DfE Responses to Questions Submitted on Behalf of the State Purchasing Community
12/16/09

1) Can you describe the development of the DfE program and the green cleaning labeling program, in particular? Why did the Agency initiate this program when it had been supporting the private labeling programs? Please describe the value to manufacturers and purchasers of the EPA labeling program and what distinguishes it from the private labels, such as Green Seal and EcoLabel. With EPA's support, those labels for green cleaners were developed through a multi-stakeholder process. These labels are commonly used by manufacturers and widely recognized by public purchasing offices.

Response: EPA developed the DfE Program's Safer Product Labeling Program as an effective means to drive Green Chemistry, reward corporate leadership, and make safer products available and easy to find. As with EPA's Energy Star and Water Sense programs, the DfE program will accelerate the transformation of the market by promoting informed green purchasing decisions based on high standards, state-of-the-art science, and good public policy.

The DfE program was founded in the mid-1990s as part of a new environmental ethic that focused on the cause of environmental problems rather than the symptoms. DfE's goal was to eliminate or reduce health and environmental risks by reformulating products with safer ingredients. The role of DfE was particularly important because the Toxic Substances Control Act (TSCA), a law that required EPA to review new chemicals for their toxic properties before they entered commerce, did not proscribe a similar review process for chemicals already in commerce (as of the late-1970s). DfE designed a pollution prevention approach that would apply the assessment tools of the New Chemicals Program to chemicals already in commercial products. The DfE staff felt a public service imperative to improve the human and environmental health and green-chemistry profile of all chemical-based products.

To promote greener chemistry for existing products, DfE's staff of scientists used the same studies, data, and models employed to assess the toxic properties and risks associated with newly created chemicals. In addition, the DfE was able to draw upon the expertise provided by its parent office, the Office of Pollution Prevention and Toxics (OPPT). The following are some examples of how OPPT's staff of chemical experts benefits the DfE program:

- It provides expert interpretation of toxicological studies from discipline-area experts (e.g., in carcinogenicity, internal organ effects, or sensitization);
- It gives DfE accurate predictions of potential harmful effects in the absence of data through EPA-developed estimation tools and models;
- It makes it possible to define the characteristics and threshold that constitute safer or low-concern chemicals;

- It makes it possible to draw comparisons between known chemicals of concern and unknown chemicals likely to cause similar adverse effects and thereby ensure that both the "knowns" and "unknowns" stay out of DfE-labeled products; and
- It permits DfE to go beyond simply ensuring the nonuse of bad-actor chemicals and to label products with ingredients as close to the green or sustainable end of the spectrum as green chemistry allows.

To understand why DfE developed a labeling program for cleaners, it's important to review DfE's labeling history. In 1996, relying heavily on the experience and expertise of the New Chemicals Program, DfE launched a consultation and product recognition program oriented to product manufacturers who were motivated and able to design or reformulate products with ingredients from the green end of the health and environmental spectrum. The program essentially began as an informal pilot to explore whether industry would be willing to work with EPA, on a voluntary basis, to make safer products in exchange for Agency recognition.

With a very small staff, the program started humbly and remained at a boutique level for a number of years, exploring various product sectors and gauging the potential to influence business behavior the supply chain, and to bring green chemistry innovation across a product sector.

As our success grew—in step with increasing public and corporate interest in green products—it became clear that DfE could play a very influential role in safer product design by improving a company's understanding of both chemical hazards and available safer alternatives. The opportunity very much hinged, however, on the availability of Agency recognition—most importantly, use of the DfE logo—to reward a company's investment in product redesign and use of safer raw materials (which typically cost more than conventional ingredients). To them, the logo serves as a powerful symbol of corporate leadership and environmental stewardship and, of course, to differentiate products in the marketplace.

At that time, we were not thinking of DfE as a certification program, as such, and not thinking of institutional purchasers as an important audience and as program stakeholders. We regret this oversight. Nonetheless, we were very much applying a set of strict, science-based criteria that would ensure that recognized products contained the safest possible ingredients. Often portrayed as a concession to industry, our continuous improvement ethic instead commits DfE partners to keep pace with green-chemistry innovation.

In 2005, New York State's decision not to include DfE-recognized products in its green procurement legislation served as a serious wake-up call to DfE. To reach its full potential, DfE realized the importance of reaching out to state purchasers, school health advocates, and other NGOs. Going forward, DfE would look at its program from the purchaser/procurement perspective and take steps to make it as transparent as possible and to add elements, like audits, especially important to the purchasing community.

