Settling with P2

How Pollution Prevention Initiatives Can Help Your Company Correct Violations and Reduce Penalties

Rachel M. Hopp

P2 Supplemental Environmental Projects may be negotiated in exchange for reductions in the penalties that violators might otherwise have to pay. Moreover, such projects can help restore a firm's good will with both regulators and the local community. This article reviews how pollution prevention initiatives can be used to settle with regulators.

YOU RUN A small but growing metal fabricating company and have just returned from an industry conference focused on strategies to cope with new environmental requirements. Although your firm has never had significant dealings with EPA, you wonder whether you would benefit from a pollution prevention (P2) or reduction strategy. You decide to look into the matter as part of your company's TQM efforts.

The following day your phone rings. On the other end you hear the frantic voice of the floor superintendent. Two inspectors from the State Department of Environment and one EPA inspector have just arrived at the plant with an administrative warrant. You discover that your firm has been targeted for inspection as part of the first state-EPA cooperative industry-sector multimedia compliance initiative.

Several months later, your company faces enforcement for violations of the Clean Air Act (CAA) and the state implementation plan limits for volatile organic compounds, of the Clean Water Act (CWA) stormwater requirements due to runoff from scrap metal accumulating outside the plant, of the Resource Conservation and Recovery Act (RCRA) for contaminated soil at the plant, and of the Emergency Planning and Community Right-To-Know Act (EPCRA) Section 313 for failing to file Toxic Release Inventory (TRI) Form Rs. The statutory maximum penalties total $500,000.

As most environmental managers and practitioners well know, the scenario just described occurs all too frequently. With new environmental regulations reaching ever smaller concerns, the successful operation of industrial facilities of all sizes has become increasingly fraught with environmental compliance pitfalls. This scenario, however, also presents the ideal opportunity for exploring P2 settlements.

Once enforcement has been initiated, the parties — if willing — can consider mutually advantageous P2 settlement conditions. As a compliance tool, P2 remedies can reduce or eliminate environmental

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concerns permanently, serving as an alternative to costly end-of-pipe controls that may only transfer pollution problems to another media. P2 Supplemental Environmental Projects, or SEPs, which go beyond what the regulators can require by law, also may be included in settlements in exchange for reductions in the penalties that firms might otherwise have to pay. P2 settlements can also help restore a firm's goodwill with the regulators and the local community and can have positive effects on other aspects of a firm's operations.

What kinds of P2 remedies have been successfully applied to date, and what will EPA require in a P2 settlement? This article first explores EPA's approach to P2 in enforcement and how that approach has been applied in recent cases. It then reviews the available sources of information on P2 settlement precedent. A companion article in an upcoming issue of *Pollution Prevention Review* will look at some of the barriers to P2 settlement efforts and emerging trends that may change EPA's approach to P2 in the enforcement context.

EPA's P2 Settlement Policies

Pollution prevention and reduction strategies have been a part of the environmental compliance story since at least 1984 when Section 3002(b) of RCRA was enacted, requiring that waste generators certify that they had developed waste minimization plans. EPA's first formal P2 enforcement strategy, the *Pollution Prevention Action Plan,* was not issued, however, until June 30, 1989. The *P2 Action Plan* sets forth what continues to be a central tenet of EPA's P2 enforcement philosophy — i.e., that aggressive enforcement creates a climate of deterrence and thereby encourages pollution prevention. Underlying this principle is a strongly held concern that voluntary P2 conditions should not dilute or become a substitute for tough enforcement.

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Aside from a basic philosophic concern with P2 settlements, EPA's initial approach to pollution prevention did not include the institutional changes needed to effectively encourage the use of P2 conditions in settlements. Such changes were not considered in earnest until enactment of the Pollution Prevention Act of 1990 (PPA), which established P2 as the preferred approach to environmental management. On February 6, 1991, then Deputy Administrator F. Henry Habicht II issued EPA's *Pollution Prevention Strategy*, under Section 6604(b) of the PPA. The *Strategy's* principal objective is to institutionalize a "pollution prevention ethic." On the subject of enforcement, the *Strategy* endorses the agency's philosophy of deterrence, but also calls for the inclusion of P2 conditions in EPA enforcement settlements.

