

US EPA ARCHIVE DOCUMENT

September 30, 1999

Mr. Stephen L. Johnson
Associate Deputy Assistant Administrator
Office of Prevention, Pesticides
and Toxic Substances
401 M Street, SW
Washington D.C. 20460

Dear Mr. Johnson:

Thank you for your letter of September 3, 1999 concerning Eastman Kodak Company's Project XL submission entitled "Developing Environmentally Preferable Products". We believe this XL initiative will result in superior environmental performance not just at Kodak but widely in the industry as well. In your letter, you asked for additional information regarding our proposal. Let me take this opportunity to respond to your questions in this letter and by updating our proposal which is attached to this letter.

Question #1) Please include more detail on Kodak's involvement in encouraging other companies and other industry sectors to apply the P2 Framework in product development efforts. Include information on how Kodak intends to act as a champion for the P2 Framework and advocate the P2 Framework among its industry colleagues. Please provide information on how Kodak's use of the P2 Framework will change business practices, resulting in pollution prevention outcomes.

Regarding the issue of Kodak's involvement in encouraging other companies and other industry sectors to apply the P2 Framework in product development efforts, Kodak has and will continue to be a partner with the EPA in communicating the benefits of the P2 Framework to other companies and other industry sectors. Kodak's efforts are intended to increase awareness among various industry sectors regarding pollution prevention and risk reduction benefits associated with application of the P2 Framework in product and process development, and existing product reformulation efforts, among other applications. Let me take this opportunity to highlight some of Kodak's efforts to make stakeholders aware of the P2 Framework and to encourage companies to apply the P2 Framework in the identification of environmentally preferable products and processes.

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The following examples are illustrative and are not intended to be a comprehensive list of Kodak's contributions to outreach regarding the P2 Framework.

Living With TSCA: Kodak gave a presentation on the use and application of the P2 Framework at the Living With TSCA Conference. Living With TSCA is the premier forum for Industry-EPA dialogue regarding key issues associated with industrial chemicals under TSCA. The conference is sponsored by EPA and major trade associations associated with industrial chemicals. The conference is a unique opportunity to encourage a broad variety of companies, from a variety of industry sectors, to apply the P2 Framework in product development efforts.

Globe 98: Kodak presented a paper on the P2 Framework and discussed risk reduction opportunities associated with application of the P2 Framework at GLOBE 98. GLOBE is a bi-annual international conference focused on pollution prevention and risk reduction issues. The GLOBE conference is an excellent forum for informing the international scientific and business community regarding the P2 benefits afforded by the P2 Framework.

QSAR 98: Kodak presented a paper at QSAR 98, the paper describes the P2 benefits of the P2 Framework and discussed the optimal points in the product development cycle for application of the Framework toward P2 outcomes. The QSAR conference series is a prime forum for information sharing relating to advances in the use and application of structure activity relationships, such as those employed in the P2 Framework. The paper has been submitted for publication.

National Workshops: Kodak presented the Keynote Address and actively participated in several P2 Framework National Workshops sponsored by EPA at state and regional locations. Among other issues, Kodak described the application of the P2 Framework in risk screening, demonstrated specific pollution prevention and risk reduction outcomes resulting from use of the P2 Framework. Industry sectors participating in the workshops include:

- machine tooling
- consumer products
- pharmaceuticals
- electronics
- dyes and pigments
- fabric finishing agents
- pulp and paper
- industrial chemicals
- automotive supply
- industrial laundry products
- specialty chemicals
- automotive fuel additives
- waste management
- microprocessors
- military applications
- synthetic rubber
- plastics
- paints and coatings
- photochemicals
- aerospace
- mining

Supporting State P2 Programs:

Kodak presented a joint paper with the EPA on P2 Technology Transfer at the 1997 Waste Watch Conference in Woods Hole, MA. This conference is sponsored by the EPA, state P2 programs, and public interest groups interested in promoting P2 at the state and local community level. The presentation focused on how states could become involved in promoting design for the environment activities through P2 Technology Transfer.

Kodak gave a paper at the 12th Annual Pollution Prevention Conference sponsored by the New York State Department of Environmental Conservation. Kodak's paper discussed the risk reduction benefits afforded by the P2 Framework in product development efforts.

