safer Products and the DfE Label

The DfE labeling program is perhaps the most visible EPA initiative to consumers in the DfE program. Through this program, producers of cleaning products that meet a variety of stringent criteria developed by EPA may add a logo to their products accompanied by the text "Design for the Environment" and "U.S. EPA." The logo is intended to convey to potential consumers that the product has met EPA's stringent criteria. A variety of products may qualify for the DfE label, including glass cleaners, general purpose cleaners, washroom cleaners, carpet cleaners, laundry detergents, graffiti removers, boat and car cleaners, drain cleaners, personal care, floor care, and other industrial products.

The criteria that EPA examines when assessing whether a product qualifies for DfE labeling fall into two categories: criteria related to the product as a whole, and criteria related to the individual chemical components that constitute the product. With respect to the latter, EPA takes a "functional" approach in evaluating individual components. EPA divides cleaning products into functional groups, such as surfactants and solvents. When considering an individual chemical that is part of a product, EPA compares that chemical to other chemicals in that functional class. In evaluating each chemical, EPA focuses on inherent hazard characteristics of the chemical compared to its counterparts in the same functional class that could substitute for that chemical in the product. Further detail regarding the EPA criteria is presented below.

Product Criteria

EPA delineates the criteria for DfE labeling in a document known as the *DfE Standard for Safer Products* (DfE Standard) (http://www.epa.gov/dfe/pubs/projects/gfcp/standard-for-safer-products.pdf). For a product to be eligible for the DfE label, its producer (referred to as a "formulator" by EPA) must enter into a partnership agreement with EPA. The agreement requires the formulator to submit complete product formulation information to EPA, including:

- The intended function or use of product or material;

- The percent composition and function of each ingredient;
- The Chemical Abstracts Service (CAS) number for each ingredient; and
- Published and unpublished scientific studies relevant to the chemicals present in the product, when available.

For a product to carry the DfE label, ingredient information must also be publicly disclosed on the product label, on a Web site, or via a toll-free number. The DfE Standard provides that the CAS number does not have to be provided for chemicals whose identities are protected as trade secrets under the Uniform Trade Secrets Act, and that a chemical-descriptive name can be used in lieu of more specific identifying information for public disclosure purposes. Additional product criteria include those related to:

- Audits. A DfE partner must allow on-site and paper audits to be conducted by a third-party verifier.
- Performance. The product must meet certain performance criteria specified for that class of products (for example, glass cleaner or hand dish soaps) established by organizations such as ASTM or the Consumer Products Specialty Association. These standards are intended to ensure that the product is not only environmentally friendly but also performs effectively.
- Packaging. Product packaging must meet sustainable packaging criteria developed by the Sustainable Packaging Coalition, such as by using 25 percent renewable or recycled source materials.

A number of other requirements are described in the DfE Standard.

Criteria for Safer Ingredients

As discussed above, in addition to the product criteria, each ingredient in a DfE-labeled product must meet individual ingredient criteria. EPA has established a set of master criteria that applies to all chemicals, and has also established sets of criteria that apply to specific functional classes. For example, fragrances, solvents, and surfactants each have separate functional class criteria. In addition, EPA has moved beyond cleaning products and established safer ingredient criteria for products such as ice-melt and marine lubricant products, apparently also allowing products in these categories to earn DfE labeling.

The ingredient criteria focus on chemical characteristics that EPA has deemed relevant to human health and the environment. For example, the master criteria relate to human health and environmental toxicity, sensitization, environmental fate, and eutrophication. An ingredient classified as a safer ingredient by EPA will either be designated as low concern for these criteria or will be of relatively lower concern than other chemicals in the same functional class.

Safer Chemical Ingredients List

Since 2012, EPA has been maintaining a list of safer chemical ingredients on its Web site. This list contains chemicals in specific functional classes (such as solvents or fragrances) that already have been evaluated by EPA and met the relevant criteria for safer ingredients. This listing allows formulators to select ingredients for products in a manner that should ease the ability to obtain DfE label approval. EPA has been seeking to expand the list of chemicals on the site. In July, it added 119 approved fragrance chemicals to the list, the first fragrances designated as safer chemicals by EPA. The site in total now lists 602 chemicals that have been approved by EPA.

Future of the DfE Program

The DfE is poised for changes on two fronts. First, EPA is in the midst of rebranding the DfE program. EPA is convening focus groups to help redesign the DfE logo and determine a communications strategy aimed at helping consumers understand the benefits of purchasing DfE-labeled products. Second, EPA has recently requested that the National Academy of

Sciences review its chemical assessment procedures, including the DfE program. Academy recommendations could lead to changes in the DfE criteria system.