EPA's Office of Enforcement (OE) concurrently issued two related policies: the *Interim Policy on the Use of Pollution Prevention and Recycling Conditions in Agency Enforcement Settlements* (February 25, 1991) (*Interim Policy*) and *The Policy on the Use of Supplemental Environmental Projects in Enforcement Settlements (SEP Policy)* (February 12, 1991). These policies are intended to systematically encourage government negotiators to include P2 conditions in settle-

ments. In particular, they describe the criteria that the Agency will apply in evaluating whether a particular P2 activity is appropriate (1) as a compliance measure or (2) to mitigate penalties.

EPA's policies on using P2 compliance remedies

The *Interim Policy* provides generic guidelines for including P2 and recycling provisions in administrative or judicial settlement agreements and addresses their use, both as methods of compliance and as supplemental conditions. One of the policy's principal objectives is to put an end to remedies that merely transfer pollution problems from one media to another and to instead promote permanent source reduction. The policy is applicable to all administrative, civil, and criminal enforcement settlements, whether they involve private entities, federal facilities, or municipalities.

A firm's willingness to use P2 to correct a violation can help mitigate the gravity component of the penalty.

As an added incentive, the *Interim Policy* authorizes extensions of compliance schedules in cases where P2 is used as the means of compliance. The *Interim Policy* also allows the Agency negotiators to consider P2 remedies when calculating the penalty. For example, a firm's willingness to use P2 to correct a violation can help mitigate the gravity component of the penalty. The policy also allows the negotiators to treat P2 projects differently when calculating the time- and cost-sensitive economic benefit component of the penalty. This helps remove any penalty disincentive to the use of P2 remedies. The *Interim Policy* also discusses supplemental P2 projects in general terms, referring to the *SEP Policy* for specific guidance.

EPA's SEP policy

A SEP is an environmentally beneficial activity, voluntarily undertaken by a defendant under the terms of a settlement with EPA, that exceeds what is needed to correct a violation and that could not have been required by the government under the applicable environmental laws. Because the eligible activity could not be compelled by the government, the *SEP Policy* authorizes a partial mitigation of the civil penalty that would otherwise be owed.

One of the express objectives of the *SEP Policy* is to secure additional protection of human health and the environment, particularly through the use of P2. Approvable SEPs, however, include the full hierarchy of environmental management set forth in Section 6602(b) of the PPA. Thus, in addition to P2 projects, SEPs may involve pollution reduction, environmental restoration, environmental auditing, and public awareness projects. An additional category of SEPs, for the EPCRA program only, consists of support to Local Emergency Planning Committees.

The *SEP Policy* describes the criteria and guidelines for negotiating approvable SEPs. The project must further the Agency's statutory mandates to clean up the environment and deter violations of law. The policy also states that "[a]ll supplemental projects must improve the injured environment or reduce the total risk burden posed to public

health or the environment *by the identified violation.*"

In order to receive penalty credits, the SEP must be an enforceable requirement of the settlement agreement. There must also be an appropriate nexus between the violation and the environmental benefits derived from the SEP. The nexus may be "vertical" (i.e., reducing loadings of the same pollutant to the same medium that was affected by the violation) or "horizontal," involving either relief for (1) different media at the same facility or (2) the same medium at different facilities. SEPs involving a horizontal nexus will be more carefully scrutinized to ensure enforceability and deterrence. The *SEP Policy* includes examples of how EPA will apply the nexus requirement.

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Although a SEP can involve a different facility, it cannot be used to resolve violations at a facility other than the one that is the subject of the enforcement action. According to the policy, this limitation is to avoid rewarding a violator for undertaking compliance requirements elsewhere. EPA believes this would undermine the enforcement action's deterrence objectives and encourage recalcitrance, poor management, and noncompliance.

Moreover, in contrast to settlements using P2 as the method of compliance, SEPs may not be used to extend a company's compliance schedule, because that would interfere with the deterrent effect of the enforcement action. Nor can a SEP be used to mitigate the entire penalty. The policy requires that deterrence be ensured through the payment of a substantial cash penalty. The cash penalty must *at a minimum* reflect the economic benefit of noncompliance. Accordingly, the SEP will only serve to mitigate the "gravity component" of the penalty calculation.

Recent Use of P2 Settlements in Enforcement

The first pioneering work with P2 settlements was undertaken by EPA's Office of Prevention, Pesticides and Toxic Substances (OPPTS).[1] Initial efforts to promote P2 through enforcement thus focused almost exclusively on EPCRA Section 313 TRI reporting violations and Toxic Substances Control Act (TSCA) cases, both of which fall under OPPTS jurisdiction. More recently, P2 settlements have been reached in virtually all of the environmental programs.