Interestingly, in this time period, industry trade organizations that had been wary of the green cleaning laws began to support the DfE label. Some industry representatives held up the DfE label as equivalent, if not superior, to other green cleaning labels. While Industry's support greatly validated DfE's efforts, to some it called into question DfE's status as a third-party certification program.

In recent years, DfE has taken a number of steps to bolster and make visible its credentials as a third-party certifier (discussed below in our responses), and to establish a rapport and collaborative relationship with the purchasing community. As described below, DfE also received (and welcomed) support from a variety of external stakeholders, including manufacturers, NGOs and academia, retailers and distributors.

- Manufacturers value the DfE Program because it talks their formulary language and understands the challenges in redesigning chemical-blended products. DfE values manufacturers and raw material suppliers because they are the engines of innovation and increasingly are embracing a new environmental ethic focused on sustainability.
- NGOs and academia appreciate DfE's in-depth science-based approach to product evaluation and inclusive technical discussion and policy forums. DfE appreciates their advocacy of and important perspective on health and ecological issues.
- Retailers, distributors and purchasers value DfE because the program labels products that excel in functional, human health and ecological performance. DfE values these groups because of their ability to drive the demand for safer products, to communicate sustainability values to end users, and to encourage support for the DfE brand.

The DfE program brings a unique approach to product certification that emphasizes and ensures the highest standards of green chemistry, while addressing important collateral environmental considerations, like product packaging. The DfE label for cleaning products also adds value by increasing the number and variety of certified products. The DfE Program has the skills, experience, industry support, and policy mandate to certify products and will continue—in consultation with purchasing and other stakeholders—to strengthen its credentials and establish a labeling program that meets the expectations and needs of the green purchasing community.

2) How does the DfE labeling program approach differ from the private-sector third party certification standards? The DfE labeling program uses a technical approach that evaluates each ingredient in a formulation based on critical health and environmental endpoints. Green Seal and EcoLogo use a set of standards established by a multi-stakeholder consensus process that include such considerations as product performance, packaging, training, and product labeling requirements. The differing approaches to labeling makes comparing the DfE program and the private labeling programs difficult.

Response: We agree. It is difficult to compare the two approaches. Nonetheless, despite the sometimes confusing comparison, the ultimate goals of the labeling programs are identical: to identify superior green products based on ambitious and clear criteria and standards. Someone could described the difference like comparing two sets of directions to Boston, one from New York, the other from Montreal. The directions aren't similar, but they take the traveler to the same destination.

To help understand the differences between DfE and other certification programs, it is important to know that the DfE program was originally developed to promote green chemistry and reduce chemical hazards and risks at their source by guiding chemical formulators in selecting safer ingredients. Consequently, DfE identifies the best chemicals for each of a product's ingredient classes. For cleaners, the ingredient classes include solvents, wetting agents (surfactants), chelants, pH adjusters, hydrotropes, polymers, preservatives, colorants, fragrances and others. By identifying the best-in-class chemicals, DfE helps formulators "build" effective cleaning products that avoid environmental and human health risks.

In comparison, third-party certifiers cater to purchasing officers, an audience concerned with the vagaries of green washing and unsubstantiated vendor claims. To assess and verify environmental claims, third-party certifiers set *de minimis* environmental standards, review testing documentation and conduct on-site visits. In addition, purchasers operate in a broad context, one in which government procurement strategies must address everything from operational concerns to building market demand for green products. As a result, third-party certifiers also include criteria that speak to issues of product performance, product packaging, worker training and product labeling.

The challenge for the DfE program has been to layer the third-party certification approach over its green-chemistry-centered, formulator-oriented approach. As described in Q.1, many steps have been taken to add *de minimis* environmental standards, thereby improving transparency and establishing a basis from which to compare products. DfE's labeling standards also address the broader range of operational and market concerns. As described below, some of these broader issues still need to be fully vetted.

- **Product performance**. Companies must provide testing on product performance, preferably using recognized test methods, which indicate that the product performs well and meets customer needs. We do not currently specify performance levels, which can be controversial because of the many variables and subjectivity involved in this type of testing.
- **Packaging**. Companies must provide information on the recycled content and recyclability of product packaging. DfE has not set required percentages for recycled or recyclable content in part because it is beyond the scope of our expertise. DfE has begun a dialogue with packaging experts in our Office of Solid Waster to improve our understanding of these issues.
- **Worker Training**. The DfE Standard references the Partnership Agreement (Sec. 7, User Benefits/Customer education), which requires company partners to act as product stewards and to provide their customers with information on

environmental and worker safety and to train the customers' sales representatives on the benefits of the partnership products. Our expectation is that our partners should have documentation of their customer education/training activities.

