ALTERNATIVES TO ENFORCEMENT ACTIONS: THE USE OF POLLUTION PREVENTION SUPPLEMENTAL ENVIRONMENTAL PROJECTS

LeAnn C. Herren, Technical Assistance Manager
Center for Environmental Policy
Institute of Public Affairs
University of South Carolina
Columbia, South Carolina 29208
(803) 777-1865
herren@iopa.sc.edu

J. Cam Metcalf, Director
Kentucky Pollution Prevention Center
420 Academic Building
University of Louisville
Louisville, Kentucky 40292
(502) 852-0965
jcmetc01@homer.louisville.edu

INTRODUCTION

In the Pollution Prevention Act of 1990, Congress put the concept of preventing waste at the source into law. The Act states that pollution "should be prevented at the source whenever feasible; pollution that cannot be prevented should be recycled in an environmentally safe manner whenever feasible; pollution that cannot be prevented or recycled should be treated in an environmentally safe manner whenever feasible; and disposal or other release into the environment should be employed only as a last resort and should be conducted in an environmentally safe manner." While this act established the waste management hierarchy, it did little to encourage either facilities or regulators to move away from the "end-of-pipe" treatment mentality. While innovative EPA programs such as the Common Sense Initiative, Project XL and the Green Chemistry Challenge have been positive steps, the participating companies are generally large and currently environmental leaders. The question of how to get small to medium facilities and environmentally challenged firms to implement pollution prevention techniques has yet to be answered. An attempt to bridge this gap has been the development of the EPA program on the use of Supplemental Environmental Projects.

Supplemental Environmental Projects (SEPs) allow facilities that violate environmental regulations to minimize the imposed fines in exchange for the implementation of an environmentally beneficial project. (Note: The fine is not totally eliminated. Generally, the company is required to pay what is considered the "economic benefit" portion of the fine, specifically, the money saved by being out of compliance.) The amount the penalty is reduced is the minimum amount of capital that must be applied to the proposed project. Typically, the cost to implement a project exceeds the amount of the penalty reduction.

SUPPLEMENTAL ENVIRONMENTAL PROJECT GUIDELINES

EPA has defined SEPs as "environmentally beneficial projects which a defendant/ respondent agrees to undertake in settlement of an enforcement action, but which the defendant/respondent is not otherwise legally required to perform." To be *environmentally beneficial*, a SEP must "improve, protect or reduce risks to public health or the environment at large." While some violators will experience certain benefits from the projects, the project must primarily benefit public health or the environment. EPA considers projects to be *in the settlement of an enforcement action* when EPA has "the opportunity to help shape the scope of the project before it is implemented and the project is not commenced until after the Agency has identified the violation." While SEPs may include activities which facilities will be legally obligated to undertake two or more years into the future, the SEP cannot include any action which is otherwise required by any federal, state or local law or regulation.

EPA has set up five legal guidelines on the use of SEPs to ensure the proposed project is within the Agency's authority and does not conflict with any statutory requirements. First, all projects must have a nexus (relationship) between the violation and the proposed project. This means the project must reduce or remove the environmental or public health impacts to which the violation contributes, or reduce the likelihood of similar violations in the future. A nexus applies if the project occurs not only at the site of the violation, but at a different site within the same ecosystem or within the immediate geographic area (generally within a 50 mile radius of the site of the violation). Some states have made changes to the nexus requirement to allow more flexibility to be creative when evaluating SEPs. Second, the project must advance at least one of the declared objectives of the state environmental statutes. Third, EPA or any other federal agency may not manage the funding of the project or be responsible for the administration of the SEP. EPA may provide oversight to ensure that implementation meets the provisions of the settlement. EPA will maintain the right of legal recourse should the SEP not be adequately completed. Fourth, the type and scope of the SEP will be determined in a signed settlement agreement. And fifth, the project cannot be something EPA itself is legally required to complete, includes providing EPA with additional resources to perform an activity or expanding an existing EPA program.

APPROVED SUPPLEMENTAL ENVIRONMENTAL PROJECT CATEGORIES

EPA currently has designated seven categories of projects which may qualify as SEPs.

1.) Public Health which provides diagnostic, preventative and/or remedial health care which is related to the actual or potential damage to human health caused by the violation. Public Health SEPs are acceptable only where the benefit of the project is to the population that was harmed or put at risk from the violation in question.
2.) Pollution Reduction focuses on waste streams that have already been generated or released and reductions in future violations through recycling, treatment, containment

or appropriate disposal. This may include the installation of end-of-process control or treatment technologies, or rather "end-of-pipe solutions."

3.) Environmental Restoration and Protection going beyond repairing damage caused by a violation to actually enhance the condition of the ecosystem or immediate geographic area adversely affected past the baseline conditions. This may be to restore or protect natural environments or man-made environments such as facilities and buildings. Man-made improvements may also include removal/mitigation of contaminated materials such as soil, asbestos and leaded paints.

4.) Assessments and Audits including pollution prevention assessments, site assessments, environmental management system audits and compliance audits if not already available as injunctive relief. In most cases, the SEP will include an agreement to implement all findings. Pollution prevention assessments are systematic, internal reviews of processes and operations to identify opportunities to reduce the use, generation and/or production of toxic and hazardous wastes. The assessments must be done using a recognized procedure and experienced personnel. Site assessments investigate the current conditions of the environment or the risk to the public health at the site or the environment impacted by the site. Environmental management system audits are independent evaluations of a facility's environmental policies, practices and controls. Environmental compliance audits are an independent evaluation of the facility's compliance status with all federal requirements and are generally only acceptable when the defendant/respondent is a small business.

