



# **Pollution Prevention Through Compliance And Enforcement**

## **A Review Of OPTS Accomplishments**



*Prepared by the*  
**Office of Compliance Monitoring**

**Katherine A. Dawes, Project Manager**



## **Foreword**

This report outlines the accomplishments that the Office of Pesticides and Toxic Substances (OPTS) compliance program has had in expanding its pollution prevention activities through settlement agreements. Over the past two to three years, the OPTS compliance program has been pioneering the settlement of cases which have provisions that require the use of pollution prevention and other innovative environmental management techniques. These settlements allow the Environmental Protection Agency (EPA) to gain environmental benefits which go beyond federal, state and local requirements, and to promote a "pollution prevention ethic" among members of the regulated community. The OPTS compliance program has accomplished this particularly through the enforcement of cases under the Emergency Planning and Community Right-to-Know Act (EPCRA) and the Toxic Substances Control Act (TSCA), as well as under other statutes such as the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA). This report represents the first overview in what will be an ongoing effort of the OPTS program to collect and evaluate these innovative settlement provisions.

As the national program office for the OPTS compliance program, the Office of Compliance Monitoring (OCM) in OPTS has developed this report to: (1) identify the accomplishments of the OPTS program in incorporating pollution prevention into actual cases; (2) share information with all parties (including EPA Regions and Headquarters, States, and the regulated community) about incorporating pollution prevention into settlement agreements; and (3) discuss issues and next steps which need to be addressed to facilitate greater use of pollution prevention methods in case settlements.

Section I presents a brief background of the relationship between the Agency's pollution prevention initiative and the OPTS compliance program. Then Section II gives an overview of OPTS actions through case descriptions of pollution prevention supplemental environmental projects (SEPs) in cases settled during fiscal years 1990 and 1991. Section III summarizes the issues facing the OPTS compliance program in expanding its pollution prevention activities as identified by OPTS/Regional compliance staff. Finally, Section IV outlines the potential next steps for the program to continue to advance pollution prevention. This report was compiled by Katherine A. Dawes, an EPA Management Intern on assignment in the OCM Immediate Office. Regional and Headquarters staff and managers contributed the case descriptions.



Michael M. Stahl, Director  
Office of Compliance Monitoring

## Acronyms

AHERA	Asbestos Hazard and Emergency Response Act
CAFO	Consent Agreement and Final Order
DOJ	Department of Justice
EPA	Environmental Protection Agency
EPCRA	Emergency Planning and Community Right-to-Know Act
FIFRA	Federal Insecticide, Fungicide and Rodenticide Act
FTTS	FIFRA/TSCA Tracking System
OCM	Office of Compliance Monitoring
OE	Office of Enforcement
OPTS	Office of Pesticides and Toxic Substances
PCB.	Polychlorinated Biphenyl
PMN	Premanufacture Notice
POTW	Publicly-Owned Treatment Works
PPA	Pollution Prevention Act
PPO	Pollution Prevention Office
RUPs	Restricted Use Pesticides
SEP	Supplemental Environmental Project
STARS	Strategic Targeted Activities for Results System
TSCA	Toxic Substances Control Act
§	Section

## Table of Contents

<u>Title</u>	<u>Page</u>
<b>Section I</b>	
Background . . . . .	1
<b>Section II</b>	
OPTS Pollution Prevention Accomplishments: Advancing Pollution Prevention in Settlement Agreements . . . . .	5
Pollution Prevention SEPs: Case Descriptions by Regions	
Region I . . . . .	6
Region II . . . . .	7
Region III . . . . .	9
Region IV . . . . .	11
Region V . . . . .	11
Region VI . . . . .	13
Region VII . . . . .	14
Region VIII . . . . .	14
Region IX . . . . .	16
Region X . . . . .	18
Headquarters . . . . .	20
<b>Section III</b>	
Advancing Pollution Prevention in the OPTS Compliance Program . . . . .	23
<b>Section IV</b>	
Next Steps-- What Are They? . . . . .	31
<b>Appendix A</b>	
OPTS Accomplishments: Non-Pollution Prevention SEPs (Case Descriptions)	
Pollution Reduction . . . . .	1
Environmental Restoration . . . . .	5
Environmental Auditing . . . . .	9
Public Awareness . . . . .	12
Other . . . . .	15
<b>Appendix B</b>	
Region I Multi-Media Checklist Pollution Prevention Survey	
<b>Appendix C</b>	
Region IX Supplemental Environmental Project Policy Summary and Matrix	

# Section I

## *Background*

In 1990, Congress passed the *Pollution Prevention Act* (PPA). This Act calls pollution prevention a "national objective" and establishes a hierarchy of environmental management priorities as national policy, whereby (a) pollution should be prevented or reduced at the source whenever feasible; (b) where pollution cannot be prevented it should be recycled in an environmentally safe manner; (c) in the absence of feasible prevention and recycling opportunities, pollution should be treated; and (d) disposal should be used only as a last resort. The EPA, through the Pollution Prevention Office (PPO), formally announced *EPA's Pollution Prevention Strategy* in February 1991. The strategy outlines the Agency's goals for how pollution prevention will be incorporated into EPA's ongoing environmental protection efforts. The overall goal of the strategy is to institutionalize a "pollution prevention ethic" which will ensure that prevention becomes the preferred Agency approach in confronting any environmental problem.

To promote the evolution of a greater pollution prevention ethic, the Office of Enforcement (OE) has issued a policy statement which encourages compliance and enforcement programs to use the settlement process to identify and implement pollution prevention activities consistent with the Agency's overall enforcement approach. The Agency recognizes that a continued strong regulatory and enforcement program is critical to supporting its overall pollution prevention goals by preventing unreasonable risk through compliance assistance, enforcement and outreach activities. Incorporating a pollution prevention ethic within a compliance and enforcement program gives the Agency a powerful tool to help regulated communities in their approach to voluntary compliance.

During the settlement process, the Agency's compliance and enforcement programs have two basic avenues for promoting the pollution prevention ethic within the regulated community. The first avenue is to use settlement conditions to require the respondent/defendant to use pollution prevention methods to redress the original violation and to achieve compliance. In the absence of statutory, regulatory, or permit language, members of the regulated community are free to choose how they will comply. However, once a civil or administrative action has been initiated, the specific means of returning to compliance are subject to mutual agreement between the Agency and the respondent. Therefore, under the mutual agreement process, the Agency can establish pollution prevention compliance methods in place of more traditional end-of-pipe compliance methods used by industries.

