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To Sandra Panetta/DC/USEPA/US@EPA

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Subject Re: Kodak Project XL

Sandra:

Thanks for your note.

The Kodak Project XL was a great success and served as the foundation for the Agency's Sustainable Futures Initiative.

The Office of Pollution Prevention and Toxics (OPPT) evaluates over 1,000 New Chemicals submissions each year. Most of these submissions lack health and safety data or information on environmental effects - making identification and control of dangerous chemicals very challenging. To address this important issue OPPT scientists, and collaborators, developed approaches, including a variety of computerized tools, that predict key risk-related parameters of chemicals based on a analysis of the chemical structure of the New Chemical under study. This approach for the evaluation of chemical risks, in the absence of scientific data or information, is called Structure Activity Relationships (SAR) or Computational Structure Activity Relationships (QSAR). OPPT scientists uses these SAR/QSAR tools to evaluate New Chemicals and, where necessary, regulate to prevent unreasonable risk to man or the environment.

With the advent of the Pollution Prevention Act in 1990 we, as an Agency, began to look at ways to prevention pollution, rather than focusing only on end of pipe controls. So how does pollution prevention (P2) relate to New Chemical? The answer is that P2 relates directly to New Chemicals and in a fundamental way.

By the time we receive a New Chemical notice, industry has already invested resources in R&D and product development. Product alternatives under consideration at R&D were not evaluated for human or environmental risk - largely because there was no requirement to do so. We, in OPPT, began to say - lets give our SAR/QSAR tools to industry for their use at R&D. This has two major benefits. First, the company can go a long way towards predicting if the Agency will regulate a given chemical. Pouring thousands of dollars into a product that is regulated and never sees the market place is not an optimal business model. Second, the company can compare and contrast product alternatives or manufacturing or processing alternatives, at R&D and identify a product and/or a process that meets the need and presents an optional environmental profile - i.e., develop and commercialize environmentally preferable products and processes.

Could our tools lead to safer chemicals? Could we drive P2 through technology transfer? We approached the chemical industry looking for a company who would be willing to try our tools to see if the technology could in fact be transferred and if SAR/QSAR technology transfer could lead to safer chemicals. The silence was deafening. No one wanted to partner with our Office in this endeavor. Given that we are a regulatory agency, this is understandable. Kodak, however, was different. Kodak had an open mind and a willingness to work with the Agency to see if our SAR/QSAR tools could help companies evaluate chemicals at R&D for risk-related considerations.

The results were dramatic and exceeded all expectations. Kodak found they could easily integrate the tools into Kodak's product development processes. Kodak issued a press release saying the tools save the company tens of thousands of dollars with every new chemical development effort. Under the Kodak XL the company committed to using the tools during product development/R&D and conducted an extensive evaluation of the economic benefits of using OPPT's SAR/QSAR tools. This important study is

called the Tellus Report and is available on the Sustainable Futures WEB sit (discussed below).

The Agency choose to scale up the Kodak XL nationally. To accomplish this we created the Sustainable Futures Initiative, a public private partnership designed to encourage the development of safer New Chemicals and the identification and commercialization of safer alternatives for existing chemicals. Sustainable Futures is the programmatic structure we use to transfer our SAR/QSAR chemical screening technology together with training, technical assistance, support to small businesses, regulatory relief for qualifying New Chemical submissions, and public recognition. Over 680 individuals from more than 280 companies, universities, research institutions, etc., have taken SAR/QSAR training under Sustainable Futures. Other Federal Agencies, other governments, the European Union, the Organization for Economic Cooperation and Development, among others, have taken training and/or are adopting our chemical assessment SAR/QSAR tools.

It started with the Kodak XL and has blossomed into a highly successful P2 effort, both domestically and internationally.

I have attached a fact sheet describing the Sustainable Futures Initiative as well as the URL for the Sustainable Futures WEB page where users can learn of upcoming training opportunities, download our SAR/QSAR tools, view case studies, among other opportunities.

I hope this addresses your inquiry.

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