You asked how Kodak intends to act as a champion for the P2 Framework and advocate the use of the P2 Framework among its industry colleagues. I believe the papers, seminars, and workshops discussed above have been, and will continue to be, an excellent forum for advocating use of the P2 Framework. Kodak has and continues to champion the P2 Framework in other highly productive ways. As an example, Kodak issued a press release describing Kodak's use and application of the P2 Framework in new chemical development, existing chemical reformulation efforts, and in waste prevention efforts. The press release was a call to others in industry to become knowledgeable about the P2 framework and the substantive benefits of incorporating the P2 framework into development processes for new products. In our press release we pointed to demonstrable risk reduction and economic benefits associated with use of the P2 Framework. The press release indicated:

- The P2 Framework "enabled us to reformulate five photochemicals under development, and, in doing so, to improve their environmental performance significantly"
- "We saved Kodak tens of thousands of dollars in development c
- "We found that the (P2 Framework) method is totally transferable"
- "...(The P2 Framework) method would help minimize the generation of wastes which typically result form lengthy chemical-development programs"

As part of our Project XL Proposal, Kodak in collaboration with EPA, will conduct a rigorous Environmental Cost Accounting Study to quantify the business and economic benefits accrued through use of the P2 Framework. The study will clearly describe a variety of benefits including reduced product development costs, reduced liability,

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reduced time to market, etc. The study will help others, in industry sectors other than photochemicals, understand how they can benefit economically by application of the P2 Framework. Demonstrating how the P2 Framework helps the bottom line, e.g., reduces cost and increases competitiveness, is an outstanding mechanism to champion the P2 Framework among our industry colleagues.

You also asked how Kodak's use of the P2 Framework will change business practices, resulting in pollution prevention outcomes. The P2 Framework allows Kodak and other companies to improve the environmental performance of products, reduce cost, decrease potential liability, and improve market share, resulting in significant competitive advantage. Companies can improve the environmental performance of their products by using the P2 Framework to pre-screen their product development options. Pre-screening allows companies to evaluate all viable candidates and select products with optimal environmental product performance (i.e., lower health hazard, lower environmental hazard, lower exposure potential) within given performance criteria.

Product development is a very costly enterprise and testing takes time. If health and safety data are not available early-on in the development process, companies may expend considerable resources on a product alternative that must be abandoned when health and safety data become available. The P2 Framework affords a reliable, inexpensive, and rapid way of evaluating product alternatives early during product development and at later times in the product development cycle. By screening-out potentially hazardous materials early, companies greatly increases the probability that product development efforts will proceed efficiently, yielding an environmentally preferable product at significantly reduced cost.

Using the P2 Framework helps companies understand potential risk-related issues and help them anticipate data and information the EPA may require during the review of their products. Anticipating EPA concerns allows companies to engineer environmentally preferable products and to generate needed data in a timely manner. Anticipating and addressing EPA concerns optimizes the regulatory review and greatly decreases the probability of adverse regulatory action. This in turn allows companies to get to market as soon as possible, resulting in increased market share.

In our seminars, workshops, news releases, and scientific and technical publications, we clearly make the case that the P2 Framework reduces costs, improves environmental performance and helps improve market share. I can assure you that our audience recognizes that these factors translate to a competitive advantage for those who use the P2 Framework. A wide variety of industries are now beginning to use the P2 Framework as a best business practice. This in turn changes business practices resulting in demonstrable pollution prevention outcomes.

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Question #2) Explain in more detail how Kodak will involve traditional stakeholder groups such as citizens and environmental groups in the development of the XL project.

All of the technical efforts associated with this XL Project will occur at Kodak's Health and Environment Laboratories which are located adjacent to Kodak Park in Rochester, NY. Kodak believes being a good corporate neighbor is fundamental to successful product stewardship and effective community relationships. Kodak has a robust and highly effective community outreach effort including a Kodak Park Community Advisory Council with a clearly articulated mission statement:

“The Kodak Park Community Advisory Council is the key forum instrumental in improving the exchange of information between Kodak Park and the community, reflecting constituents' present and future interests, so that Kodak Park operates in a way that is responsible to the needs of the community.”