P2 SEPs

The first reported SEP activity was for Fiscal Year 1990/91. During that period, P2 SEPs were negotiated by OPPTS in 34 cases. Twenty-nine of these involved EPCRA Section 313 TRI reporting violations. Most of the P2 SEPs involved either process changes or material substitution. Summaries of all 34 cases are included in "Pollution Prevention Through Compliance and Enforcement: A Review of OPTS Accomplishments," U.S. EPA OPPTS (22T-1002, January 1992). (See the box on p. 391 for examples of two 1990/91 cases.)

The first year for which there is Agencywide data on EPA-negotiated SEPs is 1992. According to EPA's "Enforcement Accom-

Examples of 1990-91 Settlements

Among the settlements entered into in 1990/91 was *Balzer, Inc. of Hudson, New Hampshire.* Balzer manufactures high technology vacuum equipment for film processing and cryogenic equipment for laboratory applications. EPA's complaint alleged that the company failed to report its emissions of freon-113 in 1987 in violation of EPCRA Section 313, and proposed a $17,000 penalty. Balzer agreed to pay a final penalty of $8,500 and to replace the freon-based cleaning systems at the Hudson facility and one other plant with water-based systems that have no toxic emissions. The capital cost of this P2 SEP was estimated at $56,000.

Another settlement entered into in fiscal year 1990/91 was *Markham Corp. of Keene, New Hampshire.* Markham had allegedly violated TSCA through the unauthorized use of a PCB transformer and a failure to maintain adequate records. The company agreed to pay a penalty of $33,000 (reduced from $76,000) and to remove the PCB transformer from the facility (environmental remediation SEP). Markham also agreed to two P2 SEPs: (1) installing a closed-loop solvent cleaning recycling system (resulting in a 75 percent annual reduction in methyl ethyl ketone), and (2) eliminating heavy metals (3,000 pounds per year of lead and cadmium) in inks used to label manufactured components. The capital cost of the SEPs was estimated at $175,000.

plishments Report," 409 SEPs were negotiated by EPA in fiscal year 1992. Of these, the EPA Regions negotiated 222 cases as part of civil or administrative stationary source enforcement settlements, and the Air Program's Office of Mobile Sources (OMS) negotiated an additional 187 SEPs. The total estimated dollar value of the projects was $50.1 million.

The fiscal year 1992 SEPs covered all media and the full hierarchy of environmental management. Excluding the OMS SEPs (183 of which were public awareness projects mostly in tampering or fuel-switching cases), 52 percent of the fiscal year 1992 SEPs involved pollution reduction and another 28 percent involved pollution prevention. P2 SEPs under EPCRA Section 313 continued to make up the largest share of the P2 SEPs settled by the Agency as a whole (84 percent). Overall, the P2 SEPs had an estimated dollar value of almost $15.7 million (31 percent); the pollution reduction SEPs had an estimated dollar value of over $29.7 million (59 percent). (The box on p. 392 summarizes several 1992 cases.)

In a separate analysis of the fiscal year 1992 docket, OPPTS reported further that the ratio of the average cost to companies for

Examples of 1992 Settlements

The following are a few of the P2 and pollution reduction SEPs reported by EPA for fiscal year 1992:

In re City of Adrian. A settlement was reached on July 15, 1992, in a CWA administrative action against the City of Adrian, Michigan. Under its terms, the city agreed to pay a civil penalty of $25,000 and to perform three pollution reduction (not pollution prevention) SEPs: (1) installing a backup dechlorination system at its wastewater treatment facility at a cost of $15,000; (2) performing a water quality study of the South Branch of the River Raisin, in conjunction with the River Raisin Watershed Counsel, at a cost of $38,937, to improve stormwater management; and (3) performing a comprehensive study of the impact of toxicants on the Pho-Strip (used to remove phosphorous), at a cost of $61,000.

In the Matter of Sanitary-Dash Manufacturing Co., Inc. The company agreed on July 28, 1992, to pay a $23,300 civil penalty and to implement two P2 SEPs to resolve alleged RCRA violations found at its North Grosvenordale, Connecticut, metal plating and polishing operations. The settlement resolved an administrative complaint alleging violations of RCRA requirements regarding hazardous waste container management, contingency planning, personnel training and records, hazardous waste storage, hazardous waste testing, and maintenance of an inspection log. At a combined cost of $180,000, the two P2 projects involved modifying the company's plating process and installing secondary containment to collect lead polishing dust. These changes reduced the need for polishing the finished product, thereby also reducing the generation of lead polishing dust. The company also changed from hexavalent to trivalent chrome, which (1) eliminated the need for annual cleanup of the chrome plating tank, (2) decreased the proportion of solids in the sludge wastestream by 33 percent, and (3) substantially reduced the amount of sulfur dioxide used to reduce hexavalent chromium in the company's wastewater treatment process.

