

CYTEC INDUSTRIES TAKES STAND ON SUSTAINABLE FUTURES

Dr. Randy Deskin discusses Cytec's experience with EPA's sustainable futures program.

By Robert Fanney

On December 11, 2002, the EPA initiated its voluntary pilot project – Sustainable Futures. The goal of this program is to encourage chemical manufacturers to apply pollution prevention principles and to develop inherently low hazard chemicals.

The EPA intends, through Sustainable Futures, to work with industry to gain additional knowledge and experience in pollution prevention and risk reduction measures, while promoting the source reduction benefits through the use of hazard, exposure, and risk screening methodologies such as EPA's Pollution Prevention Framework. This effort is focused on making new products safer while providing industry with a means to clear its chemicals faster or to identify issues early in the product development process.

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Taking the initiative, Cytec Industries Inc., a leading specialty chemicals and materials company, elected to participate in Sustainable Futures in December of 2003. Chemistry Business Editor – Robert Fanney – interviewed Cytec’s Director of Toxicology and Product Regulatory Compliance, Randy Deskin (PhD) in order to get an inside view of the Sustainable Futures process.

Robert Fanney: What was Cytec’s experience working with EPA and training contractors with regard to meeting its Sustainable Futures training needs?

Dr. Randy Deskin: Our experience was excellent. After our initial evaluation of the program in October of 2003, we decided to participate and signed up in December 2003. A number of our toxicology and product regulatory compliance staff members and two dozen of our research scientists attended the training course along with EPA, Consortium for Environmental Risk Management (CERM) and members of Syracuse Research Corporation. General training was conducted for more than two days.

Fanney: How did Cytec take advantage of this training? What did they take back from the EPA process? Has Cytec taken advantage of having up to three of its chemicals assessed for free under Sustainable Futures.

Deskin: After leaving the training, personnel immediately began using the tools EPA provided. Since the training, we’ve submitted and cleared two premanufacture notices for new materials. A third material was found, through the process, to be of higher potential hazard and we were able to stop development early on and refocus research efforts to look for a more environmentally friendly alternative.

Fanney: How does Cytec see the Sustainable Futures tools and methodology as a part of its product stewardship effort, including Responsible Care II and the Global Chemicals Management Policy (GCMP)?

Deskin: The techniques and procedures provided are part of an overall tool box that enables us to develop more environmentally friendly chemicals. It’s a good system for predicting a chemical’s potential hazard early on. Overall, I’d say it’s a good fit with GCMP, Product Stewardship and Responsible Care and is a significant aid in developing products that are environmentally sustainable over the long term.

Fanney: How has the use of Sustainable Futures models and methodology benefited Cytec with regard to commercial decisions? Was Cytec able to select products with less risk, or use the tools to reduce risks? Did Cytec

see economic benefits in areas such as assured time to market and reduced product development costs?

Deskin: Six Months of experience has allowed us to kick one product back for additional work. Though we have just begun implementing the program, we will be better able to assess its effectiveness over the long term. That said, we have already had the opportunity to make business decisions to pursue lower concern materials. The economic benefit is in identifying higher risk materials early on. With the EPA models incorporated in the earliest stages of product development this can save us from developing a product and expending all the resources only to have it turned down or subject to burdensome regulation at the end of the process. It lets us opt out or refine formulations early in the new product development process.

Fanney: How did Sustainable Futures give Cytec a better understanding as to how EPA assesses new chemicals?

Deskin: Well, we were very familiar with their criteria already. That said, what this program does is allow us to do our own assessment first. It gives us the ability to assess our materials like the EPA and to apply EPA models the way the EPA would. It really gives us a good idea about the EPA’s review process. This allows us to work more cohesively and transparently.

Fanney: Although there is no direct cost for the training, what resources did Cytec have to put into the initiative? Was Cytec able to see a return on its investment?

Deskin: The biggest investment was in people’s time. The more you put through the program, the greater the initial investment. The return? Well, we submitted two products and were able to get a reasonable assurance that two would be approved. This allows business groups to complete their marketing plans and be ready to launch a new product sooner upon EPA approval.

Fanney: Would Cytec recommend Sustainable Futures to other companies?

Deskin: Based on our experience to date, I would recommend it. It provides a transparent methodology for product’s regulatory clearance. The training is good, the tools are good. Overall, I would encourage the EPA to provide more tools that can be used in the screening of a product for its human health and environmental adverse impact potential. **CB**

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