Kodak will use the Kodak Park Community Advisory Council to involve stakeholder groups such as citizens and other interested groups in the development of the XL Proposal. Community Advisory Council Members include:

- Koda- Vista Neighborhood Association
- Maplewood Neighborhood Association
- Irondequoit PTA
- League of Women Voters
- City of Rochester
- Aquinas Institute
- Rochester Institute of Technology
- Town of Irondequoit
- Neighbors Building Neighborhoods
- School 41, Rochester City School District
- Neighborhood Leaders
- Monroe County Division of Pure Waters
- Seneca Park Zoo
- Town of Greece
- Center for Environmental Information
- Greece Central School District

In addition to the Kodak Park Community Advisory Council, Kodak will actively solicit participation by commentators. Under Project XL, “commentors” are stakeholders who are interested in an XL project but are not able to commit the time and resources necessary to be members of the organized stakeholder group. Kodak has a bi-monthly publication entitled “Update: A Newsletter to Our Neighbors Near Kodak Park.” This

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newsletter covers a wide variety of issues including our neighbors perceptions of Kodak's environmental performance, a recent copy of the "Update" is attached, FYI. The "Update" will be used to notify the community about the Kodak XL initiative and to solicit participation by "commentors."

In addition to stakeholder participation and outreach through the Community Advisory Council and the "Update," Kodak has established a Health, Safety and Environment website at: <http://www.kodak.com/go/hse>. Kodak will include information on the web site including our XL Proposal, as well as other information that may be developed in association with the EPA concerning the Kodak XL Initiative. This will be an excellent opportunity to inform local, national and international audiences about our XL initiative, to solicit comments and suggestions, etc.

Kodak has already begun a dialogue with the State of New York and will solicit comments from our state colleagues as well. Our dialogue with the State began with our participation at: "Celebrating Innovations and Accomplisth Annual Pollution Prevention Conference, held in Rochester, August 24-26, 1999. Kodak was a sponsor and active participant in this conference organized by the New York State Department of Environmental Conservation. In addition to sponsoring the conference, Kodak presented a paper on the P2 Framework, discussed how the Framework helps identify P2 opportunities, participated in a demonstration of the P2 Framework software, and encouraged others to support use of the P2 Framework. The meeting was very successful and provided an excellent forum for discussing the P2 Framework with State officials as well as a variety of participating industry sectors.

Question #3) Please provide more detail on the benefits that will accrue to Kodak from allowing manufacture to proceed in 45 rather than 90, days.

This question provides an opportunity to discuss a fundamental issue of considerable importance, not just to Kodak, but to all in the industry. A casual observer might assume that going to manufacture in 45 days would allow Kodak an earlier opportunity to market products and would help maintain market share. While this is indeed true, the real benefits of early manufacture relate to Kodak's ability to innovate.

In order to maintain leadership in the industry Kodak **must** anticipate customers needs, identify trends in the market place and, above all, strive to be innovative and creative. Innovation and advancements come as a result of iterative improvements to our products and services. While we hope to achieve great break-throughs, these are the exception -- not the rule. Innovation is a continuous process. Kodak typically identifies a number of new chemical alternatives that hold the promise of improving the utility or effectiveness of our products. The challenge is to bring these improvements to the market place quickly to test and evaluate the new product, and to use this experience to identify new

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opportunities for innovation or improvement. Innovation is not a one-time event, it is a continuous process that must go on if we are to maintain leadership in the industry.

Submitting a Premanufacture Notice (PMN) to EPA is a fundamental part of the innovation process. While Kodak clearly sees the value of EPA's review, the 90 day PMN clock has the effect of temporarily halting the continuous process of improvement. We cannot determine if our innovations have practical application until we have the opportunity to test and evaluate these innovations in the market place. We START the process of innovation and STOP for the 90 day PMN review, innovation and improvements STARTS anew and STOPS for PMN review once again. A decrease in the PMN review period from 90 to 45 days has the effect of reducing the START - STOP - START - STOP impact on innovation. Reducing the review time will facilitate innovation, reduce down-time and help bring new products and processes to market in a more efficient manner.

Question #4) In the evaluation, monitoring, and accountability section of your proposal, please include a discussion of your plans for informing the public about which chemicals will be submitted to EPA under this XL proposal. Please also include information on performance measures for the project and details of Kodak's plans for evaluating the success of the project during the project's implementation.