Regardless of these potential changes, there is evidence that the DfE program is gaining momentum. Recently, with the support of the Environmental Defense Fund, Wal-Mart announced that it is seeking DfE labeling for all of its in-house cleaning products. The decision of such an influential retailer to seek DfE branding could pave the way for more consumer awareness of the DfE program, more demand for DfE products, and more companies developing products that meet DfE criteria to satisfy this demand.

Shailesh R. Sahay *is a member of the environmental practice group in the Washington, D.C. offices of Arnold & Porter LLP.*

HELPING SAFER CHEMICALS OVERCOME BARRIERS TO ENTRY

Baskut Tuncak

There is an urgent need to expand the market share of green chemicals, including intrinsically safer chemicals, in all markets—from Bangladesh to Belgium, cosmetics to construction. The investment community is seldom conservative in its estimates for what it views as promising emerging markets. Projected estimates by venture capitalists and other sophisticated investors forecast exponential growth for green chemistry between now and 2020. For example, a 2011 assessment of green chemistry's market potential estimated it could soar from an estimated U.S. $2.8 billion in 2011 to U.S. $98 billion by 2020.

Despite these optimistic projections by investors with respect to green chemistry, more is needed to meet the overarching goal by the global community "to achieve, by 2020, that chemicals are used and produced in ways that lead to the minimization of significant adverse effects on human health and the environment . . ." While progress has been made in certain countries around the world, much more progress is needed everywhere, even in the leading countries and regions of the world.

Using the chemical industry's own estimates, the Organization for Economic Cooperation and Development (OECD) and the United Nations Environment Programme (UNEP) project approximately 25 percent growth by the chemical industry in industrialized countries through 2020. For some developing countries with nascent chemicals management regimes, estimates exceed 50 percent growth during this time period. This puts the global chemical industry on pace to grow to approximately U.S. $ 6.5 trillion by 2020. To the extent that safer substitutes displace more hazardous substances in the market, this represents a positive step in the right direction. Yet, even at the projected rate of growth, green chemistry would amount to a mere 1.5 percent of the 2020 market; a positive contribution, but not a solution to the costs that

hazardous chemicals impose on businesses, workers, families, and public resources.

Innovation hinges on the adoption of inventions. Barriers exist, however, that prevent the entry of safer alternatives. To unlock the true potential of green chemistry and meet the "2020 goal," these barriers must be overcome. In the following sections, key barriers that prevent the entry of safer alternatives are introduced, followed by recommendations for policymakers that seek laws and policies that create jobs and innovative businesses, while also protecting people and the environment.

Barriers to Entry for Safer Chemicals

Even if a potential chemical substitute is intrinsically safer and has improved functionality, this is not enough to displace hazardous chemicals. It must still overcome several barriers to entry to be adopted by downstream users. These barriers include economies of scale, the externalization of costs, and the lack of information about chemicals and products on the market today.

First, safer chemicals must overcome the substantial economies of scale relative to safer alternatives. These economies of scale result not only from the economies inherent in higher production volumes, but also from long periods of inaction by regulators in which innovations could occur around their production and use, with resulting increases in efficiencies and demand.

Second, safer chemicals must overcome the fact that enormous costs associated with hazardous chemicals fall on individuals and government budgets, not on downstream users or upstream manufacturers of these chemicals who profit from their use. Estimates for the environmentally induced portion of costs to society or individuals for cancer, diabetes, obesity, and other diseases linked to hazardous chemicals are in the hundreds of billions of dollars per year for the United States alone.

Third, recent experiences show that the lack of information about chemicals and products on the market today can impede the development and adoption of safer alternatives. Without adequate hazard and exposure information to restrict the use of hazardous chemicals, regulators have not been able to remove entrenched hazardous chemicals to enabling the entry of safer alternatives. Moreover, these experiences also illustrate how incomplete information on potential alternatives can enable cases of substituting one hazardous chemical with a different hazardous chemical, as opposed to safer alternatives.

Stronger Laws Help Bring Safer Chemicals to Market

Overcoming the inertia of entrenched hazardous chemicals requires the power of the government. To promote the adoption of safer alternatives, governments can enable economies of scale to develop around safer alternatives rather than incumbent chemicals of concern; internalize the staggering costs that are borne by the public, not profit-making entities; and address information asymmetries to empower both regulators and consumers to further incentivize and reward green chemistry.