Bethlehem Steel Corporation's (BSC's) Bethlehem and Johnstown, Pennsylvania, plants. A partial settlement was reached in a Region III CAA civil enforcement action involving BSC's Bethlehem and Johnstown, Pennsylvania, plants using a P2 SEP. BSC agreed to pay $6.7 million in civil penalties and to spend an estimated $32 million on compliance to remedy particulate matter violations. BSC also agreed, as a SEP, to replace the existing coke oven battery doors and jambs with Luter-type doors to prevent releases of benzene and other toxic coke oven gases in a manner consistent with a proposed air toxics rule. The door replacement program was estimated to cost approximately $4,000,000.

Exhibit 1. 1993 Settlements by Statute

Statute (Total SEPs)	*P2*	*Pollution Reduction*
EPCRA/313 (64)	22	29
TSCA (37)	—	33
AHERA (7 — mostly audit SEPs)	—	1
FIFRA (19)	2	10
CWA/NPDES (21)	3	10
SDWA (5)	—	5
Wetlands (2)	—	—
Oil Pollution Act (2)	—	2
Clean Air Act (11)	4	6
RCRA (20)	9	6
CERCLA (1 — LEPC)	—	—
Multimedia (5)	1	2

completing a SEP to the average penalty reduction received for the SEP was approximately 6 to 1 for TSCA, 6 to 1 for EPCRA, and 4 to 1 for FIFRA.[2] (No comparable cost information is currently available on P2 SEPs in other media.) One might ask why a firm would invest in a P2 project that will cost four to six times more than the potential penalty reduction? To a large extent, these seemingly lopsided ratios reflect the "soft" economic benefits that companies receive from SEPs. These include avoiding negative publicity, restoring their image in the community, and, in some instances, avoiding future regulation and compliance costs altogether.

EPA's Enforcement Accomplishments Report for fiscal year 1993, which was released in July 1994, did not include a comparable analysis of the SEPs that were negotiated that year.[3] However, an EPA spokesperson states that the Agency plans to release a separate report on enforcement penalties that will include information about pollution prevention SEPs for fiscal year 1993. Preliminary data from the Regions obtained by the author indicate that 198 SEPs were negotiated in fiscal year 1993. These include 41 P2 SEPs (21 percent) and 105 pollution reduction SEPs (53 percent). **Exhibit 1** shows the breakdown of the 1993 settlements by statute.

Other cases in each of these years have included SEP credit for P2 projects completed prior to the conclusion of the settlement and SEP credit conditioned on specified actions. Perhaps the rule of thumb in this new area of environmental enforcement is to think creatively.

Using P2 to comply

In a February 1994 draft final report entitled "Recent Experience in Encouraging the Use of Pollution Prevention in Enforcement

Settlements," the Massachusetts Institute of Technology's (MIT's) Center for Technology, Policy and Industrial Development concluded that P2 efforts appear to focus almost exclusively on penalty mitigation, rather than on potential uses of P2 as injunctive relief to achieve compliance.[4] Although the MIT study was based on only a limited survey of ten cases, other available information appears to support MIT's conclusions.[5]

The only case that has been widely reported by EPA using P2 as a method of compliance is *U.S. v. Louisiana-Pacific Corporation,* CA No. C-78-0567-MHP (N.D. Cal.). This case involved whole-effluent toxicity limit violations from Louisiana-Pacific's Samoa, California, pulp and paper mill. On January 15, 1993, the court entered a modification to an earlier consent decree under which Louisiana-Pacific had already paid a civil penalty of $2.9 million (plus interest) and was required to implement a variety of measures that included extending its effluent outfall, installing an in-plant steam-stripper for the condensate, and conducting treatability and skin irritation tests to measure the effects of the effluent. Under the modification, Louisiana-Pacific agreed to change its operations in order to entirely eliminate chlorine bleaching after September 1, 1995, and to meet specified levels of chlorine-free production prior to that time.