While statistics vary from year to year, Kodak typically submits 15 - 25 PMN notices yearly. Under Project XL, Kodak commits to evaluating PMN materials using the P2 Framework, and submitting the results of the environmental fate and effects evaluation to EPA along with our PMN submission. Kodak's XL Proposal clearly reflects this commitment and we will inform the public by reiterating this commitment to our stakeholders including the Kodak Park Community Advisory Council and by including this commitment in our publication "Update: A Newsletter to Our Neighbors Near Kodak Park" and on our web site discussed above.

While Kodak commits to evaluating each of our 15 - 25 PMNs each year, it is very important to make the point to stakeholders that our commitment goes far beyond P2 Framework evaluation of 15 - 25 PMNs annually. The selection of a particular material to become the subject of a PMN Notice is but the culmination of many, many evaluations and decisions. As noted above, Kodak typically has several alternative chemicals that may possess needed performance characteristics, any one of which could be chosen for PMN submission. Kodak will use the P2 Framework to evaluate otherwise equivalent PMN candidates and use this information to help choose the most environmentally preferable chemical for PMN submission. It is the screening of chemical candidates, before submission of a PMN, that provides the opportunity to identify pollution prevention opportunities and to select environmentally preferable products and processes.

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As such, Kodak will use the P2 Framework not just to review 15 - 25 chemicals annually, but to evaluate potentially hundreds of alternative chemicals and to use this information to make environmentally-informed decisions prior to submission of a PMN notice.

As the EPA is keenly aware, the vast majority of all PMN submissions, in all industry sectors, are claimed as Confidential Business Information under TSCA. As such, revealing the exact nature of our PMN submission to the public would place Kodak at a fundamental competitive disadvantage. As discussed above, we will inform the public of our commitment to review each and every PMN submitted by Kodak under our XL Proposal.

Your question asked for information on performance measures for the project. Under our XL proposal Kodak has made four commitments: 1) to incorporate the P2 Framework as part of our product development program, 2) to communicate with, reach out to, and work with scientific and technical staff from a variety of chemical companies and stakeholders, 3) to reach out to the business audience, and 4) to outreach to the senior management audience.

The performance measure for the first item, incorporate the P2 Framework as part of our product development program, will be reflected in each and every PMN submitted by Kodak to the EPA. Each PMN submission will include the results of our P2 Framework environmental fate and effects evaluations of the subject PMN. The EPA will have the opportunity to directly observe Kodak's use of the P2 Framework in new chemical development. Kodak recently announced new 5-year corporate environmental goals. To achieve these goals Kodak will need to evaluate alternate materials for manufacturing products. Kodak will use the P2 Framework to help make the selection of alternate materials.

As to the second item: communicate with, reach out to, and work with the scientific and technical staff from a variety of chemical companies and stakeholders. At significant milestones during the XL project, Kodak will report performance and accomplishments using the stakeholder groups discussed in response to question #2 above, e.g., The Kodak Park Community Advisory Council, publication in our newsletter "Update: A Newsletter to Our Neighbors Near Kodak Park", and on our web site. In our response to question #1, we highlighted successful outreach efforts that have already taken place, e.g.,:

- Kodak's presentation at The Living With TSCA Conference
- Kodak's presentation at GLOBE 98
- Kodak's presentation at QSAR 98 and subsequent publication in the technical literature

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- Kodak's participation at National Workshops, and
- Kodak's presentation at the 12th Annual Pollution Prevention Conference sponsored by the New York State Department of Environmental Conservation.

The items above, and others as appropriate, will be included in our first year accomplishments report.

Kodak will demonstrate performance to commitment #3, reach out to the business audience, through completion of an environmental cost accounting study. This study will be a rigorous analysis of the business benefits companies can accrue through application of EPA's P2 Framework in chemical product development. This study will analyze both quantitative and qualitative benefits associated with the P2 Framework including, but not limited to, savings in product development, toxicity testing, time to market, and product liability. Kodak will work with EPA to bring this study to the attention of other companies in a variety of industry sectors. This report will help others understand that use of the P2 Framework is a best business practice that will yield tangible economic and business benefits.

The performance measure for #4, outreach to the senior management audience, will take the form of participation in a management study that will examine opportunities for integrating pollution prevention into business practices. The audience for this study will be senior managers in Fortune 500 companies. Case studies will be used to highlight:

- What approaches are currently being used by industry leaders to weigh relative risk in establishing P2 objectives.
- What organizational factors promote or impede integrating P2 considerations into business practices.
- What organizational practices, structures, linkages and incentives promote attention to risk in "leadership" organizations.
- What external influences promote or impede integrating P2 into decision making.

