Innovating for Better Environmental Results

by Thomas Gibson

little more than a year ago, I came into EPA as a member of Governor Christine Todd Whitman's new management team for the agency. As the associate administrator for policy, economics, and innovation, I was quickly charged with two priority tasks: take a hard look at our regulatory development process to ensure

that it is working soundly, and come up with a game plan to build on a wealth of experience in testing and applying innovative approaches.

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The regulatory review is now complete, and many of the necessary improvements, such as bolstering the role of science and economic analysis in

decision-making, are underway. Likewise, we have recently completed a new strategy that will move innovation into the mainstream of our work.

Developed with input from states and many external stakeholders, this strategy reflects both forward and reflective thinking. It looks at a set of serious environmental challenges that need innovative solutions, and at some key management opportunities for encouraging innovation throughout the agency. It also looks back at what I regard as a vast gold mine of only partially tapped

opportunities, one that has built up as a result of state and EPA determination to achieve better environmental results.

For more than a decade, we have been investing in new tools and approaches inside and outside the conventional regulatory framework. We have done so based on a number of factors, such as the availability of new information and technology, more sophisticated environmental management in the public and private sectors, and the lack of new legislation specifying priority issues and actions. But the greatest factor of all has continued to be the need to more efficiently and effectively address increasingly complex environmental problems.

The results from early innovation efforts often have been impressive. Voluntary approaches are wracking up steady gains for the environment and for the bottom lines of those who see the short and long-term value in making environmental improvements. Likewise, market-based approaches, such as pollution trading, are proving to be a highly

cost-effective means of achieving environmental goals. Information is beginning to flow electronically between regulated facilities, regulatory

agencies, and the public, eliminating paperwork and creating new avenues for people to access and understand environmental conditions and trends.

And novel approaches, such as self-certification and self-auditing, are transforming traditional regulatory activities like permitting and inspections.

So have we hit our stride as innovators? Not fully. EPA and the states still have much to learn and achieve by looking where we have not looked before. We must keep searching for innovative approaches that can help us solve problems and boost results across-the-board—in all media, in all sectors, and in all communities. And when we find them, we

when we find them, we must put them to use to realize the benefits on the largest possible scale.

The new strategy addresses these needs and other factors that will affect how quickly and successfully we arrive at innovative solutions to environmental problems. It focuses on four key areas, all of which are critical for innovation to flourish.

Strengthen Our Innovation Partnerships with States and Tribes

There are certainly cases where the states and EPA might innovate alone. But our work is strongly intertwined, and for the most part, our abilities

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to innovate or accomplish even the most routine tasks are magnified greatly when we work together.

Today, EPA and the states have two key mechanisms that foster partnership and innovation. The first is the National Environmental Performance Partnership System, or NEPPS. The second is the Joint EPA/State Agreement to Pursue Regulatory Innovations. EPA is committed to the principles behind each of these vehicles and to making the most of supporting tools, such as Performance Partnership Agreements and Grants and regulatory innovation projects, that enable us to put them into practice. To that end, we will work with states to create incentives for their use, and to address barriers that may have limited their usefulness in the past.

Recognizing that partnerships and innovations require more than just tools, we will focus on the larger management framework that consists of planning, budgeting, and accountability. Specifically, we will provide states with the opportunity

for earlier and more meaningful involvement in these processes. The resolve behind this commitment was evident as early as last spring, when Administrator Whitman invited

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states to be part of EPA's annual planning meeting for the FY 2003 budget. Likewise, EPA is now planning a consultation process to ensure that states are engaged early and throughout the development of EPA's next Strategic Plan. Due in September 2003, this will be EPA's third Strategic Plan produced under the Government Performance and Results Act.

Focus Innovation Efforts on Priority Environmental Problems

While EPA sees a need for innovation in all areas, we will focus intently on a set of priority problems that are serious in nature, national in scope, and in need of something more than we have now. They are reducing greenhouse gases, reducing smog, restoring and maintaining water quality, and closing the gap on water infrastructure. We will exploit all available means that show promise for improving results in these areas — from voluntary agreements with key industry sectors to market-based trading programs to public/private sector research.

We believe that targeting attention and resources is the best way to make substantial progress. While it is true that some problems are solved with a sudden inspiration, in most cases, it takes time and perseverance—backed up by dollars and support from those in leadership positions. That is why the President's budget for FY 2003 includes an unprecedented \$4.5 billion federal investment for global climate change-related activities, a Clear Skies Initiative to significantly cut emissions of smog-producing pollutants, and \$21 million for targeting improvements in up to 20 of the country's most highly-valued watersheds.

