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Project XL Progress Report Massachusetts Department of Environmental Protection



On March 16, 1995, the Clinton Administration announced a portfolio of reinvention initiatives to be implemented by the U.S. Environmental Protection Agency (EPA) as a part of its efforts to achieve greater public health and environmental protection at a more reasonable cost. Through Project XL, which stands for eXcellence and Leadership, EPA enters into specific project agreements with public or private sector sponsors to test regulatory, policy, and procedural alternatives that will produce data and experiences to help the Agency make improvements in the current system of environmental protection. The goal of Project XL is to implement 50 projects that will test ways of producing superior environmental performance with improved economic efficiencies, while increasing public participation through active stakeholder processes. As of October 1999, 15 XL projects are in the implementation phase and 35 XL projects are under development. EPA Project XL Progress Reports provide overviews of the status of XL projects that are implementing Final Project Agreements (FPAs). The progress reports are available on the Internet via EPA's Project XL web site at <http://www.epa.gov/Project XL>. Or, hard copies may be obtained by contacting the Office of Reinvention's Project XL general information number at 202-260-7434. Additional information on Project XL is available on the web site or by contacting the general information number.

Background

The Massachusetts Department of Environmental Protection (Massachusetts DEP) is the state agency responsible for protecting human health and the environment by ensuring clean air and water, the safe management and disposal of solid and hazardous wastes, the timely cleanup of hazardous waste sites and spills, and the preservation of wetlands and coastal resources. Massachusetts DEP has developed the Massachusetts Environmental Results Program (ERP), an innovative regulatory compliance system designed to achieve superior environmental results by replacing the current permit system. To date, Massachusetts DEP has selected the state's small and medium-sized businesses to participate in ERP.



Major Milestones

April 23, 1996
Massachusetts DEP XL
Proposal Submitted

December 23, 1996
Supplement to
Proposal Submitted

October 6, 1998
Final Project Agreement
Signed

March 31, 1999
Draft Addendum for
Dry Cleaners Submitted

October 6, 2008
Final Project Agreement
Terminates

Massachusetts DEP developed ERP to reduce the number of state permits applied for, renewed, and issued, through a performance-based self-certification program. Senior-level company officials are required to self-certify annually that the participating companies are, and will continue to be, in compliance with all applicable air, water, and hazardous waste management performance standards throughout their facilities. Massachusetts DEP anticipates that participating firms will achieve superior environmental performance because, by converting the permit requirements to performance-based standards, company officials will be aware of their environmental obligations *before* they make decisions about modifying equipment and operations, rather than at the end of a long, expensive permitting process. This gives companies more flexibility to choose cost-effective compliance strategies for themselves, thereby reducing the “time to market” for new products and removing regulatory obstacles to pollution prevention. Superior environmental performance will also be enhanced by the outreach and training provided to participating companies that helps to explain and clarify their environmental obligations. Finally, superior environmental performance will result from the increased frequency with which audits and field inspections can be conducted and enforcement actions carried since Massachusetts DEP staff will have to spend less time, thanks to ERP, reviewing plans and writing permits.

Under ERP, companies are accountable for reporting any releases or exceedances of discharge or emission standards to the Massachusetts DEP. Violations are reported, and a Return to Compliance Plan submitted to Massachusetts DEP if any such violations are either outstanding at the time of certification or discovered thereafter. Beginning with a demonstration project of 18 companies, industry representatives cooperated with Massachusetts DEP in establishing criteria for reporting compliance with state standards without developing permits for each facility. The first three sectors to participate in ERP are dry cleaners, photo processors, and printers. After evaluation and revision, the program may be transferred to other industry sectors throughout Massachusetts.

Massachusetts DEP is undertaking a thorough evaluation of ERP beginning with the dry cleaner and photo processor sectors. Key to this evaluation process is the development of Environmental Business Practice Indicators (EBPIs), which are industry-specific measures that provide a snapshot of a facility’s environmental performance. EBPIs can be regulatory requirements (such as putting labels on barrels of hazardous waste) or they can be “beyond compliance” measures (such as posting a sign above a sink prohibiting the discharge of process chemicals into the sink).

Massachusetts DEP will compare baseline data (which include EBPIs) collected during random inspections *before* ERP certification to data collected during random inspections *after* outreach and certification under ERP. The data will then be used to calculate facility scores and group scores (such as “before ERP” dry-cleaner scores versus “after ERP” dry-cleaner scores), and to track changes in specific behaviors (for example, to compare the percentage of dry cleaners that perform leak inspection over time). By using such statistics, Massachusetts DEP will be able to determine whether differences in scores or changes in before and after behavior are “significant,” that is, whether the differences represent true differences, or are simply random variations.

In addition to this comparison, Massachusetts DEP will also compare results of data collected from facilities during random inspections *after* ERP to the answers on the certification forms from those facilities to determine the overall level of accuracy of the certification data.