The second important avenue available is to include supplemental environmental projects (SEPs), previously termed environmentally beneficial expenditures<sup>1</sup>, in settlement agreements. As part of a settlement agreement, a respondent/defendant will agree to conduct a project (or projects) which reduces risks posed to human health and the environment beyond which would be required by law (federal, State, or local). Unlike the settlement conditions described above, SEPs would not be designed to redress the original violations. Successful implementation of the SEP serves to mitigate the size or gravity component of an assessed penalty. The voluntary and flexible nature of SEPs allow companies to explore any number of options to both mitigate their penalties and benefit the environment-- these options may include traditional, or new and innovative pollution prevention methods.

OE recognizes the unique opportunities SEPs represent in promoting the pollution prevention ethic. In February 1991, OE outlined the Agency SEP guidelines in the memorandum "Policy on the Use of Supplemental Enforcement Projects in EPA Settlements."<sup>2</sup> The memorandum outlines the types of projects which are appropriate for SEPs. These categories reflect the hierarchy of environmental management priorities outlined in the 1990 Pollution Prevention Act, and include pollution prevention projects, as well as what are considered pollution prevention-related projects (such as pollution reduction, environmental restoration, environmental auditing, and public awareness). A summary of SEP categories follows below:

### ***Pollution Prevention Projects***

Pollution prevention projects which substantially reduce or prevent the generation or creation of pollutants through use reduction, or through the application of closed-loop processes. For example, projects may change industrial processes, or substitute different fuels or materials. Projects may also be considered pollution prevention when they substantially reduce the discharge of generated pollutants through innovative recycling technologies, but only if pollutants are kept out the environment in perpetuity.

---

<sup>1</sup> In the past, the Agency has used several terms to describe substantive settlement conditions (i.e. projects or activities) such as "alternative payments," "mitigation projects," and "environmentally beneficial expenditures." The latest official term in this evolution is supplemental environmental projects (SEPs), although environmentally beneficial expenditures or (EBEs), is still a term widely used throughout the Agency.

<sup>2</sup> "Policy on the Use of Supplemental Enforcement Projects in EPA Settlements" (issued February 12, 1991), amends GM-22, "A Framework for Statute-Specific Approaches to Penalty Assessments: Implementing EPA's Policy on Civil Penalties" (issued February 16, 1984), by replacing and superseding the section on "Alternative Payments."

### ***Pollution Reduction Projects***

Pollution reduction projects go substantially beyond compliance with discharge limitations to further reduce the amount of pollution that would otherwise be discharged into the environment. For example, projects that reduce the discharge of pollutants through more effective end-of-pipe or stack removal technologies; through improved operation and maintenance; and through recycling of residuals at the end of the pipe. Pollution reduction projects may also encompass an "accelerated compliance project."

### ***Environmental Restoration Projects***

Environmental restoration projects not only repair the damage done to the environment because of the violation, but go beyond repair to enhance the environment in the vicinity of the violating facility.

### ***Environmental Auditing Projects***

Environmental auditing projects require the defendant/respondent to undertake additional auditing practices designed to correct deficiencies in existing management and/or environmental practices. The audits would target practices that appear to be contributing to recurring or potential violations at the violating facility or other facilities owned and operated by the defendant/respondent.

### ***Enforcement-Related Environmental Public Awareness Projects***

Enforcement-related environmental public awareness projects include developing publications, broadcasts, or seminars which underscore, for the regulated community, the importance of complying with environmental laws to disseminate technical information about the means of complying with environmental laws. For example, projects which sponsor industry-wide seminars directly related to correcting widespread or prevalent violations within an industry.

The OPTS compliance program has had a tradition of actions which have had a significant impact in promoting the pollution prevention ethic-- including actions prior to the formal Agency pollution prevention initiative. For example, enforcement of TSCA, particularly in the PCB (polychlorinated biphenyl) program, has been successful in having violators agree to undertake SEPs to reduce penalties. Projects have included a spectrum of SEPs, including cleanup to higher standards than required under the regulations (i.e.



environmental restoration), and expedited retirement and disposal of PCBs in use (i.e. pollution reduction).

As in other Agency programs, the OPTS compliance program has actively pursued integrating SEPs into its settlement agreements subsequent to the pollution prevention initiative. These cases come under EPCRA, the FIFRA, and TSCA. In fiscal year 1991, OPTS settled a total of 776 cases (332 under TSCA, 179 under EPCRA, and 265 under FIFRA); and of these cases, OPTS closed 168 cases with SEPs representing the full hierarchy of environmental management (87 under TSCA, 65 under EPCRA, and 16 under FIFRA). This report focuses mainly on the SEPs to which the definition of pollution prevention, as established by the PPA and the pollution prevention strategy, can be applied. Section II features examples of the pollution prevention SEPs which OPTS/Regional compliance staff have developed and implemented in fiscal years 1990 and 1991. This report also describes SEPs which represent the non-pollution prevention categories. Appendix A features descriptions of cases with non-pollution prevention SEPs.

## **Section II**

### ***OPTS Pollution Prevention Accomplishments: Advancing Pollution Prevention in Settlement Agreements***

This section features summaries of cases with pollution prevention SEPs. The following case descriptions are based on information submitted by OCM and Regional Toxics/Pesticides Enforcement staff. These SEPs represent "highlights" from cases settled in fiscal years 1990 and 1991, and should not be considered a statistically representative sample of the pollution prevention SEPs. The size and scope of these SEP agreements have a wide range, such as project costs of \$25,000 to the company to costs of over \$500,000. Certainly, these projects represent the OPTS program's ability to leverage enforcement actions into significant environmental benefits. These benefits are both direct- (i.e., pounds of toxic materials not generated as waste), and indirect (i.e., encouraging companies to "think pollution prevention" in place of thinking end-of-pipe controls).