The power of the government is inextricably linked with effective laws. To increase the likelihood that safer chemicals will be pulled into the market as they become available, chemical laws need to identify clearly hazardous properties that are not acceptable in society, generate information about these properties in all chemicals, and require their substitution with safer alternatives in a systematic way.

Experiences with chemical laws and policies around the world prove that the following are necessary elements of effective policies that not only drive innovation, but also create a safer market place: (1) placing the burden of proving chemical safety on chemical manufacturers; (2) phasing out certain chemicals that cannot be managed in an environmentally sound manner, including endocrine

disruptors; (3) internalizing the costs of chemical pollution; (4) promoting access to information; and (5) developing international laws that ensure a level playing field globally.

These elements ensure that laws for chemicals spark the invention and development of alternatives, and pull safer inventions into the market, turning invention into innovation and realizing the true potential of green chemistry. As policymakers in the United States and around the world consider necessary changes to laws that govern chemical use, evaluating proposals in light of these necessary elements will help to ensure protection for consumers who increasingly demand safer chemicals.

Baskut Tuncak *is a staff attorney and chemist with the Environmental Health Program at the Center for International Environmental Law (CIEL).*

OUR HOME STATE PUTS THE SPOTLIGHT ON CHEMICALS AND EXPOSURE

Eric Lindstrom

The California Safer Consumer Products Regulations (SCPR) took effect on October 1, 2013, and the California Department of Toxic Substances Control (DTSC), which administers the SCPR, has also published an "informational initial candidate chemicals list." Part of California's Green Chemistry Initiative, the SCPR is described by DTSC as a program "to reduce toxic chemicals in consumer products, create new business opportunities in the emerging safer consumer products economy, and reduce the burden on consumers and businesses struggling to identify what's in the products they buy for their families and customers." The SCPR are designed to accomplish this through four essential stages: (1) identification of "candidate chemicals" by DTSC; (2) selection of priority products by DTSC; (3) submission of alternatives analyses by manufacturers (or other responsible parties) on the priority product/chemical(s) of concern; and (4) issuance of a regulatory response by DTSC (i.e., DTSC determines the fate of the designated priority product/chemical of concern combination).

In a previous rulemaking, DTSC published an "informational candidate chemicals list," which comprised the 1200-chemical universe of "candidate chemicals." DTSC's new list of "informational initial candidate chemicals" represents a narrowing of DTSC's initial focus to 45 groups of chemicals containing approximately 160 individual chemicals.

DTSC will next choose three to five consumer "priority" products containing one or more of these approximately 160 chemicals for the first round of priority products/chemicals of concern combinations. The priority products will be subject to the SCPR's requirement that the responsible companies conduct alternatives analyses, from which DTSC will determine the products' regulatory fate. Although the list has a number of

chemicals that are not likely to be contained in consumer products sold in California (e.g., dioxins, polychlorinated biphenyls (PCB), polycyclic aromatic hydrocarbons (PAH), nitrosamines, and various chlorinated solvents), the list has a number of interesting entries, notably:

- Parabens: butylparaben (includes n butylparaben and isobutylparaben), ethylparaben, methylparaben, propylparaben, potentially used as preservatives in cosmetics and other consumer products;
- Fuel oils, high sulfur; heavy fuel oil (and other residual oils); fuel oil, no. 6; heavy fuel oil; gasoline (automotive, refined, processed, recovered, and other unspecified fractions); gasoline, natural; low boiling point naphtha; jet fuels, JP 4, JP 5, JP 7, and JP 8; petroleum; crude oil; and used mineral based crankcase oil;
- Brominated flame retardants, including hexabromocyclododecane (HBCD);
- Phthalates of various types;
- Isocyanates, potentially used in polyurethane-based adhesives, including methylene diphenyl 4,4'-diisocyanate (MDI) and toluene diisocyanate (TDI);
- 4,4'-Diaminodiphenylmethane (MDA), potentially used in epoxy resins;
- Glycol ethers and glycol ether acetates, potentially used in lubricants and friction oils;
- Tetrahydrofuran, potentially used in varnish and adhesives;
- Beryllium and beryllium compounds, potentially used in certain electronic goods;
- Cadmium, lead, mercury, and compounds thereof;
- Various aromatic azo dyes; and
- Styrene.

Although it is difficult to predict DTSC's next steps, the department will need to cull the list to come up with its initial list of up to five priority products/chemicals of concern combinations. DTSC plans to propose these initial priority products/chemicals of concern combinations within the next six months (early 2014) and prepare the list in final after notice and comment rulemaking.