The modification allowed Louisiana-Pacific to switch to a hydrogen peroxide bleaching process. This had benefits to both the company and the environment. First, the capital costs associated with the process change (principally retrofitting the plant to handle higher temperatures) were in the range of $200,000 to $300,000, which paled in comparison to the $20 million cost of a new treatment plant. The switch to a non-chlorine process also virtually eliminated dioxin and toxic chlorinated organic compounds from the effluent, justifying a modification of the decree to allow for a shorter outfall extension and a one-year extension of the deadline for completing the outfall work. Louisiana-Pacific was able to accelerate the process change and has now completely phased out its production of chlorinated pulp.

The agreement was not without risks to the company, however. Among other things, Louisiana-Pacific lost virtually all of its overseas customers because the unbleached pulp is not quite as bright. Louisiana-Pacific hopes to make up that loss through increased sales within the United States and may benefit from a recent Executive Order mandating that federal agencies purchase environmentally beneficial products.[6]

Although Louisiana-Pacific appears to be the only settlement to use P2, a number of cases have been settled in recent years using pollution reduction as the method of compliance.

Although Louisiana-Pacific appears to be the only settlement to use P2 as a compliance method, a number of cases have been settled in recent years using pollution reduction as the method of compliance. An example of these cases is *In the Matter of University of Texas.* The University of Texas at Austin (UT) and EPA Region VI settled a RCRA action on April 20, 1992. UT agreed to develop a waste minimization program for the university to address the wastes generated by laboratory projects and experiments conducted by university stu-

dents and professors. This waste accounts for approximately 90 percent of the waste generated by the university. The waste minimization project will be suitable for use in large academic research institutions, and UT will be sponsoring a seminar for other educational institutions to disseminate the knowledge acquired during the development of the project.

P2 as a basis for no-action assurances

One of the more interesting recent developments was an EPA decision to issue a limited "no-action assurance."

Finally, one of the more interesting recent developments was an EPA decision to issue a limited "no-action assurance." According to the December 10, 1993, OPPTS "P2 Quarterly Activity Report Update on Pollution Prevention Activities in EPA Regions and Headquarters," EPA's Office of Enforcement issued a no-action assurance in mid-October to a non-profit trade association, the Printing Industries of New England (PINE). PINE proposed to negotiate a federally funded group hazardous waste collection contract with a private waste transporter as part of a comprehensive voluntary P2 program.[7] Participating PINE members would have their wastes collected under the contract at significant savings. PINE was, however, concerned that it would be liable if the wastes were to ever become subject to a federal or state Superfund cleanup. EPA agreed that a limited no-action assurance was merited because of the environmental benefits that would be achieved by PINE's proposed program. The assurance provides that PINE will not be subject to enforcement under Sections 106 or 107 of CERCLA (or under state law) as a result of the proposed P2 program. EPA hopes the program will serve as a model for other small quantity hazardous waste generators.

Roadmap To Finding P2 Settlement Precedents

The February 1994 MIT study discussed above concluded that, in order to facilitate P2 settlements, it is essential that both government case managers and firms have access to P2 technical and policy information early in the settlement-negotiating process.

PPIC and PIES

Perhaps in recognition of this critical need, Section 6606 of the PPA mandates that EPA establish a clearinghouse and data base of P2 management, technical, and operational information. Consistent with that mandate, EPA established the Pollution Prevention Information Clearinghouse (PPIC) and the Pollution Prevention Information Exchange System (PIES) bulletin board. In addition, on February 25, 1991, then-EPA Assistant Administrator for Enforcement Jim Strock directed that the EPA Regions submit summaries of all P2 settlements to the PPIC Hotline.[8]

The promised PPIC settlement bank never materialized, however, and according to EPA staff only three or four summaries of P2 settlements were ever submitted to PPIC. Moreover, despite an investment of $1 million to $1.5 million annually, the contractor-run

PIES bulletin board closed in December 1993.[9]

Although several studies and reports have been published on the uses of P2 in enforcement, EPA has not yet begun to systematically collect comprehensive data on P2 settlements for all media. As a result, there is currently no central source of information available for the regulated community to explore P2 settlement precedents.[10] There are, however, some more informal sources that interested parties can turn to for P2 settlement precedents.