The ultimate goal of evaluation is to use the results to best target Massachusetts DEP resources. For example, if dry cleaners are not doing leak checks, then Massachusetts DEP might increase outreach and then re-analyze this behavior. Or, if printers score higher than expected, then Massachusetts DEP might skip certification for a year.

The Experiment

This project will test a process to streamline permitting and reporting, and improve and better measure compliance rates for several business sectors. The project reduces the reporting burden for affected facilities and the Massachusetts DEP while fostering superior environmental performance by identifying and encouraging opportunities for pollution prevention.

The Flexibility

The purpose of the “umbrella” FPA signed under Project XL is to establish an expedited EPA review process for any changes to Federal regulations or policies that Massachusetts DEP may propose to ensure effective ERP implementation. Subsequent phases of FPA development will appear as separately negotiated and signed sector-specific addenda to the umbrella FPA. These addenda will be developed only for those sectors that need flexibility in Federal regulations or policies. Only those ERP sectors for which a sector-specific addendum is required will be evaluated by U.S. EPA under Project XL.

According to the umbrella FPA, sector-specific addenda will identify

- the flexibility Massachusetts DEP needs to smoothly implement ERP in a specific commercial or industrial sector;
- the superior environmental performance to be gained as a result of extending ERP to that sector; and
- the evaluation process to judge ERP’s effectiveness in that particular sector.

Massachusetts DEP will convert most state-only permits to certifications under ERP. Currently, a facility is excluded from participating in ERP if it is subject to any of the following federally mandated permits: Federal Air Quality Operating Permits; National Pollutant Discharge Elimination System (NPDES) Surface Water Permits; Hazardous Waste Treatment, Storage, and Disposal Facility Licenses; and EPA Single-Source State Implementation Plan (SIP) Revisions. Therefore, EPA does not anticipate providing flexibility in these areas. The statutory programs, and the EPA offices administering the programs, that will affect the Massachusetts DEP XL project will be determined by the sector-specific addenda.

Promoting Innovation and System Change

Project XL provides EPA opportunities to test and implement approaches that protect the environment and advance collaboration with stakeholders. EPA is continually identifying specific ways in which XL projects are helping to promote innovation and system change. The innovations and system changes emerging from the Massachusetts DEP XL project are described below.

Using Self-Certification as a Means to Improve and Reward Compliance. A key component of ERP focuses on corporate accountability and self-evaluation. ERP provides a period of outreach and training for companies on compliance and other performance standards, after which the companies submit a statement in which they certify compliance with applicable environmental standards and that they will maintain compliance for the coming year. Self-certifications are signed under the penalties of perjury by the facility’s owner, president, CEO, or other high-ranking official. If a facility is not in compliance when it self-certifies, it must identify the existing violations and include a Return to Compliance Plan that specifies how and when compliance will be achieved. The ERP approach—with clear performance standards written in plain language, targeted compliance assistance, an emphasis on pollution prevention, and required annual self-certifications—promises to yield

environmental results superior to those achieved through traditional permitting. EPA and Massachusetts DEP acknowledge that some reasonable amount of time must be allowed to pass before final conclusions about a particular sector's response to self-certification can be drawn.

Alternative Compliance Evaluation. The Massachusetts DEP efforts to measure a sector's performance using EBPIs is one of ERP's most significant policy innovations. The number of EBPIs is different for each sector. Printers have 26 EBPI measures (including nine pollution prevention measures), dry cleaners have 16 EBPI measures, and photo processors have eight EBPIs. The number of EBPIs is based on the complexity of the industry, the number of multimedia discharges, and the potential for beyond compliance opportunities. The use of EBPIs rather than the traditional "single dimension" measures of compliance (e.g., in compliance, out of compliance, or significant noncompliance) allows regulatory agencies not only to look at compliance more comprehensively but also to offer the opportunity to recognize and potentially encourage "beyond compliance" techniques for industry leaders.

Project Commitment Summary

This section and the environmental performance section will summarize progress made in meeting commitments described in future sector-specific addenda to the Massachusetts DEP FPA.

Environmental Performance

This section will summarize progress in meeting the environmental performance described in future sector-specific addenda to the Massachusetts DEP FPA. Specific measurements of environmental performance before and after undertaking the XL Project will be presented in these addenda.

In general, the Massachusetts DEP XL Project intends to achieve superior environmental performance by

- promoting pollution prevention through outreach and assistance;
- freeing up time for DEP staff, who formerly wrote permits, to inspect facilities and carry out enforcement actions;
- giving Massachusetts DEP a better understanding of regulated industries; and
- increasing the number of facilities operating within Massachusetts DEP's regulatory programs.