Attention is most likely to focus on those substances that are perceived to generate high exposures to Californians, especially sensitive subpopulations, including children, and where being designated in the first priority group is thought to result in significant exposure reduction.
The text of the Safer Consumer Products Regulations can be found at the following link: http://www.dtsc.ca.gov/LawsRegsPolicies/Regs/upload/Text-of-Final-Safer-Consumer-Products-Regulations-2.pdf.

The text of DTSC's informational initial candidate chemicals list can be found at the following link: http://www.dtsc.ca.gov/SCP/upload/Group_Initial_Candidate-Chemicals-List.pdf.
The text of DTSC's informational candidate chemicals list of 1200 chemicals can be found at the following link: http://www.dtsc.ca.gov/SCP/upload/Group-Member-Candidate-Chemicals-List.pdf.

Eric Lindstrom *is with Keller and Heckman LLP's San Francisco office.*

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FROM GREENWASH TO GREENMAIL: POLICING THE GREEN COMMERCE MOVEMENT

Charles L. Franklin

Business is booming in the sustainable commerce space. Even as the country struggles to fuel a recovery from the unprecedented recessionary economic conditions of 2008–2009, the overall demand for "green," more "sustainable" products and services has not only held, it has grown.

In September 2011, the market research firm Packaged Facts reported that retail sales of green cleaning products had more than doubled over four years, from $303 million in 2007 to $640 million in 2011. A 2011 report by Pike Research projected that the international "green chemistry" market would grow from $2.8 billion in 2011 to close to $100 billion by 2020. These numbers are still just a fraction of the larger chemicals and products markets, but they are getting the attention of businesses, governments, and nongovernmental organizations (NGO) alike.

But to what end? Green commerce means different things to different stakeholders. Progressive manufacturers and retailers see green chemistry and commerce as ways to generate corporate goodwill, provide greater value to customers, and distinguish their products and services from competitors. Government regulators see green chemistry as a more politically palatable, market-based way to encourage innovation and transition toward "safer," more sustainable business practices. NGOs see the growing green chemistry and green commerce market as evidence that technology forcing—using regulatory, market, and social pressure—works. To some degree, all of these characterizations—or results—of the green chemistry and green commerce trend are true.

But the growing demand for greener products and services—and the enthusiastic embrace of the trend by stakeholders across the political spectrum, also has a dark side. More than ever, consumers, companies, governments, and watchdogs need to distinguish between the health and environmental *claims* associated with specific substances, products, and services, and their objective health and environmental *attributes*. Without greater scrutiny of both positive and negative health and environmental claims, the green commerce movement threatens to become little more than a rhetorical device used to advance the business and political interests of specific factions, to the detriment of consumers, businesses, and communities alike. Here are two ways that false and misleading claims are undermining the legitimacy of the green commerce movement.

Greenwashing: The first use of the term "greenwashing" is typically attributed to a 1986 essay by Jay Westervelt, a field biologist and activist, criticizing efforts by hotels to justify reduced towel service based on environmental grounds. Defined by the Oxford American Dictionary as "disinformation disseminated by an organization so as to present an environmentally responsible public image," the term entered into common parlance during the late 1990s and 2000s as consumer interest in green commerce reached a tipping point, resulting in an explosion of environmental marketing in mainstream markets along with a variety of questionable claims and practices. TerraChoice Environmental Marketing Inc., now a subsidiary of UL Industries, provided a particularly popular distillation of common greenwash tactics in its 2007 report, "The Six Sins of Greenwashing," which, as later amended to add a "sin," referenced:

1. **The Hidden Trade-off** (i.e., highlighting one positive attribute while ignoring a glaring negative);
2. **No Proof** (i.e., making claims without adequate substantiation);
3. **Vagueness** (i.e., making overly broad or unqualified claims lacking necessary context);
4. **Worshiping False Labels** (i.e., use of meaningless labels, logos, and endorsements to exaggerate or conjure green attributes);

5. **Irrelevance** (i.e., claiming attributes that, even if true, lack relevance or importance in the context of the product or industry);
6. **The Lesser of Two Evils** (i.e., citing marginal improvements in a health or environmental attribute to redeem a fundamentally irredeemable product or service), and;
7. **Fibbing** (i.e., outright lying). *See* http://sinsofgreenwashing.org/.

