

## Case Study

### EPA's 33/50 Program: From Confrontation to Collaboration\*

#### **EPA Tries A New Way of Doing Business**

In February 1991, the Environmental Protection Agency began an experiment that reflects a fundamental change in the way government regulatory agencies carry out their responsibilities. Dubbed "33/50," this approach makes industry a partner, not an adversary, in environmental clean up. The results to date have been impressive, though not without controversy.

#### **Background**

President Nixon created the EPA by executive order, pulling together over 5,700 employees from 15 federal agencies. The agency opened for business on Dec. 2, 1970, under the leadership of William D. Ruckelshaus. The widespread publicity given to the first Earth Day held on April 22, 1970 reflected the public's growing concerns about the environment. President Nixon responded by bringing under one roof a variety of research, standard-setting, grant-making, technical assistance and enforcement activities formerly scattered throughout the government. The idea was to provide a single governmental structure for dealing with pollution by treating the environment as an interrelated system.

In its early years EPA enjoyed broad public support, and that support was reflected in laws passed by Congress. Perhaps the most well known were the amendments to the Clean Air Act, which created national clean air standards. Prior to the amendments, each state could set its own pollution standards; since states compete with each other to attract industry, they were at risk of putting themselves at a competitive disadvantage when they imposed strong pollution control laws. The Clean Air Act amendments required EPA to promulgate national ambient air quality standards, putting all states on the same playing field.

While the Clean Air Act was credited by many with having a major impact on air pollution, the discharge of chemical emissions into the environment continued to worry many people. Until the Superfund law was revised in 1986, there was no systematic attempt to measure the amount of chemicals released into the environment. Then came the disastrous chemical leak at Union Carbide's plant in Bhopal, India, killing thousands. Congress responded by passing a provision that required companies to indicate the toxic chemical releases at their plants. The EPA compiles the numbers and publishes them in its Toxic Release Inventory (TRI).

\* Sources: Chris Tirpak, EPA; *N.Y. Times*, 10/13/91, and 6/9/94; *Chemical Engineering*, Aug., 1995; Ed Hopkins, Citizen Action; "Pollution Prevention...Or Public Relations? An Examination of EPA's 33/50 Program," by Citizen Fund, May, 1994; Dean Kerwin, American University.

The data come from industry reports. The first reliable TRI numbers reflected 1988 chemical releases, and they looked extremely high. Industry reported that it released 1.47 billion pounds of chemicals into the air, land and water that year, and that amount covered only 17 relatively high-volume chemicals out of an initial total of 300 on the list. The New York Times ran a full-page article on the nation's 10 largest polluters and the TRI reporting data (see Appendix).

The 1988 figures were released to the public in 1990, and they had an impact. Then-EPA Administrator William K. Reilly called the TRI "one of the most powerful tools we have to reduce toxic emissions. "The agency conducted high-level meetings with chief executives of major corporations, industry trade associations, and environmental groups, and looked for ways to use the TRI figures to reduce chemical releases into the atmosphere. These discussions led to a new approach to pollution prevention, and to the 33/50 Program.

The goal of the program is straightforward: reduce (from the 1988 baseline) the amount of the 17 chemicals released by 33% as of the end of 1992, and by 50% as of Dec. 31, 1995 (thus, the "33/50" name). Rather than relying on government's usual top-down, "command and control" approach to regulations, 33/50 treats industry as a partner in cleaning up the environment.

"It's a paradigm shift," remarks Chris Tirpak, of EPA's 33/50 staff. "We're moving from confrontation on environmental problems, to collaboration on environmental solutions... This is a bridge to a new way of doing business. It gives industry an incentive to reduce chemical releases and transfers. And it's working."

### **How 33/50 Works**

The essence of 33/50 is simple, and powerful. It invites companies that use certain chemicals to monitor their own releases of those chemicals, set specific goals for reducing their releases, and find the best way to meet those goals. It doesn't dictate to the companies how to reduce their pollution, it doesn't monitor their releases, it doesn't penalize the companies when they fall short. In other words, it challenges many assumptions about how regulatory agencies must do their work. This is the process:

- The EPA invites the company to join the 33/50 program, or the company sends a short letter indicating its interest in participating. EPA started by taking a "worst, first" approach, inviting the 600 largest polluters to join. Roughly half of them agreed, others volunteered without being invited, and by the end of 1991, 732 companies were participating.
- The company receives a list of the 17 high-priority chemicals selected from EPA's TRI. These 17 were selected because they fit three criteria: their volume of use, their relative toxicity, and the potential for reduction by using substitutes or other prevention methods.
- The company then identifies those chemicals on the TRI list that it purchases, and the quantities that it purchases.
- It estimates the amount of the chemicals that it actually uses annually.