- **Product Labeling**. DfE has specific requirements in both its Standard (Sec. 6) and Partnership Agreements (Sec. 8 and Annex A). Terms of logo use are spelled out in these documents. For example, whenever the logo is used it must be accompanied by the tagline: "Recognized for safer chemistry."

The learning curve has not been easy but the commitment to further the goals of the DfE program is strong. Going forward, we will be revisiting our criteria on product performance, packaging, worker training, and labeling requirements to ensure that they address the concerns of purchasing officials and inspire confidence in the DfE brand.

3) What are the relative benefits and weaknesses of DfE's labeling efforts?

Response: There are several aspects of the DfE program/label that have made it difficult to gain acceptance in the purchasing community.

- DfE label has a dual functionality: it serves as both recognition for design of leadership green-chemistry products and as a third-party certification mark. This duality has understandably confused purchasers and, until recently, not been fully addressed and explained. Even today, there are key issues that require discussion and input. Fortunately, the DfE program is committed to working with purchasers and other stakeholders to refine the program in a way that meets their expectations and earns their trust.
- Industry's strong support for the DfE program has caused suspicion regarding the program's motivations and goals. Some distrust is understandable given the tentative approach to green purchasing exhibited by trade groups that now support DfE. Lack of contact between DfE and state purchasing officials has contributed to misperceptions and misunderstandings. The good news is that the green purchasing movement now has more allies, more manufacturers, and more products to choose from. The best news is that the DfE program won't compromise on environmental standards (Note: All DfE labeled products must comply with the latest DfE standards within one year of their adoption.)
- To some, it appears that the DfE labeling program is in competition with existing third-party certifiers of green cleaning products. This is unfortunate because EPA has supported and funded third-party certification efforts since the early 1990s. There are a growing number of products and services that need their green product claims verified. The national economy is huge and the green purchasing movement will need as many high quality product certifiers as possible to label products.

Some of the unique benefits of the DfE Safer Product Labeling Program, from the procurement perspective:

- The DfE Program is a government entity that adheres to the principles of ethical conduct and good government, fairness and due process. We accept comments on our operations at any time, are dedicated to continuous improvement, and strive to deliver the best possible service to all our stakeholders.
- Our mission is to ensure that labeled products contain the safest possible chemicals and that our program advances the protection of human and environmental health. The DfE program has Agency chemists, toxicologists and experts in related disciplines on its product review work group and uses sophisticated analytical tools and unique information resources to ensure that its product evaluations are especially protective.
- We offer both technical assistance on green chemistry alternatives and sustainable product design and certification to the DfE Standard and component-class criteria, in separate but complementary processes.

4) When DfE makes a recommendation for an ingredient change, who verifies that the manufacturers had made the change? How and when is that verification made?

Response: DfE uses a multi-tiered approach to verify required formulation improvements and overall product content.

At tier one, DfE interacts with the manufacturer to find a safer substitute that satisfies both functional and environmental performance needs (required changes often necessitate other ingredient adjustments that are coordinated and verified through the DfE program). At tier two, the company submits health and environmental profiles of the new chemistries to DfE's third-party reviewer who further assesses the documents and verifies product content. At tier three, the above information is sent to DfE and the DfE technical work group evaluates these profiles and verifies the entire production formulation. Finally, the partner attests and signs on to the new ingredients in the partnership agreement or agreement modification.

Please know that DfE does not allow the use of its logo unless a manufacturer has made all formulary changes and attested to the new formula in the partnership agreement. Starting next year, annual desk audits and triennial on-site audits will provide further verification of product contents and the use of good manufacturing practices.

5) What modifications of the program does EPA plan for the future? For example, does DfE plan to incorporate some of the attributes of a third-party labeling program? If so, how would this take place? According to Green Seal, there are 18 attributes that comprise a credible third-party certification programs. As the DfE program has matured, it has included some of these attributes. Does the DfE program plan to incorporate the other attributes and to what degree?

Response: DfE will continue to enhance its labeling program to better serve the goals of human and environmental health protection, program transparency, and customer service. DfE believes it has the programmatic attributes and internal governance to reliably label

leadership products, which the public can trust to help safeguard families and communities. The program has complied with the substance and intent of respected standard development procedures and, with the enhancements noted immediately below, will possess all the attributes of a credible third-party certifier.