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The P2 BBS

In 1993, EPA's Office of Air and Radiation responded to the void in enforcement-related information resources by establishing a P2 bulletin board system (P2 BBS) on the Air Office's Technology Transfer Network (TTN). Despite a modest budget of $60,000, this may be one of the richest sources of information about P2 settlements. According to the P2 BBS manager, Louis Paley, the system is upgraded quarterly and now contains some 607 data files. The P2 BBS can be accessed using a personal computer with a modem and telecommunications software, and it has interactive capabilities. Documents on the P2 BBS can be downloaded, and messages with comments or questions may be sent to the system by E-mail. If you run into trouble using the BBS, you can call TTN's voice helpline at (919) 541-5384 or Louis Paley at (703) 308-8723.

In contrast to PIES, which has been described as "a mansion with no furniture," the P2 BBS can be aptly characterized as "all yack and no shack." The main problem is finding relevant information. Whereas the PIES system includes sophisticated word search capabilities, finding a P2 settlement on the P2 BBS can require time-consuming explorations. P2 BBS documents are organized in multiple "file areas" under six document categories.[11] In searching through the "Case Studies" document category, for example, one finds that the term "Case Studies" is not synonymous with enforcement cases, consent decrees, or settlements, and that the category contains few if any documents specifically related to enforcement. The "Case Studies" category is, however, rich with technical information on successful P2 applications in a variety of industries. (See the box on p. 397 for an example of a case study from P2 BBS.)

Other categories of the P2 BBS do, however, include documents related to enforcement policies and P2 settlements. For example, "Regulatory Information" includes enforcement documents under the following file areas: Alternative Payments, Civil Penalty, Enforcement, EPA Suits, Executive Order, Guidance, Penalty Assessments, Settlement, and Supplemental Environmental Projects. Enforcement documents may also be found in file areas for specific companies, types of facilities (e.g., boilers and furnaces), laws, and EPA Regions.

The P2 BBS includes abstracts and full texts of several EPA enforcement policies. (See the box on p. 398 for an example of a P2 BBS abstract.) It also contains summaries of some 35 to 40 P2 settlements,

Sample P2 BBS Case Study

The file area on "Chesapeake Corporation" gives the following information in files under "Case Studies":

CHESAPEAKE CORPORATION, WEST POINT, VIRGINIA (804) 843-5000.

This kraft paper mill no longer discharges their "black liquor" waste resulting from wood pulp fiber separation to surface waters. Since beginning P2 efforts, they now dehydrate this waste and use wood bark wastes and sawdust to fuel a boiler generating electricity. They are also able to recover molten inorganic chemicals and recycle "black liquor" back into virgin "white liquor" used to separate wood fibers. In addition, gases produced by the paper "digestive" process are used as a fuel substitute for high sulfur coal. Further modifications to concentrate the wastewater treatment solid residues to the BTU energy level of wood have eliminated sludge landfill disposal. The company has also increased the recycling of paper (secondary fiber) from 200 tons per day to 1,000 tons per day. This plant is very active in all areas of waste reduction and reuse, so attributing specific cost savings to specific actions is difficult.

Savings:

Reduced electrical energy purchases

Sales of extra electrical generation capacity to Virginia Power System

Production of steam needed for the pulping process in industrial boilers

Annual operating costs saved $1,000,000 per year

Waste reduction:

Landfill space saved — 390,000 cubic yards per year and increasing

Particulate emissions on recycling alone 1,050 tons per year

Total reduced sulfur 200 tons per year

Virgin trees saved 1,250,000 per year due to recycling

Cross-media transfers in the recycling operation that are causing problems:

Starch glues cause explosive cell growth in the wastewater treatment plant.

Waxes released in the re-pulping of secondary fiber cause operational problems in the paper machines.

Source: "Waste Minimization Practice in a Kraft Paper Mill." Paper presented at Pollution Prevention for the 1990's: A Chemical Engineering Challenge. American Institute of Chemical Engineering.

Note, however, that this description gives no indication as to whether this P2 project is related to an enforcement action.

Sample P2 BBS Abstract

As part of its obligations under a judicial decree (5/7/92), Bethlehem Steel Corp. implemented a SEP calling for installation of new coke oven battery doors.

CITATION:

Region 3 - Bethlehem Steel Corporation SEP. EPA. 1992.

Contact: Peter Rosenberg, EPA/OE (202) 269-8869.

with examples from each of EPA's 10 regional offices. These settlements involve virtually all of the major environmental statutes. The case-specific information provided can be sketchy, however, and finding someone in the lead regional office who can provide more detailed information may be difficult.