The Bloustein School of Planning and Public Policy at Rutgers University will prepare the report with the assistance of Kodak as a participant in the study.

Question #4 also asked for Kodak's plans for evaluating the success of the project during the project's implementation. Success in the first component, incorporate the P2 Framework as part of our product development program, will be clearly evident in each

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of Kodak's PMN submissions. As discussed above, each Kodak PMN submission will include the results of our application of the P2 Framework to the PMN submissions.

Successful completion of item #2, communicate with, reach out to, and work with scientific and technical staff from a variety of chemical companies and stakeholders, has been demonstrated by the numerous ongoing and completed outreach activities. For example, our technical outreach efforts discussed above (e.g., The Living With TSCA Conference, GLOBE 98, QSAR 98 and subsequent publication in the technical literature, Kodak's participation at National Workshops, and the 12th Annual Pollution Prevention Conference) clearly reflect successful accomplishment of item #2. Kodak will work with EPA to identify additional opportunities to outreach to technical and scientific audiences explaining the value of using the P2 Framework.

Successful completion of item #3, reach out to the business audience, will be evident in completion of the Environmental Cost Accounting Study discussed above. This study will be completed within six months of approval of Kodak's XL Proposal, if not sooner.

Successful completion of item #4, outreach to the senior management audience, will be evident in completion of the management study to be conducted with the support of the Bloustein School of Planning and Public Policy at Rutgers University. This study is discussed in greater detail above. The Kodak portion of this study will be completed within six months of approval of Kodak's XL Proposal, if not sooner.

Question #5) In the superior environmental performance section of your proposal please include a discussion of project commitments.

We have modified the superior environmental performance section to include the following four commitments:

- 1) a commitment to apply the P2 Framework in each and every Kodak PMN submission
- 2) a commitment to communicate with, reach out to, and work with scientific and technical staff from a variety of chemical companies and stakeholders to support their implementation of the P2 Framework,
- 3) a commitment to reach out to the business audience to promote the use of the P2 Framework as a best business practice, and
- 4) a commitment to outreach to the senior management audience to help them understand what management structures will aid the implementation of the P2 Framework in their companies.

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Question #6) Please include an expanded discussion of the transferability aspects of the project.

The P2 Framework is a public/private partnership that results in demonstrable P2 outcomes. The public sector (EPA) provides state-of-the-art computerized risk-screening technologies and the private sector (Kodak and other companies/industries) applies these technologies in innovative ways that: a) yield safer new chemicals, b) stimulate reformulation of existing products, and c) reduces generation of waste.

The premise of the P2 Framework is pollution prevention through technology transfer. Kodak's entire focus in its XL Proposal is to demonstrate that pollution prevention through technology transfer works - and works extremely well! Our entire focus is to demonstrate that EPA's methodologies included in the P2 Framework are indeed totally transferable to the industry and that these methods can drive P2 outcomes. All of our efforts in this XL Proposal, including a) application of the P2 Framework to Kodak PMN development, b) outreach to the scientific and technical community, c) outreach to the business audience, and d) outreach to the senior management audience are specifically structured to clearly and convincingly demonstrate the transferability of the technology reflected in the P2 Framework. In addition to demonstrating transferability, our XL Proposal will clearly articulate both the environmental/P2 benefits as well as the economic and business benefits afforded companies that adopt and apply the P2 Framework in chemical development operations.

I hope I have answered your questions and I would be happy to provide additional information. I believe the P2 Framework is a win-win proposition. The industry wins by gaining insights into risk-related issues early in product development, when change is most cost effective. The environment wins through source reduction, waste reduction and development of environmentally preferable new chemicals.

Thank you for the opportunity to participate in the EPA's XL initiative,

Sincerely,

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JOD:cpp
Enc.: Revised Project XL Submission

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Update, A newsletter to our neighbors near Kodak Park, Issue 3, June 1999
Eastman Kodak Company Annual Report 1998
Eastman Kodak Company Annual Report 1997
Health, Safety, and Environment Report 1998
Health, Safety, and Environment Report 1997
Five-Year Worldwide Environmental Goals