Today, numerous academic, governmental, and NGOs have adopted, defined, and applied the term "greenwash" to reflect a wide variety of environmental marketing practices that use express or implied claims to exaggerate, misstate, or even invent health and environmental benefits of a product or service. Government regulators like the Federal Trade Commission (FTC), state attorneys general, and state and local regulatory agencies actively monitor business communications and take enforcement action against false and misleading claims, supplementing the aggressive oversight efforts by industry watchdog groups like the Better Business Bureau's National Advertising Division and NGOs like Greenpeace and Sourcewatch.

Greenmailing: Surprisingly, for all of the attention given to false, exaggerated, and misleading environmental claims by commercial businesses, few regulators or consumer watchdogs appear to apply similar standards of accuracy, clarity, and fairness to claims asserting negative health or environmental attributes to substances, products, or services. Contrary to its dictionary definition as a corporate takeover tactic, here I am using the term "greenmail" to describe the threat or use of exaggerated, misstated, vague, or factually unsupported allegations of health or environmental risk to discredit substances, products, services, and companies, and to force changes in corporate operations or product content —essentially the converse of greenwashing. Playing on the term "blackmail," the term can be polarizing, having been used by the World Resources Institute (WRI) to describe NGO campaigns to discourage the purchase of paper products and palm oil from Indonesian and Chinese producers, by California politicians and developers to describe threats of litigation under the California Environmental Quality Act as a method for extracting money and concessions from developers; by Australian politicians to describe the use of NGO-derived certification standards to direct Australian government land management efforts, and even by critics of the U.S. Environmental Protection Agency's so-called sue-and-settle program.

But readers need not accede to these characterizations to understand or apply the term as used in this article. Instead, consider the FTC's own environmental marketing guidance.

A *Green Guide*s Primer on Deceptive Environmental Claims

If reasonable people can disagree on what constitutes a false and misleading environmental claim, the FTC has done its best to reduce the uncertainty. In 1999, FTC published its first *Guidelines for Environmental Marketing* (*Green Guides*), providing non-binding guidance on the commission's interpretation of false, deceptive, and misleading environmental marketing conduct under its statutory authority governing unfair competition. 15 U.S.C. § 45(a); 16 C.F.R. § 260. FTC has amended its *Green Guides* several times, most recently in October 2012, to address new marketing terms-of-art and new issues of concern. Though lacking the force of law, *Green Guides* offer an important guidepost to the commission, the regulated community, and the broader public by identifying presumptive prohibitions and safe harbors with respect to marketing practices. For example, the *Green Guides* establish general principles applicable to all environmental marketing:

- **Express and Implied Claims:** Marketers are accountable for all claims reasonably conveyed by a marketing statement or advertisement, whether express or implied, and whether intended or not. 16 C.F.R. § 260.2.

- **Substantiation:** Marketers must be able to substantiate claims, both express and implied, under a "reasonable basis" test. *Id.*
- **Qualification:** Marketers must qualify and limit claims where the purported claim would otherwise expressly or impliedly overstate the attribute or benefit. *Id.* § 260.3.
- **Product vs. Package vs. Service:** Marketers must limit claims to the relevant portion(s) of the product, package, or service. *Id.*
- **Negligible vs. Significant Benefits:** Marketers should not make express or implied claims for environmental attributes with a negligible net benefit. *Id.*
- **Special Care with Comparative Statements:** Where marketing materials make explicit or implicit comparisons between the environmental attributes of one product or process and another, the materials should make the basis for the comparison sufficiently clear to avoid consumer deception. *Id.*

The *Green Guides* also provide more tailored guidance and limits for a long list of commonly used environmental claims and terms-of-art, discussing potential sources of consumer confusion and offering examples of compliant and noncompliant claims. For example, companies will often make "free-of" claims that imply a health or environmental benefit from the absence of a specific substance in a product or service. Under FTC's analysis, even a verifiable claim may still be deceptive "if the product, package, or service contains or uses substances that pose the same or similar environmental risks as the substance that is not present," or "if the substance's presence does not cause material harm that consumers typically associate with that substance." *Id.* § 260.9.