- Then it determines the amount of chemicals it releases into the environment by subtracting the amount used from the amount purchased. It is the resulting figure that the company pledges to reduce.
- The company then sets corporate-wide numerical goals for reducing the release of chemicals it uses that are on the TRI list. It is encouraged to use 1988 as a baseline year for measuring reductions. It may select a different baseline year if it deems appropriate; EPA asks that it cite the reason for the baseline period in its commitment letter.
- It reports the results each year to the EPA, which totals the figures from the participating companies and publicizes the results.
- EPA reports the amount of chemicals released throughout the U.S. each year. It gives recognition to those companies participating in 33/50.

### **Some Important Issues**

Several points should be noted about the program. First, the EPA doesn't monitor the participating companies to ensure that their figures are accurate. It does require that the company's chief financial officer sign the form indicating the amount of chemicals released. The EPA's reasoning is two-fold. First, it wants this program to be collaborative, not confrontational, so it must maintain a level of trust and mutual respect. Second, it believes that the company CFOs will want to know that the figures are accurate, because it's in their interest to reduce waste, and chemicals released into the atmosphere represent waste. In fact, the CFO's of participating companies have been very interested in the figures on the 33/50 forms; most them had no idea how much waste they were generating, and 33/50 represents an opportunity for cost cutting.

A second point is that EPA allows companies to decide which of the designated 17 chemicals it wants to reduce. EPA doesn't micro manage the companies—if a company decides to target a large reduction in the release of just one or two chemicals, it can do so. It can target its reduction efforts to all, some, or very few of its plants. Goals can be changed as circumstances dictate (for instance, an unexpected increase in production can alter the company's situation).

Third, EPA is also very flexible in terms of company goals. The 33% and 50% EPA goals are national targets, not goals imposed on each company. Those that participate in the 33/50 program set goals that make sense to them.

The last issue may be the most significant from the point of view of the public sector. In targeting 17 chemicals for the program, EPA did something not often seen in government: *it set priorities*. Though many government agencies establish goals and produce lofty strategic plans, relatively few actually acknowledge that not everything is equally important. In setting up 33/50, EPA was explicitly acknowledging that it must take a targeted approach, that it would determine the highest priorities, that it would take control of its agenda.

Critics point out, with justification, that the 1,300 participating companies represent only about 18% of the total number eligible. However, these 1,300 contribute 58% of the 33/50 chemicals released into the environment. EPA has a very small staff to run 33/50, and it is trying to focus its scarce resources where they can make the largest impact.

## **Results To Date:**

The numbers are striking:

- ◆ 1,300 companies were participating as of the end of 1995, representing approximately 6,000 facilities
- ◆ In 1991 and 1992, the first two years of the program, participating 33/50 companies reported reductions in the release of chemicals at nearly three times the rate of nonparticipating companies.
- ◆ From 1988 to 1992, the country experienced a 40% reduction in the amount of the 17 chemicals released, exceeding the original 1992 goal of a 33% reduction by 100 million pounds.
- ◆ From 1992 to 1993, releases of the 17 chemicals targeted by 33/50 were reduced by an additional 100 million pounds.
- ◆ As of 1993, the country experienced a reduction of 685 million pounds of the 17 TRI chemicals, a 46% reduction from 1988 levels.
- ◆ From 1988 to 1993, the country experienced a 42% reduction in the release of all 300 chemicals on the TRI list, compared to the 46% reduction in the 17 chemicals targeted by 33/50.

The 1994 data are in and analysis on them isn't quite complete. Initial indicators from the '94 data indicate the goals of 33/50 will have been met one year early.

There is a good deal of debate whether the 33/50 program directly led to these improvements (see below). Critics of the program, like Ed Hopkins, Environmental Director for the Citizen Action organization, agree that there has been a reduction of chemical releases, but they don't agree that 33/50 is directly responsible for that reduction.

There are also important non-quantitative results. One is improved communications about pollution within participating companies. "Some environmental managers in these companies say that they'd never met their CEO or CFO until the 33/50 program came along," says the EPA's Chris Tirpak. Now that the company senior executives have the information concerning their release of chemicals (and the waste and costs involved), they are communicating with the employees closest to the problem."

Another non-quantitative result is heightened awareness. When senior executives learn of unnecessary costs, when they are able to join a non-bureaucratic government program that saves money as well as contributes to the national good, they develop new understandings of environmental problems. Further, they start to see the EPA in a different light.

A third consequence is especially meaningful: companies that pollute now have a strong incentive to clean up their acts, without the fear and anger engendered by regulation and law suits. Companies are far more motivated to find and prevent pollution at their plants when they develop their own goals and have the freedom to determine how to achieve those goals.

## **Stakeholder Reactions—Mixed Reviews**

Reflecting the views of leaders in the chemical industry, Richard Zanetti wrote the following in the August, 1995 edition of *Chemical Engineering*:

“...33/50 has been one of the smartest things EPA has done regarding the environment... [EPA’s old approach of] legislation, regulation and litigation is thorough. But it is also slow, costly and punitive. And a lot of the money goes to attorneys, not cleanup... With 33/50, peer pressure has worked a lot better than prescription.... We urge EPA to continue it, and ask more companies to join in.”