In addition to these projects, Regions and Headquarters have negotiated SEPs which fit the non-pollution prevention categories in the environmental management hierarchy. These projects, like the pollution prevention projects, also represent significant environmental benefits. These benefits include: getting out information to the rest of industry related to compliance and pollution prevention; increasing and improving assessments of chemical use and disposal; bringing environmental benefits to communities which need technical assistance. These SEPs have come under TSCA (especially for PCBs), the Asbestos Hazard Emergency Response Act (AHERA), EPCRA and FIFRA. The OPTS program continues to recognize and embrace the contributions these SEPs make to the Agency's goal of reducing risks to the environment and human health. [A description of cases with non-pollution prevention SEPs is provided in Appendix A.]

## ***Pollution Prevention SEPs: Case Descriptions by EPA Region***

### **Region I**

#### ***Balzers***

Balzers, Inc. of Hudson, New Hampshire agreed to pay a final penalty of \$8,500 for violation of EPCRA §313. The company manufactures high technology vacuum equipment for film processing and cryogenic equipment of laboratory applications at its Hudson facility. EPA's complaint alleged that the company failed to report its emissions of freon-113 to EPA and the state of New Hampshire in calendar year 1987; it proposed a \$17,000 penalty.

In addition to paying the penalty, the company agreed to undertake a pollution prevention project which requires a process change and material substitution in multiple facilities. It will replace freon-based cleaning systems in its Hudson, New Hampshire and Fremont, California, facilities with a water-based system that will not result in emissions of toxic chemicals into the environment. The project will cost Balzers an estimated \$56,000.

#### ***Seekonk Lace***

Seekonk Lace Company of Barrington, Rhode Island agreed to pay a final penalty of \$15,000 for violation of EPCRA §313. EPA's complaint alleged that the company failed to report its emissions of acetone to EPA and to the State of Rhode Island in calendar year 1987; it proposed a \$25,000 penalty.

In addition to paying the penalty, the company, which manufactures lace, agreed to undertake a pollution prevention project which requires a change in its industrial process. It will eliminate its use of more than 250,000 pounds of acetone per year by instituting a mechanical method to separate nylon and acetate threads. The project cost Seekonk an estimated \$95,000.

#### ***Madico, Inc.***

Madico, Inc., of Woburn, Massachusetts agreed to pay a final penalty of \$30,000 for violation of EPCRA §313. EPA's complaint alleged that the company failed to report its emissions of toluene and methyl ethyl ketone in calendar year 1987; it proposed a penalty of \$50,000.

In addition to paying the penalty, the company, which primarily manufactures solar control window film, agreed to undertake a pollution prevention project requiring a change in industrial process and material substitution. The project will reduce Madico's use of toluene by 90% and methyl ethyl ketone by 50% by using ultraviolet and infrared radiation to aid in the application of scratch-resistant coatings to polyester film. The project will cost the company an estimated \$49,000.

### ***Markham***

Markham Corp. of Keene, New Hampshire agreed to pay a final penalty of \$33,000 for violations of PCB regulations. EPA's complaint alleged an unauthorized use of a PCB transformer and failure to maintain adequate records; it proposed a penalty of \$76,000.

In addition to paying the penalty, Markham agreed to undertake a series of environmental projects. The company agreed to remove a PCB transformer from its facility (an environmental remediation project). It also agreed to conduct pollution prevention projects which require closed-loop recycling and material substitution. It planned to institute a cleaning solvent recovery system and to eliminate the use of heavy metals in the pigments found in the ink used to label components that the company manufactures. This company disposes of 20,000 gallons of methyl ethyl ketone yearly, and the projects will reduce this by 75%. The company also uses 3,000 pounds of lead/cadmium pigment yearly which will be replaced with a non-heavy metal substitute. These projects were estimated to have capital costs of \$175,000.

## **Region II**

### ***Fairfield Textiles Corporation***

Fairfield Textiles Corporation of Fairfield, New Jersey, agreed to pay a final penalty of \$13,000 for violation of EPCRA §313. EPA's complaint alleged failure to report for use of tetrachloroethylene in 1987 and 1988; it proposed a penalty of \$34,000.

In addition to paying the penalty, the company agreed to undertake a pollution prevention project which required a change in industrial process. The company

purchased special washers and "tumblers" to be used in lieu of dry cleaning. This equipment uses the tetrachloroethylene much more efficiently. For example, although the facility's 1990 production is almost double that of 1985, the facility used 141,440 pounds of tetrachloroethylene, which is less than half the amount of tetrachloroethylene it used in 1985 (332,000 pounds). The cost to the company for the project was approximately \$12,450,000. The SEP allowed the penalty to be reduced by \$6,500.

### ***Northern Plastics***

Northern Plastics Corporation agreed to pay a final penalty of \$2,500 for violations of EPCRA §313. EPA's complaint alleged failure to report for acetone use during the 1987 reporting year. The proposed penalty was \$17,000; however, Northern demonstrated financial hardship, which allowed the penalty to be mitigated \$5,000.

In addition to paying the penalty, the company agreed to undertake a pollution prevention project which required a change in industrial process. The company agreed to install an acetone recovery system which will substantially reduce its acetone usage. It will also result in reducing emissions (pollution reduction). The cost to the company for the project was \$26,500. The SEP allowed the penalty to be reduced by \$1,250.

### ***C. H. Thompson, Inc.***

C.H. Thompson, Inc. agreed to pay a final penalty of \$2,500 for violation of EPCRA §313. EPA's complaint proposed a penalty of \$5,000.

In addition to paying the penalty, the company agreed to undertake a pollution prevention project requiring closed-looped recycling. It agreed to install a thinner recycling unit to recapture toluene and methyl ethyl ketone. The installation of the unit reduces the amount of thinner disposed of by approximately 80 gallons per month. The cost of the SEP to the company was \$4,995, and added to the cost of the SEP there is a monthly maintenance fee of \$259 bringing the total cost to \$6,220 spent in maintenance over the past two years. This is an on-going SEP with no specific date of completion. The SEP allowed the penalty to be reduced by \$1,250.

## ***Itran Corporation***

Itran Corporation, agreed to pay a final penalty of \$2,500 for violation of EPCRA §313. EPA's complaint proposed a penalty of \$5,000.