The following changes are coming soon to DfE:

- Beginning next year, DfE will institute annual desk audits and triennial on-site audits to strengthen its verification program;

- On the web site list of partners and recognized products, the date of partnership formation and most recent renewal will be added, so that purchasers can know with which version of the DfE Standard a company and its products comply;

- Also on the web site, descriptions of all committees that work with DfE and a list of committee participants will be added; and

- More restrictive limits on product VOCs will go into effect with the issuance of new air regulations referenced in the DfE Standard.

It should be noted that EPA's list of attributes for credible third-party certification programs was developed to ensure that **non-governmental** certifiers have good **government** attributes. As a government entity, the DfE program and its staff must adhere to the principles of ethical conduct, including honesty, impartiality, fairness, good governance, and avoidance of even the appearance of conflicts of interest. Furthermore, DfE is fully dedicated to EPA's mission: to protect human health and the environment.

In developing its standard and criteria documents, DfE has followed the important elements of credible standard development; it is open to all interested parties, represents all stakeholder interests, provides rationale for all criteria and methodologies, and allows for public comment with meaningful responses to those comments. DfE's Standard is also based on internationally harmonized toxicological guidelines and thus has had an unequalled level of public involvement.

In particular, when it comes to stakeholder involvement, DfE enjoys enthusiastic stakeholder participation from businesses, consultants, academia, and non-profit groups (admittedly, more involvement is welcome from non-profit organizations and government purchasing organizations).

6) How does the DfE program verify the validity of the information submitted by manufacturers? Please describe the data verification procedures and assurances that the DfE program uses.

Response: Manufacturers must sign a Partnership Agreement with EPA before they are permitted to use the DfE logo. Providing false statements to a federal agency (including

improperly using the logo) constitutes fraud and may result in criminal penalties. Also, see the response in # 4.

Next year, DfE will institute an on-site audit program that will further assure the accuracy of partner company-submitted information, especially related to product formulation, and help partners maintain good manufacturing practices.

7) How does DfE plan to revise and upgrade its environmental standards for green cleaning labels on a regular basis? Please clarify how often or under what circumstances EPA will review and update the standards released in June 2009.

Response: DfE will review and update the standard on an ongoing basis, based on internal review, public comment, new science, and advances in safer chemistry. All proposed enhancements will be posted on the DfE web site for formal public comment and Agency response before being finalized.

8) How will the DfE program ensure that products adhere to revised standards in a timely manner? Is EPA planning to communicate with potential purchasers about which products meet the revised standards in the future? Over 1,200 institutional cleaning products have the DfE label, and most of these products received recognition before the DfE standard was developed in June. Purchasers need to know which products meet or do not meet the current DfE standards. What will happen with products that have received the label prior to these changes, and will they be reviewed and relabeled? How does the program plan to address those products that do not meet the standard?

Response: DfE will implement the proposed enhancements and any revisions to its standard right away. In practical terms, that means that within one year all partners will be in compliance with the new criteria or will loose their partnership. The new annual desk audits—which will roughly coincide with the anniversary date of partnership formation— will serve as the time to verify compliance with the new criteria.

An update to the DfE web site will soon indicate the date of partnership formation and most recent partnership renewal, as well as the on-site audit (once they begin).

Manufacturers of products that do not meet the Standard will be so notified and given a reasonable time to reformulate or remedy the situation. If unsuccessful, the partnership and permission to use the logo will terminate. Existing stocks of labeled products at the point of shipment may be distributed and sold (as is true for labeled pesticides).

9) Is the DfE labeling program planning to develop a process of standard development and governance that is balanced, rigorous, and transparent in the future? Will the DfE standard setting process be open for public participation and review in the future? DfE has not published publically information on its internal procedures for standard development and governance. To date, the NEWMOA member

state programs have not been able to identify the participants in the DfE standard setting process or the rules and procedures that guide the process of DfE standard development.

Response: DfE has a process that is designed to drive green chemistry. We set our standard at the highest level of leadership that is possible while still producing high-performing products. We involve stakeholders to make sure we have considered all information.

DfE will continue to add information to its web site and new background materials that explain the program, how it develops its standards and criteria, and how it is governed. At its core, DfE develops its standards and criteria by following the dictates of sound science, leadership health and environmental protection, and good government (see # 5 above).

We should be clear that, unlike existing third-party certification programs, DfE does not engage in a formal process of consensus building to set product standards. As described in #5, DfE relies on input from stakeholders but reserves its authority as a government agency to make final decisions based on its scientific assessment, environmental mission and public duty.