Diversify Environmental Protection Tools and Approaches

As we ourselves understand and many credible policy studies have concluded, the U.S. needs to expand its environmental protection system so it is equipped to address an increasingly complex set of problems. We need a more diverse toolbox

that will enable us to tailor environmental strategies to the problems at hand. Perhaps a technology-based standard is needed to achieve a specific goal. But maybe a voluntary program or economic incentives could be used just as effectively. The

strategy calls for EPA to continue developing and testing new tools, and to creatively combine them in ways that produce the best possible results.

But the process of innovating doesn't end there. The next step, and one the strategy emphasizes, is putting proven innovations to use whenever and wherever appropriate. Call it "scale-up, "diffusion," or "mainstreaming" — the idea is to fully utilize innovative approaches that prove successful. This may require revising program practices, policies, or regulations to incorporate new options; transferring ideas from one program or another; or facilitating the transfer of effective innovations between states. By following through in this manner, we can extend the benefits of each innovation, lower the transaction costs associated with development, and build confidence that the time and effort often needed for innovation will pay off in the end.

EPA will focus initially on a set of tools that have already proven effective and that have cross-

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media applicability. It includes information resources and technology, environmental management systems, incentives, environmental technology, and environmental performance goals. Once again, EPA's commitment is seen in the budget. For example, the President's budget for FY 2003 includes \$10 million to fund a new environmental technology

competition. The intent is to reward development of technologies that produce more effective and lower cost solutions to environmental protection and stimulate develor.

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opment where major technology gaps exist. The budget also includes a \$25 million investment for information grants to states. These dollars will help states modernize their systems and accelerate development of the much-anticipated Environmental Information Exchange Network which will make e-business and public access goals a reality.

Foster More Innovative Culture and Systems

To be innovative means, among other things, to be open to change. But the truth is most people and most organizations resist change. This natural human response is even harder to overcome in regulatory agencies where a premium is placed on putting processes in place that do *not* vary, but perform consistently and reliably. The challenge for us in the regulatory business is to find a balance between the potential risks from departing from conventional processes on one hand and the potential benefits that might be achieved with an innovative improvement or alternative on the other.

At EPA, we recognize the difficulty of this challenge for ourselves and our state counterparts. We do not have a simple solution, but we must keep striving for that balance. As we do so, we must become comfortable with — and skillful at — the art of innovating.

How do we achieve such a state? At EPA, we will draw upon the many lessons learned from past innovation experiences. In addition, we will take encouragement from the very top. Driven by desire to achieve results, Administrator Whitman wasted no time in asking for this innovation strategy. And she turned to the career senior managers, deputy assistant administrators, and deputy regional administrators who make up the agency's Innovation Action Council to get it done.

Her support for innovation—and that of EPA Deputy Administrator Linda Fisher—has surfaced in other forms. For example, earlier this year, they brought together EPA's new political team to discuss regional experiences with innovation and how assistance from headquarters could help to advance progress and overcome barriers that may

have blocked innovation in the past. Moreover, each week they dedicate a portion of management time with all the regional administrators to hearing about innovations in

the field. This sort of visibility helps to reaffirm that innovation is an ongoing priority and gives regional administrators an opportunity to hear about innovative approaches that may be of value in addressing their own challenges.

A look around the agency shows the message is getting through to the political and career managers alike. For example, in the national waste program, Assistant Administrator Marianne Horinko is launching a new round of innovative pilots to address a set of priorities that includes cleanup and revitalization, energy recovery, and waste minimization, and raising consumer awareness of environmental issues. In addition, she has selected a group of change agents to spur innovation throughout the organization. In the national water program, Assistant Administrator Tracy Mehan has staff exploring a proposal that could potentially reorient one of EPA's largest and most mature programs – water quality permitting – around watersheds rather than individual facilities. At Research Triangle Park, North Carolina, John Seitz, director of EPA's Air Quality Planning and Standards Office, just hosted a staff conference to showcase innovative programs, such as Cool Cities and Commuter Choice, that represent innovative approaches to achieving air quality goals.

Together, these and other developments show that new ways of thinking and doing are taking hold. The transformation is gradual, but undeniable, and it will be strengthened by actions that address both cultural and organizational challenges. They include developing better outcome-based performance measures that enable us to assess how well innovations are working, addressing the issue of "scale-up" so that proven approaches are

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replicated as quickly and fully as possible, and engaging in futures planning to identify the trends and conditions that will likely affect environmental outcomes. Other actions focus specifically on staff development. They include providing training to enhance skills, and offering rotational assignments so good ideas in one area can make their way across organizational boundaries to others. The latter extends to the Senior Executive Service, where a number of members are rotating to new positions.

With strong support from our senior leaders and in the President's proposed budget, EPA is optimistic about the future of environmental innovation. Indeed, we believe this is the time to take it to a whole new level. We will do our part, and look forward to working with states and all other innovators that want to do the same.

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