In addition to paying the penalty, the company agreed to undertake a pollution prevention project which required material substitution. The company installed a liquid rubber removal system which allowed partially substituted liquid nitrogen for methylene chloride in their process. The cost of the project to the company was \$5,171. The SEP allowed the penalty to be mitigated by \$2,500.

## **Region III**

### ***Murata Erie North America***

Murata Erie North America of State College, Pennsylvania, agreed to pay a final penalty of \$30,500 for violations of EPCRA §313. EPA's complaint alleged a failure to report during the reporting year of 1988; it proposed a penalty of \$85,000.

In addition to paying a final penalty, Murata agreed to undertake two environmental projects-- a pollution reduction project which will reduce the discharge of pollutants through more effective stack removal technologies, and a prevention project which will reduce and replace pollutants through a change in industrial processes and material substitution. The pollution reduction project is to install an exhaust scrubber system on the facilities breakout ovens; this project will cost the company \$124,000 for a penalty reduction of \$31,000. The pollution prevention project will eliminate the use of freon as a drying agent in the plating of ceramic capacitors by replacing it with water, and will replace the 1,1,1-trichloroethane, freon, toluene and xylene used in the vapor degreasers and dip tanks for washing and cleaning soldered parts with a water based solvent. This project will cost the company \$74,000 for a penalty reduction of \$14,800.

### ***Johnson Matthey***

Johnson Matthey of West Chester, Pennsylvania, agreed to pay a final penalty of \$11,000 for a violation of EPCRA §313. EPA's complaint alleged failure to report during the reporting year of 1987; it proposed a penalty of \$34,000.

In addition to paying the penalty, the company agreed to undertake a series of pollution prevention projects which required material substitution and a change in industrial process. The first project required replacing the degreaser in the fabricated gauze production area, to reduce 1,1,1-trichloroethylene by 1200 pounds a year, a 10% reduction (cost to the company-- \$52,000). The second project required upgrading cooling medium in still room to reduce 1,1,1,-trichloroethylene by 1200 pounds per year, a 10% reduction (cost to the company-- \$8,000). The third project required replacing acid stripping lines in the depleting operation, to reduce nitric acid by 4000 pounds per year, 70% reduction (cost to the company-- \$14,000). Finally, the fourth project required upgrading the wet scrubber in the acid room, to reduce hydrochloric acid by 250 pounds per year, a 50% reduction (cost to the company-- \$27,000).

### ***Falls Manufacturing Company***

Falls Manufacturing Company agreed to pay a final penalty of \$12,000 for 3 counts EPCRA §313 violations. EPA's complaint alleged failure to report during the reporting year 1988; it proposed a penalty of \$51,000.

In addition to paying the penalty, the company agreed to undertake a pollution prevention project which required a change in industrial process. The company modified of the washing and priming process, which would eliminate the use, and therefore discharge, of xylene in the process of priming fabricated parts. The cost of this modification to the company was \$384,610. The SEP allowed the proposed penalty to be mitigated by \$39,000.

## Region IV

Note: At the time of print, Region IV had two major cases pending with settlement agreements which included pollution prevention SEPs. One case was related to a series of TSCA violations; the other case was related to a violation of EPCRA §313. The settlement agreements had been agreed to in principle by both EPA and the respondent/defendants.

The company responding to the TSCA violations has submitted a proposal to conduct several environmental projects including pollution prevention and pollution reduction. These projects would involve solvent recycling (pollution prevention), and emission reductions of organic materials (pollution reduction).

The company responding to the EPCRA §313 violation has agreed in principle to undertake a series of environmental projects which would include pollution reduction, environmental remediation and pollution prevention. The environmental remediation project includes removal of a underground tank and the construction of two above-ground waste storage tanks with catch basins. The proposal also had projects which would involve emission reductions (pollution reduction), and a change in industrial process (pollution prevention).

## Region V

### *Magnetec National Electric Coil*

Magnetec National Electric Coil of Columbus, Ohio agreed to pay a final penalty \$9,500 penalty for a violation of EPCRA §313. EPA's complaint alleged failure to report for three chemicals for one year during the reporting year 1988; it proposed a penalty of \$51,000 with a 15% reduction for attitude (\$7,560).

In addition to paying the penalty, the company agreed to undertake a pollution prevention project which will eliminate the use of 12,000 pounds of 1,1,1-trichloroethane per year. The project is to be completed within 200 days of signing the CAFO. The cost to the company will be \$95,850. The SEP allowed the proposed penalty to be reduced by \$34,350.



## ***Display Pack***

Display Pack of Grand Rapids, Michigan agreed to pay a final penalty of \$1,500 for a violation of EPCRA §313. EPA's complaint alleged a reporting violation for one chemical, for one year during the reporting year 1988; the proposed penalty was \$17,000 with a 15% reduction for attitude (\$2,550).

In addition to paying the penalty, the company agreed to undertake a pollution prevention project which requires a change in industrial process and material substitution. The project will eliminate the use of 56,000 pounds of methyl ethyl ketone by replacing the methyl ethyl ketone-containing material with a water-based coating. The project is required to be complete six months from the date of settlement. The equipment cost to the company will be \$313,500. The SEP allowed the proposed penalty to be reduced by \$12,950.

## ***Andrew Corp.***

Andrew Corp. of Orland Park, Illinois agreed to pay a final penalty of \$15,000 for violations of EPCRA §313. EPA's complaint alleged a reporting violation for four chemicals, for one year during the reporting year 1988; the proposed penalty was \$84,000, with a 10% reduction (\$1,700) on one count because of circumstances of use.

In addition to paying the penalty, the company agreed to undertake a pollution prevention project which requires a material substitution. It will eliminate the annual use of 52,000 pounds of 1,1,1-trichloroethane and 15,000 pounds of phosphoric acid, by replacing the current cleaning fluids with water-based cleaners. The cost to the company will be \$190,693. The SEP allowed the proposed penalty to be mitigated by \$67,300.

## **Region VI**

### ***International Extrusion***

International extrusion of Waxahachie, Texas agreed to pay a final penalty of \$10,000 for violations of EPCRA §313. EPA's complaint proposed a penalty of \$101,000.