P2 enforcement reports

As noted above, OPPTS was the first office to report P2 settlement data. The initial evaluation was conducted in 1992 and focused on the use of SEPs during fiscal years 1991 and 1992, principally in EPCRA Section 313 reporting cases and TSCA cases. The results of the OPPTS study were published in the two OPPTS reports cited above and in "Investigation of Environmentally Beneficial Expenditures for Settlement Agreements" (OPPTS 1992).

These reports include case summaries, evaluations of the effectiveness of SEPs and the types of SEPs that may be especially beneficial to the environment, statistical analyses, and instructions on how to access OPPTS SEP data. The last report also includes a chart showing the proportional share of SEPs by statute (including the CAA, CWA, and RCRA SEPs). The reports do not, however, give case descriptions for P2 SEPs in non-OPPTS programs. Nor do they include any information about cases using P2 as the remedy.

Other helpful sources of information on P2 settlements are EPA's annual Enforcement Accomplishments Reports. These reports summarize the Agency's major enforcement actions. The report published in April 1993 and covering fiscal year 1992 is the first to include Agencywide statistics on P2 settlements. Unfortunately, as previously mentioned, the Agency's most recent Accomplishments Report did not contain a similar analysis of its fiscal year 1993 enforcement record.

Perhaps the most instructive information on EPA's P2 settlement practices is contained in the two 1994 MIT reports mentioned above. These reports include descriptions of the cases MIT surveyed and discuss factors that helped and interfered with the inclusion of P2 conditions in the settlements.

The Technology Innovation and Economics (TIE) Committee of the National Advisory Council for Environmental Policy and Technology (NACEPT), which is chaired by MIT's Nicholas Ashford, has also issued a series of reports and recommendations on the relationship between P2 and enforcement. These include "Permitting and Compliance Policy: Barriers to U.S Environmental Technology Innovation," published in 1991, and "Transforming Environmental Permitting and Compliance Policies to Promote Pollution Prevention: Removing Barriers and Providing Incentives to Foster Technology Innovation, Economic Productivity, and Environmental Protection" (EPA 100-R-93-004, April 1993). The NACEPT reports suggest measures for promoting technology innovation and P2 through EPA enforcement, but do not include case summaries.

EPA offices

Case-specific information on P2 settlements may also be available informally from EPA's Office of Enforcement and Compliance Assurance or from the EPA Regional offices. EPA staff may be reluctant, however, to release case information because of concerns about the inadvertent disclosure of enforcement-sensitive material. ◆

Notes

1. This office was then called the Office of Pesticides and Toxic Substances (OPTS).

2. "Innovations in Compliance and Enforcement: Supplemental Environmental Projects in EPA's Toxics and Pesticides Program — Final Accomplishments Report Fiscal Year 1991/1992 on SEPs in the EPCRA Section 313, TSCA, and FIFRA Enforcement Programs," EPA OPPT/OCM (March 1993).

3. The Report, although dated April 1994, was not actually released until July 29, 1994.

4. The study systematically evaluated ten recent P2 settlements, including nine cases settled with P2 SEPs and one case settled with P2 as the basis for achieving compliance. The cases involved both judicial and administrative actions. See also N.A. Ashford and M.M. Becker, *Encouraging the Use of Pollution Prevention in Enforcement Settlements: A Handbook for EPA Regions* (MIT Center for Technology, Policy and Industrial Development, May 1994).

5. See EPA's "Enforcement Accomplishments Report — FY 1992."

6. This Executive Order is discussed in more detail in this issue's "Washington Watch" column.

7. Although described as a P2 program by EPA, this project appears to be more in the nature of pollution reduction or enhanced waste management.

8. *Interim Policy on the Inclusion of Pollution Prevention and Recycling Provisions in Enforcement Settlements.*

9. This reportedly occurred because the contract vehicle used to fund the system expired. A new contract vehicle was reportedly signed in June 1994, and the PIES system reportedly will be operational soon.

10. Interviews with Mike Stahl, deputy assistant administrator for EPA's Office of Compliance Assurance; with Peter Rosenberg; and with Louis Paley.

11. The document categories are "Case Studies" (266 files); "Regulatory Action" (61 files); "Other Resources" (60 files); "General Documents" (95 files); "Training and Education" (28 files); and "Federal Facilities" (97 files). The P2 BBS also reports news, including a list of P2 contacts, a calendar of events, bulletins, and new additions to the BBS.