5.) Environmental Compliance Promotion provides training or technical support to other members of the regulated community to a) identify and achieve compliance with the regulatory requirement associated with the violation; b) avoid commitment of a similar violation; or c) go beyond compliance by reducing the generation, release or disposal of the related pollutants beyond the legal requirements. This education must be focused on the same regulatory requirements that were violated and would advance compliance in the industrial sector affected by the proposal.

6.) Emergency Planning and Preparedness provides assistance in the form of computers and software, communication systems, chemical emission detection and inactivation equipment, HAZMAT equipment, or training to a responsible state or local emergency response or planning entity in the district or state affected by the violation.

7.) Pollution Prevention which reduces the generation of waste through source reduction including equipment or technology modifications, processor procedure modifications, reformulation or redesign of products, substitution of raw materials and improvements in housekeeping, maintenance, training, inventory controls or other operation and maintenance procedures. Pollution prevention also includes any project which protects natural resources through conservation or increased efficiency in the use of energy, water or other materials.

POLLUTION PREVENTION SUPPLEMENTAL ENVIRONMENTAL PROJECT

SEPs that target pollution prevention (P2SEP) are preferred by EPA and receive greater consideration than the other six categories. Currently, the definition of a P2SEP is "an environmentally beneficial project that a violator agrees to undertake in consideration of a penalty offset from an enforcement action that incorporates pollution

prevention as the primary objective, and that must be performed as part of the legal requirements established in the settlement of the enforcement action, but is not otherwise legally required to be performed."

Projects that are not acceptable as P2SEPs include general educational environmental awareness projects, contributions to environmental research at a college or university, a project beneficial to a community but unrelated to environmental protection, studies or assessments without an agreement to implement the results and/or projects which are funded by low interest federal loans, federal contracts or federal grants.

PROCEDURAL GUIDELINES

Although not all enforcement cases are suitable for P2SEPs, the consideration of pollution prevention opportunities is available in all enforcement actions. Once an agreement between the violator and the Agency has been reached regarding a P2SEP, the violator should conduct a waste assessment. The assessment will ensure that the conceptual project is applicable and technically feasible to implement. Waste assessments generally include a list of operational procedures for each production step, a process flow diagram, an inventory of all raw materials on-site, a detailed listing of all toxic and hazardous substances generated, amounts of all waste on-site, a materials balance on all process streams, a maintenance survey and a summary of all regulatory permits.

While this process is similar to the Assessment and Audit SEP, no agreement will be made to implement waste minimization opportunities developed. Should such an agreement be reached, additional consideration on reductions would be made during calculation of the final penalty. Costs incurred by a violator in implementing a SEP are usually considered in determining an appropriate settlement amount.

PENALTY OFFSET CALCULATIONS

Calculating a final penalty in a settlement including a P2SEP includes three phases: the Agency penalty; calculation of the cost of the SEP; and penalty mitigation. A substantial Agency penalty is generally required for legal and policy reasons. *Not including the P2SEP*, the penalty will recover at a minimum the greater of the economic benefit of noncompliance plus 10 percent of the gravity component, or 25 percent of the gravity component only. The net present amount after tax cost of implementing a P2SEP is calculated by the facility. These costs generally include capital costs, such as equipment, one-time nondepreciable costs associated with things like clean-ups or land purchase and annual operating costs or savings incurred after P2SEP changes are made. The penalty mitigation phase uses the information provided by the company in estimating implementation costs to determine the amount the Agency penalty may be offset. Currently, the EPA statutes recommend a penalty mitigation related to 80 percent of the cost to implement general SEP, however P2SEPs are encouraged by a recommended 100 percent offset of implementation costs. However, P2 projects typically result in cost savings. While P2SEPs are encouraged, the proposed project should be one that the

violator would not normally implement without the enforcement action. To address this issue during penalty mitigation, many states have set up a detailed payback analysis. Projects are only approved if they fall outside a set payback period (in years). Projects inside the period are reasoned as being implemented regardless of whether a penalty offset is received. Some states grant additional offset based on a determination of the benefits to public health or the environment, innovativeness of the technology, environmental justice, multimedia impact and volumes of pollution prevented.

After the penalty mitigation, a P2SEP plan will be generated. This plan will be incorporated into the Consent Agreement and Order. The plan should include the pollutant and media to be addressed, a detailed cost estimate and project completion schedule, a list of contractors and/or consultants assisting with the project, a schedule of report submittals and other pertinent information. An essential part of the packet is financial data which illustrates that the company has sufficient financial resources to implement the project. An SEP of any type will be rejected if the facility is deemed financially unstable to see the project to completion.

Other possible reasons for rejection of a P2SEP include: facility operations have little potential for P2; upper management is not interested in implementing P2 activities; penalty amount is too low for significant funds for a P2 project; the P2 project is so large the regulatory agency does not have sufficient resources to oversee the project and verify implementation; or the violator has an extended history of noncompliance and has not been cooperative. Some states have found P2SEPs extremely useful to bring repeat offenders into compliance.

CONCLUSION

In the future, the use of SEPs and specifically P2SEPs, will be encouraged by EPA and state regulatory programs. While EPA deems penalties important in environmental protection by deterring violations and creating a level playing field, SEPs have been recognized as playing a role in developing significant environmental and/or public health protection and improvements. SEPs may also help to further other EPA objectives including promoting pollution prevention and addressing environmental justice. Therefore SEPs involving pollution prevention techniques will always be preferred over other types of reductions or control strategies.