In addition to paying the penalty, the company agreed to undertake a series of environmental projects (pollution prevention and pollution reduction) which require a changes in industrial process. The projects will lower the emissions of toxic chemicals, reduce emissions to Publicly-Owned Treatment Works (POTW) and disposal to sanitary landfills. The company agreed to install and operate a caustic regeneration unit to reduce the disposal of impure material (pollution reduction), the facility will also be able to withdraw aluminum trihydrate as a saleable product (pollution reduction--recycling) and reduce the consumption of sulfuric acid (pollution prevention). The equipment cost to the company exceeded \$543,951 and will include a reporting requirement on emissions for six months of operation and report on the costs and progress on that time period. EPA allowed a penalty reduction of 90% because the company is expending in excess of \$303,000 on the SEP.

This case has provided the Region with a "guidance case" for structuring SEPs.

### ***Xetel Corporation***

Xetel Corporation of Austin, Texas agreed to pay a final penalty of \$1,700 penalty for violations of EPCRA §313. EPA's complaint proposed a \$17,000 penalty.

In addition to paying the penalty, the company agreed to undertake an pollution prevention project which requires a change in industrial process and material substitution. The project will replace freon degreasers with a semi-aqueous system that will greatly reduce the use of freon-113 at the facility. The company will install the equipment within six months of the effective date of the CAFO, and will measure and report on the effectiveness of the equipment and the consumption of freon for one year after that. The cost to the company will be in excess of \$45,900. EPA reduced the proposed penalty by 90% because the company will expend in excess of \$45,900 on the SEP.

## **Region VII**

### ***Dico Inc.***

Dico Inc. of Des Moines, Iowa agreed to pay a \$12,000 for violations under EPCRA §313. EPA's complaint alleged a failure to report the use of xylene during the reporting year 1988; the proposed penalty was \$18,300 with a 15% reduction for good faith efforts to comply.

In addition to paying the penalty, the company agreed to undertake a series of pollution prevention and pollution reduction projects as part of a company-wide effort to reduce use of EPCRA §313 chemicals which will effect its four facilities located in Iowa, Wisconsin, Georgia and Tennessee. The company agreed to reduce its use of EPCRA chemicals by 50% by 12/31/90 and to continue to reformulate its paints until it reached an additional 25% reduction in EPCRA chemicals by 3/1/91. The cost to the company will be \$76,000 and is to be completed within one year of the CAFO, and reduce its annual EPCRA §313 chemical usage by at least 65,000 pounds. The SEP will offset the proposed penalty by \$6,300.

## **Region VIII**

### ***EIMCO Process Equipment Co., Inc.***

EIMCO Process Equipment Co., Inc. of the Great Salt Lake Region agreed to pay a final penalty of \$51,000 for violations of EPCRA §313. EPA's complaint alleged five counts of failure to report as required during reporting years 1988 and 1989. The proposed penalty was \$85,000; the penalty was reduced because of good attitude on the part of the respondent. One count has been tentatively dropped pending experimental verification.

In addition to paying the penalty, the company agreed to undertake a pollution prevention project which requires a change in industrial processes and material substitution. It will purchase equipment which will reduce the need for volatile solvents in painting operations. The company will completely remove the wet paint spray booth and replace it with a dry paint spray booth. This will significantly reduce the amount of toluene, xylene and other paint related solvents. The cost to the company will be \$52,600.

This is a subsidiary of a large national company and there is the potential for national impact in other subsidiary facilities. This particular case could be given national attention to raise the awareness of metal processing and fabricating companies of a technique to reduce the use of the above chemicals.

### ***Fashion Cabinet Manufacturing Inc.***

Fashion Cabinet Manufacturing Inc., located in the Great Salt Lake Region, agreed to pay a final penalty of \$89,250. EPA's complaint alleged six counts of failure to report during the calendar years 1988 and 1989. The proposed penalty was \$119,000; the penalty was reduced because of good attitude on the part of the respondent. One count has been tentatively dropped pending experimental verification.

In addition to paying the penalty, the company agreed to undertake a pollution prevention project which required a change in industrial process. The company agreed to purchase equipment which will reduce the need for volatile solvents in their operations. The cost to the company will be \$69,300 and is to be completed within one year of the CAFO. This SEP will significantly reduce the amount of toluene, methyl ethyl ketone and methyl isobutyl ketone purchased by the company.

This particular case could be given national attention which would make wood finishing companies aware of a technique to reduce the use of the above chemicals.

### ***Frontier Oil and Refining Company***

Frontier Oil and Refining Company of Cheyenne, Wyoming agreed to pay a final penalty of \$15,000 for violation of EPCRA §313. EPA's complaint alleged one count of failure to report during reporting year 1988. The proposed penalty was \$25,000; the penalty was reduced because of good attitude on the part of the respondent. The chemical (aluminum oxide) was to be delisted which further reduced the penalty by \$6,250.

In addition to paying the penalty, the company agreed to undertake a pollution prevention project which required closed-loop recycling. The company agreed to use coker source reduction method to do internal recycling to minimize sulfur dioxide emissions. This reduction is to be achieved by the recycling of part of the emission gases. The cost to the company will be \$30,000 and is to be completed in one year.

## **Region IX**

### ***Crown Cork and Seal Corp.***

Crown Cork and Seal Corp. agreed to pay a final penalty of \$22,500 for violation of EPCRA §313.

In addition to paying the penalty, the company agreed to undertake a pollution prevention project which requires a change in industrial process. The company agreed to install a regenerative thermal oxidizer system for incineration of volatile organic compounds emitted from the facility, which is located in the Los Angeles basin. The system will eliminate the facility's use of natural gas for volatile organic compound combustion, thereby reducing NOx emission by an estimated ten tons per year and reducing carbon monoxide emissions by an estimated six tons per year. The estimated cost of this system is \$810,000. On the basis of the facility's good faith in negotiations and the project described above, the proposed penalty was reduced approximately 70%.

### ***Sun Land Beef Company***

Sun Land Beef Company agreed to pay a final penalty of \$32,000 for violations of EPCRA §313. EPA's complaint proposed a penalty of \$58,900.

In addition to paying the penalty, the company agreed to undertake a series of environmental projects. One of these projects was a pollution prevention project, which required the company to install an Evaporative Condenser and Ammonia Compressor at a cost of approximately \$88,952. This will reduce its ammonia usage through use of the Evaporative Condenser and Ammonia Compressor. The proposed penalty reduced by \$26,900 because the company agreed to spend approximately \$230,000 on a series of SEPs.