The *Green Guides* Policy in Practice

A review of FTC's enforcement page or even simple Google TM search will provide numerous examples of how FTC has applied its *Green Guides* principles to police corporate environmental claims deemed greenwash. A more interesting exercise might involve applying the same principles to potential cases of greenmail. Take the ubiquitous hazard-based labeling requirement established under California's Safe Drinking Water and Toxic Enforcement Act of 1986, also known as "Prop 65." Under Prop 65, California has published a list of roughly 900 chemicals, including alcohol and wood dust, "known" to cause cancer or birth defects or other reproductive harm under certain laboratory or exposure conditions. Businesses that use a listed substance in the California workplace or marketplaces, or that distribute products containing the listed chemical above a *de minimis* threshold within California, must provide state-mandated warning language on the product labeling or at the point of sale/commerce, along the following (paraphrased) lines:

WARNING: This [product/area][contains/uses] a chemical known to the State of California to cause cancer, birth defects, or other reproductive harm.

Failure to include the required language in the appropriate form or location can expose the business to enforcement and third-party civil suit liability. Proposition 65 supporters argue that the law is a critical tool in fulfilling the consumer's and worker's "right to know" about hazards in their environment, thus giving them the information necessary to take appropriate risk management precautions.

Under the basic standards established under the FTC *Green Guides*, however, the mandated warning language appears to violate many of the basic tenets of fair labeling. Like so many of the environmental marketing claims deemed misleading by NGOs and regulators, the express claim in the Prop 65 warning—that the product or establishment contains a specific substance—may be factually correct. But it is the warning's implied claim—that use of the product or presence in the establishment exposes the individual to a material risk of harm—that is questionable, if not deceptive. By design, the standards used to trigger a Proposition 65 warning are set well below the exposure levels deemed to cause environmental or health risks based on

science or objective regulatory standards. The unqualified nature of the mandatory claim, and the required "warning" language accompanying it, implies an imminent, or at least material risk to the user. Just as with so many of the environmental claims vilified as self-serving and misleading, consumers have no way to gauge whether avoiding the labeled product or establishment in favor of another will offer any health or environmental benefit at all.

Of course, FTC lacks the statutory authority to review a state-mandated disclosure requirement like Proposition 65, and, if the recent furor over the preemption provisions in the bipartisan Consumer Safety Improvement Act (S. 1009) bill to amend the Toxic Substances Control Act (TSCA) is any guide, the administration would be hard-pressed to challenge the California congressional delegation over the state's right to mandate a state-based hazard disclosure law. Still, for practitioners advising clients on the legal and policy foundation for FTC's environmental marketing policy, it is difficult to rationalize holding corporate environmental claims to reasonable standards of substantiation, qualification, and materiality, while upholding laws requiring the same companies to label their products with warnings that have not received the same level of scrutiny.

In any event, for companies and counselors looking to ride the wave of green commerce, perhaps the fundamental lesson is that claims matter, and that green claims are receiving greater scrutiny than ever before—from customers, competitors, regulators, and third-party litigants. From a defensive perspective, however, even companies remaining agnostic on the green marketplace need to be aware that government and third-party efforts to promote greener products and services are increasingly putting conventional products and services under negative scrutiny as well. Even the most ardent greenwashing opponents seem happy to let greenmailing claims fall where they may.

Charles L. Franklin *is an attorney with Akin Gump Strauss Hauer & Feld LLP in Washington, D.C.*

GREEN CHEMISTRY HAS ARRIVED . . . ALTERNATIVE ANALYSES SHOULD BE RESPECTFULLY APPROACHED

Eric P. Gotting and Martha E. Marrapese

Of the four stages of product assessment envisioned under the California Safer Consumer Products Regulations (SCPR)—identification of "candidate chemicals," selection of priority products, submission of alternatives analyses (AA), and issuance of a regulatory response—the AA submission bears close examination by the legal professional. The AA submission will be a public statement by a manufacturer or other party concerning various aspects that include a discussion of the relative risks of a product compared to replacement products. It is within the grasp of those tasked with crafting these submissions whether the AA becomes an admission against interest later on or showcases a company's responsible system of product assessment and management.

The SCPR is being administered by the California Department of Toxic Substances Control (DTSC). DTSC's list of "informational initial candidate chemicals" consists of 45 groups of chemicals representing approximately 160 individual chemicals. DTSC is expected to cull through this list to identify up to five priority product/chemicals of concern combinations. For those manufacturers whose products may fall on the initial priority list, and who therefore may be faced with preparing AAs for these items, the potential impacts that the SCPR could have on product liability suits should be considered. As we indicated in our companion article on the subject (PCRRTK Committee Newsletter, November 2012, Vol. 14, No. 1), the analysis that will be completed in the AA process—including consideration of the risks posed by the chemical of concern, anticipated consumer exposures, and whether a safer alternative exists—may be relevant to future product liability suits. As a result, crafting an AA should be approached with proper care and attention with an eye toward future litigation. Consideration should be given to:

- Reviews of these particular regulatory submissions by in-house counsel before they are submitted;
- Filing joint AA reports to avoid inconsistencies among submissions and provide manufacturers with some predictability;
- The type of scientific and technical documentation that will be adequate to demonstrate that the product does not pose an unreasonable risk to consumers;
- Narrow crafting of the AA, within the requirements imposed by the SCPR, so as to avoid implicating other substances and uses not identified by DTSC;
- Paying close attention to any available exemptions from the AA requirements (e.g., where the chemical of concern in the product does not exceed the AA threshold specified by DTSC);
- Recognizing where an AA may actually help fend off potential litigation or defend against product liability suits (e.g., where no viable product alternatives exist may mean that a plaintiff will have a difficult time showing that the product is defective); and
- Protecting sensitive business information, to the extent permitted by law, against public disclosure when working through the AA process.

Complying with the SCPR and the AA requirements may only be half the battle. The potential for future litigation means that the impact of an AA report may continue long after it has been completed. Manufacturers and their counsel should, therefore, begin thinking about these issues now as they begin to meet their obligations under California's green chemistry initiative.

Eric P. Gotting *and* **Martha E. Marrapese** *are with Keller and Heckman LLP's environmental practice group.*

ALTERNATIVES ASSESSMENTS FOR CHEMICALS OF CONCERN: IN SEARCH OF A UNIFORM STANDARD

Warren U. Lehrenbaum and
Joshua M. Kaplowitz

The linchpin of California's Green Chemistry Initiative is the "alternatives analysis" (AA) that responsible entities must perform on "priority products" that contain chemicals of concern to determine how best to limit the chemicals' potential harm to the environment and human health. California's Department of Toxic Substances Control (DTSC) has yet to issue guidelines for conducting AAs. If and when those guidelines are issued, they will join an expanding list of AA guidance documents that manufacturers, users, and purchasers of chemical products must sort through. This article surveys ongoing government and private sector AA initiatives, and recommends a uniform approach that will provide certainty to industry and regulators and confidence to consumers.

State AA Guidance

California's Safer Consumer Products Regulations direct DTSC to provide the regulated community with guidelines for conducting AAs. When it provides that guidance, DTSC will not be working from a blank slate. Earlier this year, a comprehensive draft document, *Guidance for Alternatives Assessment and Risk Reduction* (*AA Guidance*), was released by an 11-state consortium, the Interstate Chemical Clearinghouse (IC2). The consortium, which includes member agencies from California, Connecticut, Maine, Massachusetts, Michigan, Minnesota, New York, Oregon, Vermont, and Washington, received substantial financial and technical support from the U.S. Environmental Protection Agency (EPA) and EPA's Design for the Environment (DfE) program in assembling the *AA Guidance*. The state of Washington, which has been increasingly active over the past several years in regulating chemicals in consumer products sold within the state, and which is implementing its own green chemistry regulatory program, helped lead this effort.

The *AA Guidance* articulates a so-called golden rule that defines the overall objective of the alternatives assessment process: "to replace chemicals of concern in products or processes with inherently safer alternatives, thereby protecting and enhancing human health and the environment." To achieve this objective, the *AA Guidance* presents several decision-making frameworks for identifying and selecting alternatives to "chemicals of concern." Highlights of the draft guidance include:

- Two sets of analytical "modules" that are to be used to (i) identify potential alternatives and (ii) evaluate the desirability of selected alternatives. Each module examines a different aspect of the alternative being assessed (for example, there are modules for "hazard," "exposure," "performance," etc.). The guidance presents these modules as a "buffet" that allows users the flexibility to select whatever particular combination of modules they want to employ in conducting their assessment.
- Different levels of scrutiny are allowed within a given module, providing individual users the option of developing a more, or less, rigorous and robust analysis, depending on the individual user's needs and objectives. Different tools are provided for different levels of analysis.
- Decision rules are provided to guide the user in performing an assessment using the outputs from the various "modules." Alternate decision rules allow individual users the option of developing a more, or less, robust assessment depending on the individual user's needs and objectives.
- The draft guidance also articulates broad principles for conducting an alternatives assessment, including transparency in decision making, flexibility in conducting the analysis, and consideration of the life-cycle impacts of a product.