Initially, most environmentalists opposed 33/50, and some continue to do so. One criticism concerns the numbers; EPA isn’t monitoring participating companies, and environmentalists worry that the self-reporting aspect of the program won’t provide accurate figures on chemical releases because the companies have an interest in making their numbers look good. Says Citizen Action’s Ed Hopkins:

“Overall, I’m in favor of voluntary programs like 33/50, *as long as there is accountability and measurement*. There needs to be a mechanism for measuring success, and TRI isn’t such a mechanism. A company can close a plant, for instance, and get credit for chemical reduction on TRI...the TRI just isn’t accurate.”

Another environmentalist criticism concerns the way the EPA defines “prevention” in its 33/50 program. Environmentalists like Hopkins and the Citizens Action organization define prevention to mean reducing pollution *at the source*. They cite the Pollution Prevention Act of 1990 to support their belief that EPA should attempt to prevent pollution by reducing or eliminating the amount of pollution at the source. Thus, they would have EPA monitor chemicals from the point they reach a plant, not at the point of departure (as is done by 33/50). They argue that any chemical is a potential hazard to workers.

“It’s not just a question of controlling chemicals once they enter a plant; the overall use of toxic chemicals must be reduced.” Says Hopkins. “Chemicals go into products -- carpets, building materials - - and then they are emitted into our homes and offices through normal use. Further, the control of pollution through recycling, treatment and energy recovery isn’t the same as prevention; these control methods often expose people to toxic chemicals. The important goal is to *reduce* everyone’s exposure to chemicals, not just reduce the amount leaving the plants.”

The EPA’s Chris Tirpak offers a different definition of prevention. “You can define prevention in terms of inputs, as Ed Hopkins does, or you can define it in terms of *outputs*, that is, the amount of pollution emitted from companies and plants. We’re more interested in targeting and reducing the output of pollution, and that’s what 33/50 does.”

Finally, many environmentalists worry about the concept underlying 33/50-- that a win/win situation exists, that industry will see it in its interest to do what is also in the public’s interest, without the heavy hand of EPA hanging over industry’s head. “Companies love the 33/50 philosophy,” according to Hopkins, “because the voluntary approach forestalls tougher EPA controls, and it reduces active citizen involvement. Voluntary approaches are OK if they use accurate measurements and if they are what they say they are, but this one [33/50] isn’t. It advertises itself as a pollution prevention program, but that’s not fully accurate. There is some pollution prevention through 33/50, but there are a host of causes other than TRI, that have led to a decline in chemical releases.”

### **Similar Initiatives, Next Steps:**

The 33/50 program officially terminated Dec. 31, 1995; it was a five-year experiment, and many people in the agency and at the participating companies are asking, "what's next?" In March of 1995, EPA came out with 20 new environment initiatives entitled "Reinventing Regulation." One of these, the Common Sense Initiative, regularly brings together representatives from different industries to look for ways to achieve environmental goals without complicated and costly regulations. This Initiative focuses on six specific industries, and teams from each industry meet with representatives from labor, environmental groups and community organizations to seek the best ways to meet environmental standards.

In another new effort, dubbed Project XL, the EPA works with states to help companies find better ways to achieve environmental goals than through regulation. Companies are encouraged to replace EPA requirements with their own methods and controls. If the company-developed methods perform better than current laws and regs, if they allow citizens to track progress, if they ensure worker safety and are supported by the local community, the EPA approves the company's approach and grants exemptions from its regulations.

A similar initiative with which EPA has experience is negotiated rule making. Colloquially termed "reg neg," this approach brings together those who have a stake in a proposed rule to meet with agency representatives and offer input on how a rule ought to read, *before* the agency puts the proposed rule out for public comment. They meet without the glare of the media, and thus are able to listen and learn from one another, rather than use the session primarily to posture for their particular cause. The result is still a rule that is subject to public comment, but it is developed through a negotiated process involving key stakeholders. The EPA and several other government agencies have used reg neg since 1990 and some have used the reg neg principles since the early 1980s.

Prof. Neil Kerwin, Dean of American University's School of Public Administration, has researched EPA's use of reg neg and his findings are very positive. He learned that reg neg participants show a high level of satisfaction with the process, and that they rate the rules they develop through reg neg very high. Perhaps most important, the participants placed a very high value on the learning that goes on in reg neg -- "they learn about the technical issues involved, and about each others' views and interests in the issues," Kerwin notes. He adds that there has been no successful court challenge to an EPA rule developed through reg neg to date.

Whether 33/55 is continued in a new form or not, it seems clear that the underlying principles of collaboration, incentives and voluntary compliance will inform and guide EPA's future.