### ***Cypress Semiconductor Corp***

Cypress Semiconductor Corp. agreed to pay a final penalty of \$30,000 for violations EPCRA §313. EPA's complaint alleged failure report use of sodium sulfate for calendar year 1987, and sodium hydroxide, sulfuric acid and phosphoric acid for calendar years 1987 and 1988; it proposed a \$151,000 penalty.

In addition to paying the penalty, the company agreed to a series of pollution prevention projects. Cypress has agreed to (a) reduce its use of acetone and isopropyl alcohol by 30%, (b) reduce its use of sulfuric and nitric acids by 10%, (c) reduce its wastewater discharge by 30%, (d) reduce its demand on the San Jose city water supply by 30%, and (e) reduce its use of freon by 30%. The percentage reductions are to be based in 1990 consumption and production levels. These projects will cost Cypress an estimated \$985,000. The SEP mitigated the proposed penalty from \$100,900 to \$30,000.

### ***Survival Systems International, Inc. (SSI)***

Survival Systems International, Inc. (SSI) agreed to pay a final penalty of \$59,500 for violations of EPCRA §313. EPA's complaint alleged failure to report use of acetone for calendar year 1987, 1988 and 1989; and for styrene for calendar years 1988 and 1989. The proposed penalty was \$85,000.

In addition to paying the penalty, SSI agreed to undertake a pollution prevention project requiring material substitution. First, SSI ran a 90-day pilot of the project at its facility in Valley Center, California and was able to achieve a substantial reduction in its acetone usage. Now, SSI uses a water-based emulsifier, containing no volatile organic compounds, for cleaning, instead of acetone. Acetone is still used at the facility for certain tasks, but in much smaller quantities. SSI has reduced its use of acetone from over 20,000 lbs per year to around 1,000 lbs per year. In recognition of SSI's successful efforts to substantially reduce its use of acetone, the proposed penalty was mitigated by \$25,500.

SSI has also agreed to maintain its present level of acetone usage (a 98% reduction in its historic rate of use) at the Valley Center facility, for the next three years. At its present rate of acetone use, SSI is not required to report under EPCRA §313, therefore, the CAFO also requires SSI to submit annual reports on its acetone usage to EPA, Region IX.

## **Region X**

### ***Barmon Door***

Barmon Door of Lake Stevens, Washington agreed to pay a final penalty of \$6,375 for violation of EPCRA §313. EPA's complaint alleged three counts of failure to report during reporting year 1990. The proposed penalty was \$15,000; per headquarters guidance, the counts in the complaint were treated in settlement as "late reporting" instead of Circumstance Level 1 "non reporting." This action reduced the proposed penalty to \$7,500. There was a 15% penalty reduction for cooperativeness and prompt response to the inspection and complaint.

In addition to paying the penalty, the company agreed to undertake a series of environmental projects. The company agreed to install a sophisticated dust control system to reduce ambient levels of dust (pollution reduction); to install "high output/low pressure" spray equipment which increases paint transfer efficiency and, in turn, reduces chemical use (pollution prevention). The cost to the company will be \$33,643. Reporting requirements include documentation of pollution prevention and reductions of chemical use and release one year after the CAFO. The SEP allowed for a 35% reduction in the penalty.

### ***Tiz's Door Sales***

Tiz's Door Sales of Everett, Washington agreed to pay a final penalty of \$6,000 for violation of EPCRA §313. EPA's complaint alleged nine counts of failure to report during the calendar year 1990. The proposed penalty was \$45,000; the penalty was reduced because, with headquarters guidance, the counts in the complaint were treated in settlement as "late reporting" instead of Circumstance Level 1 "non reporting". This action reduced the proposed penalty to \$17,000. The respondent was given a reduction of 15% for cooperativeness and prompt response to the inspection and complaint.

In addition to paying the penalty, the company agreed to undertake an environmental project by installing doors and control systems for paint shop to contain emissions; installation of new high volume/low pressure spray guns and pumps to reduce chemical use. The cost to the company was \$34,150 and was completed at the time the CAFO was signed. These SEPs allowed deferral of 40% of the assessed penalty.

## ***Coastal Manufacturing***

Coastal manufacturing of Everett, Washington agreed to pay a final penalty of \$3,825 penalty violation of EPCRA §313. EPA's complaint alleged two counts of failure to report during the reporting year 1990. The proposed penalty was \$10,000; the penalty was reduced because, with headquarters guidance, the counts in the complaint were treated in settlement as "late reporting" instead of Circumstance Level 1 "non reporting". This action reduced the proposed penalty to \$4,500. The penalty was further reduced 15% for cooperativeness and prompt response to the inspection and complaint.

In addition to paying the penalty, the company agreed to undertake a pollution prevention project requiring a change in industrial processes. It will install a paint bake oven and spray booth which allows the use of power coat and water based paints which, in turn, reduces amount of solvent used. This company will report on effectiveness of the installed project to be submitted four months following the CAFO. The cost to the company will be \$33,150. The SEP allowed a 35% reduction in the penalty.

## ***Micron Technology***

Micron Technology located in the Boise, Idaho agreed to pay a final penalty of \$107,950 for violations of EPCRA §313. EPA's complaint alleged seven counts of failure to report during the reporting year 1990. The proposed penalty was \$35,000; the penalty was reduced because, with headquarters guidance, the counts in the complaint were treated in settlement as "late reporting" instead of Circumstance Level 1 "non reporting." This action reduced the proposed penalty to \$21,000.

In addition to paying the penalty, the company agreed to undertake a series of environmental projects including a pollution prevention project requiring closed-loop recycling and a pollution reduction project. The project includes an acid recovery system which reduces the use of sulfuric acid by at least 20,000 gallons/year and reduces ammonium sulfate in waste water by at least 30%. Also a distillation system will be installed to recover waste solvents that were previously discarded, reducing the waste disposed by at least 6,000 gallons/year. For the pollution reduction project the company will install a system to collect air emissions for destruction by incineration, thereby reducing solvent emissions by at least 10,000 pounds/year. The cost to the company will be \$21,000. The respondent will complete the projects in exchange for a 35% mitigation of the assessed penalty.