Massachusetts DEP anticipates superior environmental performance by converting permit requirements into industrywide performance standards, since facility managers will be aware of their environmental obligations before they make decisions about modifying equipment and operations. This will give companies more flexibility to choose cost-effective compliance strategies for themselves, thereby removing regulatory obstacles to pollution prevention. For example, Massachusetts DEP estimates that compliance with ERP standards will lead to an estimated 43% reduction in perchloroethylene emissions (a total of 500 tons) from Massachusetts dry cleaners each year, will yield significant reductions in the use of smog-forming solvents and alcohol used by commercial printers, and will reduce wastewater discharges of silver by 99% from photo processors.

Stakeholder Participation

Massachusetts DEP worked to ensure the involvement of key stakeholders and the general public in ERP development.

When state agencies propose regulations for promulgation, the Massachusetts Administrative Procedures Act requires them to give public notice of the regulations' availability for review and the dates, times, and locations

of public hearings. Massachusetts DEP was required to follow this procedure when promulgating ERP regulations for dry cleaners, photo processors, and commercial printers, and will also give public notice in the future when proposing regulations for other sectors.

Massachusetts DEP developed ERP with the active participation of its ERP Design Team, comprised of representatives from EPA, other government entities, environmental advocacy groups, business and industry, consulting firms, and the legal community. For more than a year during the development of the project, members of the Design Team met weekly to review and comment on various decision and discussion documents.

Massachusetts DEP kept the ERPs Design Team apprised of its efforts to obtain Project XL designation for the program and intends to continue to involve the group. Massachusetts DEP also provides the general public access to information about the ERP XL project development process. Massachusetts DEP published notices in several major newspapers and on Massachusetts DEP's website (www.state.ma.us/dep) inviting the public to participate in the January 1998 Design Team meeting that served as the kickoff for public review of and comment on the umbrella FPA. The FPA document itself was published on Massachusetts DEP's website.

Massachusetts DEP will continue to involve and inform the ERP Design Team, sector-specific advisory groups, and the general public in the development of ERP sector-specific addenda. Proposed sector-specific regulations and draft sector-specific addenda will be made publicly available, and interested stakeholders will be invited to provide input.

Six-Month Outlook

Key focus areas for successful implementation of the FPA over the next 6 months include finalizing the sector-specific addendum for the dry cleaner sector; and analyzing and reporting on EBPI data collected from dry cleaners.

Project Contacts

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Information Sources

The information sources used to develop this progress report include (1) the FPA for the Massachusetts DEP XL project; (2) an ERP brochure and report entitled *Evaluation of the ERP Demonstration Project* from the Massachusetts DEP website; and (3) Project XL background information and a press release dated October 6, 1998, from the U.S. EPA Project XL website.

Glossary

Air Emissions: Pollution discharged into the atmosphere from smokestacks, other vents, and surface areas of commercial or industrial facilities; from residential chimneys; and from motor vehicle, locomotive, or aircraft exhausts.

Air Emission Standard: The maximum amount of air-polluting discharge legally allowed from a single source.

Baseline: The measure by which future environmental performance can be compared.

Discharges: Flow of liquid or chemical emissions from a facility into water, air, or soil.

Final Project Agreement (FPA): The FPA outlines the details of an XL project and each party's commitments. The project's sponsors, EPA, state agencies, tribal governments, other regulators, and direct participant stakeholders negotiate the FPA.

Hazardous Waste: By-products of society that can pose a substantial or potential hazard to human health or the environment when improperly managed. These wastes possess at least one of four characteristics—ignitability, corrosivity, reactivity, or toxicity—or appear on special EPA lists.

Media: Specific environments—air, water, soil—which are the subject of regulatory concern and activities.

National Pollutant Discharge Elimination System (NPDES): A provision of the Clean Water Act that prohibits discharge of pollutants into waters of the United States unless a special permit is issued by EPA, a state, or a tribal government on an Indian reservation.

Perchloroethylene: A manufactured chemical that is widely used for dry cleaning of fabrics and for metal degreasing. It is also used to make other chemicals and is used in some consumer products. Other names for perchloroethylene include tetrachloroethylene, PCE, and tetrachloroethene.

Permit: An authorization, license, or equivalent control document issued by EPA or an approved state agency to implement the requirements of an environmental regulation.

Reinvention Initiatives: Programs designed by EPA to promote innovation to achieve greater and more cost-effective public health and environmental protection.

Release: Any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment of a hazardous or toxic substance.

State Implementation Plans (SIP): EPA-approved state plans for the establishment, regulation, and enforcement of air pollution standards.

Self-certification: The central concept of self-certification is that the regulated community should internally certify their compliance with requirements, subject to regulator verification, as a substitute for permit issuance and some compliance reporting.

SIP Revision: A revision of a State Implementation Plan altered at the request of EPA or on a state's initiative.

Solvents: Substances, usually liquid, that can dissolve other substances.

Wastewater: The used water from a home, community, farm, or industry that contains dissolved or suspended matter.