During a public comment period, several stakeholders criticized the draft AA Guidance for (among other things):

- Failing to distinguish between hazards and potential for exposure;
- Failing to address protection of trade secrets and other confidential business information (CBI);
- Offering a set of assessment options that is unworkable for differing industries that use hundreds and thousands of inputs;
- Lacking criteria for judging what an acceptable alternative is; and
- Failing to address integration with existing and future regulatory obligations.

It is unclear when the *AA Guidance* will be issued in final, how it will change, and whether and how it will be integrated into existing regulations.

Washington State's Department of Ecology advertises two voluntary tools for companies to conduct AAs; the GreenScreen™ methodology and the simpler Quick Chemical Assessment Tool (QCAT). *See* http://www.ecy.wa.gov/programs/hwtr/ChemAlternatives/index.html. GreenScreen™ is purportedly based on EPA's DfE program and has already been used by the department in evaluating alternatives to a class of brominated flame retardants. QCAT is intended for companies that find GreenScreen™ "too complicated and expensive to implement."

Federal AA Guidance

Although certain EPA actions *under* the Toxic Substances Control Act (TSCA), such as regulation under section 6, require the agency to conduct an assessment of alternatives, the current statute does *not* include a broad green chemistry component requiring alternatives analyses for substances identified as high priority chemicals. In the absence of a legislative mandate, EPA has continued to press forward with its voluntary DfE program. Broadly speaking, the DfE program identifies products and processes that have been determined to be "effective and safer" for human health and the environment and that can display the DfE logo on their labeling. In addition, the program maintains a safer chemical ingredients list that provides product manufacturers with a list of chemical ingredients

that satisfy the criteria of the Safer Product Labeling Program.

The DfE program also conducts *alternatives* analyses for specific chemicals and chemical categories, including, in particular, chemicals designated for risk assessment under EPA's Chemical Work Plan program. In conducting those analyses, DfE follows a relatively narrow hazard-based approach to alternatives assessment, which is set forth in its *Alternatives Assessment Criteria for Hazard Evaluation* guidance document. *See* http://www.epa.gov/dfe/alternatives_assessment_criteria_for_hazard_eval.pdf.

Recently, EPA has signaled an intent to develop more broadly applicable risk-based AA guidance and as part of that effort, the agency has sponsored a National Academy of Sciences (NAS) committee to assist in developing such guidance. The NAS committee is charged with "develop[ing] a decision framework for evaluating potential safer substitute chemicals as determined by human health and ecological risks." The framework will focus on characterizing risk and environmental impact for chemical substitutions, and will analyze trade-offs between risks and benefits such as product functionality, product efficacy, process safety, and resource use. NAS's report, which is expected to be issued in spring 2014, will provide at least two examples that demonstrate how the framework can be applied. At this point it remains unclear whether, and when, the NAS framework will lead to the development of formal EPA guidance, and how broadly that guidance may be applied.

Private Sector AA Guidance

The world's largest retailer is not waiting for state and federal regulation to impose its own AA requirements on its vendors. In September 2013, Walmart announced its new consumables chemicals initiative designed to "reduce or eliminate the use of priority chemicals used in consumables products in favor of greener alternatives." Walmart has stated that its program "will begin with household cleaning, personal care, beauty and cosmetic products, asking suppliers to transition to greener substitutes for priority chemicals." Walmart has compiled an initial list of ten "high priority" chemical ingredients for "continuous reduction, restriction, and elimination, using informed substitution principles."

Beginning in January 2014, Walmart will "monitor progress on high priority chemical reduction, restriction, and elimination." *See* http://az204679.vo.msecnd.net/media/documents/wmt-chemical-policy_130234693942816792.pdf. It will begin to publicly report on progress in January 2016. Walmart has not publicly announced the process by which its vendors will be asked to analyze alternatives to these high priority chemicals. Given the market power wielded by Walmart, any policy it imposes on its vendors could be at least as consequential as any future California green chemistry AA guidance.

Toward a Uniform Standard

Companies that make chemicals or use them in their manufacturing processes are at risk of facing a patchwork of competing approaches to AAs from the federal, state, and private sectors. Industry and the public would be best served by a standard approach that allows all stakeholders to be confident that proper science is being applied to the search for safer substitutes for high priority chemicals. Depending on how well the NAS report integrates the best elements of existing AA frameworks, and how quickly the NAS framework can be incorporated into useable guidance for stakeholders, EPA may provide the most appropriate and most effective vehicle for adoption of a nationwide approach to alternatives assessment.

Warren Lehrenbaum *and* **Joshua Kaplowitz** *are members of Crowell & Moring's Environment, Energy & Resources Group.*