## ***Travis Pattern & Foundry***

Travis Pattern & Foundry of Spokane, Washington agreed to pay a final penalty of \$55,250 violation of EPCRA §313. EPA's complaint alleged seven counts of failure to report during the reporting year 1990. The proposed penalty was \$119,000; the penalty was reduced because, with headquarters guidance, the counts in the complaint were treated in settlement as "late reporting" instead of Circumstance Level 1 "non reporting." Two counts were withdrawn because of new information. This action reduced the proposed penalty to \$65,000. There was also a 15% penalty reduction for cooperativeness and prompt response to the inspection and complaint.

In addition to paying the penalty, the company agreed to undertake an environmental project which will reduce use of solvents and paints, and related emissions and reduce the quantity of waste generated. The company will install a circulating water system to conserve water; install a compactor to reclaim cardboard; convert a trichloroethylene vapor degreaser to a hot caustic tank, thereby eliminating the use of a hazardous solvent. In addition to the above pollution prevention projects, the company will create a full time position of Environmental Compliance Manager to ensure compliance with all environmental regulations. The company is required to report and document costs, and to give a description and evaluation of the completed project within one year of the CAFO. The cost to the company will be \$76,000.

## **Headquarters**

### ***Sherex Polymers, Inc.***

Sherex Polymers Inc., of Lakeland, Florida agreed to pay a final penalty of \$252,000 for violation of TSCA §5. EPA's complaint alleged failure to submit 83 PMNs to EPA at least 90 days prior to manufacturing new chemical substances. The proposed penalty was \$840,000. The penalty was reduced by %0% and 15%, respectively, due to the company's prompt self-confession and prompt response in mitigating the violations.

In addition to paying the penalty, Sherex agreed to undertake a pollution prevention project at its lakeland, Florida facility which requires a change in the industrial process, and of which a result is closed-looped recycling. The project

includes replacing the existing filtration and recycling system. Replacing the existing filter system on a dimer fatty acid production unit results in waste reduction of at least 500,000 pounds of filter cake annually. It will also increase the recovery of reusable fatty acid material by over 250,000 pounds annually (based on current production volumes and laboratory studies of equipment). The cost to the company will exceed \$525,000. The SEP allowed a mitigation of the penalty by \$42,000.

### ***3-V Chemical Corporation***

3-V Chemical Corp. agreed to pay a final penalty of \$30,000 for a series of TSCA violations. EPA's complaint alleged multiple occasions of importing a chemical substance in violation of TSCA §5 and §13, failure to submit a letter of intent to test a substance as required by two separate §4 regulations; failure to supply a notice of export under TSCA §12(b) for an export of a substance that was the subject of a TSCA §4 rule. TSCA §5 and regulations promulgated thereunder require a person intending to manufacture (includes import) a new chemical substance for commercial purposes to submit to EPA a premanufacture notice (PMN) at least 90 days prior to the first such manufacture. After self-disclosing these violations to EPA, the respondent took all steps reasonably expected to mitigate and correct the violations. EPA calculated a gravity based penalty of \$150,000.

In addition to paying the penalty, 3-V has agreed to undertake a series of environmental projects, including a pollution prevention and a pollution reduction project. For the pollution prevention project, the company agreed to purchase and install a closed-loop solvent recycling system that is intended to reduce by more than 50 percent its point-source emissions of an unregulated ozone depleting substance (1,1,1-trichloroethane) and a probable human carcinogen (dichloromethane). For the pollution reduction project, 3-V has agreed to implement a leak and detection program for fugitive emissions of these two solvents, and will report annually on their pollution prevention efforts.

### ***General Electric Company***

General Electric Company agreed to pay a \$75,000 penalty for TSCA violations. EPA's complaint proposed a \$397,800 penalty.

In addition paying the penalty, the company agreed to undertake a series of pollution prevention and pollution reduction projects. These projects are described below.

GEC agreed to install a Phenol Recovery System at its Burkville, Alabama facility Bis-phenol A manufacturing plant in order to recover phenol from wastewater and channel it back into the manufacturing process for reuse (closed-loop recycling). Also, GEC agreed to use its best efforts to phase out the use of solvents containing chlorinated materials (e.g, 1,1,1-trichloroethane) in the maintenance parts washers at its Burkville, Alabama facility. Within 30 days after signing the Consent Agreement and Final Order, and monthly thereafter until the phase out is complete, GEC report to EPA on the phase out (material substitution). Also, GEC agreed to install at its Burkville, Alabama facility, a Methylene Chloride Containment System on the rupture discs which prevent over pressurization of the methylene chloride concentrator in order to collect methylene chloride gas and channel it into a containment vessel for recovery and reuse (closed-loop recycling). Finally, GEC agreed to install a vent condenser cooler at its vent gas recovery rate by substituting chilled water for cooling tower water used by the methylene chloride vent gas condenser (material substitution).

GEC agreed to install a wastewater effluent cooling system in the A Building Resin Production facility at GEC's Washington, West Virginia facility, in order to reduce acrylonitrile fugitive emissions from the wastewater treatment plan. GEC also agreed to install and begin operating Latex Seal Water Strippers in Latex Buildings A and B at GEC's Washington, West Virginia facility in order to reduce fugitive emissions of 1,3-butadiene. Finally, GEC agreed to install a seal-less pump to eliminate seal leaks of methylene chloride at its Burkville, Alabama facility. If the seal less pump is effective in the judgment of GEC in eliminating seal leaks of methylene chloride, the company will install and begin operating two additional seal-less pumps. If the seal-less pump is not effective in the judgment of GEC in eliminating seal leaks of methylene chloride, GEC agreed to evaluate the use of other alternative seal-less pumps, and agreed that if none of the seal-less pumps evaluated are effective, GEC will continue to use cartridge pumps.

## **Section III**

### ***Advancing Pollution Prevention in the OPTS Compliance Program: A Discussion***

This section is based on a series of brief interviews conducted by OCM Immediate Office staff with OPTS/Regional compliance staff in Headquarters and in the Regions. The interviews explored issues that the OPTS compliance program faces when dealing with pollution prevention. These issues include the definition of pollution prevention; the different options available for pollution prevention allowed under the application of EPCRA, TSCA, or FIFRA; the potential pollution prevention activities in settlements for multi-media or cross-program cases; and the future strategic options available to the compliance program for continuing or expanding its pollution prevention activities. These issues will eventually become the focus of OPTS-specific policy and SEP guidance (this guidance is discussed in more detail in Issue 2, below). The summary of issues below are based on analysis of these interviews.

## **ISSUE 1**

### ***OPTS/Regional compliance staff use a relatively broad definition of pollution prevention.***

At this time, OPTS/Regional compliance staff use a relatively broad definition of pollution prevention. In particular, compliance staff do not often draw distinctions between what the Agency (through PPO and OE) defines as a pollution prevention project versus other type of SEPs. Compliance staff feel that most projects of an environmental nature can contribute directly or indirectly to pollution prevention, and therefore they label SEPs which fit the definitions of pollution prevention-related projects (i.e. pollution reduction, environmental restoration, environmental auditing, and public awareness) as "pollution prevention projects."

The tendency of the compliance staff to use a broad definition of pollution prevention projects can be traced to the following:

- o compliance staff have not yet internalized the hierarchy of environmental management projects which distinguishes pollution prevention from pollution prevention-related projects, and they are inexperienced in applying strictly the SEP definitions as outlined by OE;

- o many compliance staff perceive that definitions of pollution prevention vary greatly throughout the Agency, from program to program, and from person to person.

OPTS needs to explore potential steps to promote understanding and acceptance of the environmental management hierarchy among the OPTS/Regional compliance staff. For example, future reporting of SEPs to the FIFRA/TSCA Tracking System (FTTS) database<sup>3</sup> can help familiarize staff with the distinctions between pollution prevention and other types of SEP projects. Another reporting venue will be the future use of the enforcement mini-exchange of the Pollution Prevention Information Exchange System (PIES) pollution prevention case/settlement worksheet developed by OE and PPO staff, in which Headquarters and Regional offices will be asked to prepare for cases negotiated with a pollution prevention settlement credits.

## ISSUE 2

*Compliance staff are concerned about issues related to the application of appropriate "nexus" as outlined in the OE guidelines, and how this effects the flexibility of the OPTS compliance program in developing SEPs.*

OPTS/Regional compliance staff express a general concern that the OE guidelines as outlined by OE in the memorandum, "Policy on the Use of Supplemental Enforcement Projects in EPA Settlements," can limit their flexibility to include SEPs in settlements. The question of appropriate "nexus" or the relationship between the nature of the violation and the environmental benefits to be derived from the supplemental projects, lies at the center of concern. The OE "nexus" policy states that "all supplemental projects must improve the injured environment or reduce the total risk burden posed to public health or the environment by the identified violations."

Compliance Staff identified several different levels of problems associated with the OE guideline application of nexus. Firstly, they feel the guidelines do not fully reflect the flexibility that the statutes of TSCA and EPCRA specifically provide. Secondly, Regional compliance staff feel that the above restriction undermines their flexibility in taking advantage of opportunities to develop creative and innovative SEPs which may not have a direct relationship with the violations in question. They feel that the "nexus" requirement reduces the Agency's potential for gaining environmental benefits outside of current regulations. Thirdly, staff cite concerns with the OE requirement that SEPs have a link to the facility involved in the violations, thus possibly eliminating potential pollution prevention

---

<sup>3</sup> A Draft of FTTS Category Codes for Reporting SEPs (or EBEs) will soon be distributed for comment.

projects which involve other facilities owned and operated by the respondents<sup>4</sup>.

The generic OE policy calls for the individual programs to develop media-specific policies, and OPTS plans to take advantage of this directive. Earlier this year, the Assistant Administrator of OPTS sent a memorandum to the Acting Assistant Administrator for OE, expressing concern that the Agency-wide guidance needed to be tailored to fit the enforcement programs in OPTS. She specifically expressed concern that the policy unnecessarily restricts the use of SEPs in some instances and that the program's compliance flexibility could be compromised by potentially excessive OE concurrence requirements. In light of these concerns, OPTS is assembling a small advisory group with representatives from OPTS, the Regions, and OE, which will develop new guidelines by the second quarter of fiscal year 1992 that specifically reflect the mandates and pollution prevention goals of the OPTS compliance program. These steps will serve to alleviate the concerns and uncertainties expressed by Regional staff. However, under the current status of the OPTS policy on SEPs, compliance staff in the field perceive that the relationship of the OPTS compliance program to the OE guidelines remains largely unresolved, and that this has had an unintended chilling effect on their SEP activity. Regional staff, in particular, feel strongly that OPTS needs to respond as soon as possible to the OE guidelines with an official policy of its own.

### ISSUE 3

*Compliance Staff feel that the three statutory authorities of FIFRA, TSCA and EPCRA represent different potentials and strategic options for promoting the pollution prevention ethic in an enforcement context, including implementing SEPs.*

#### FIFRA

OPTS/Regional compliance staff identify several issues particular to FIFRA, which limit the potential for implementing pollution prevention SEPs, including:

---

<sup>4</sup> This specifically reflects concerns surrounding the "horizontal nexus" requirement when the SEP involves either (a) relief for different media at a given facility or (b) relief for the same medium at different facilities. The restrictions as outlined in the OE SEP policy memorandum raised concerns in OPTS about allowing SEPs at multiple facilities outside of the geographic regions cited in the subject violation. Horizontal nexus does allow for the same SEP to be conducted at multiple facilities. For clarification of the horizontal nexus policy see the OE memorandum "Implementation of Policy on Supplemental Environmental Projects," (issued July 1991).

- (1) the delegation of enforcement authority to the States<sup>5</sup>;
- (2) the low fines under the current statute; and
- (3) the small size of the operations which commit the violations.

For the OPTS compliance program, delegation of enforcement authority to the States under FIFRA is the major barrier to OPTS ability to advance a national agenda for promoting pollution prevention in settlement cases under FIFRA. Compliance staff feel that the main option for addressing this barrier lies in integrating pollution prevention goals into the cooperative enforcement agreements the Agency has with States. This issue should be considered in more depth by the OPTS and Regional senior managers in the upcoming OPTS strategic dialogue.

Under those FIFRA cases settled by EPA, the traditional types of SEPs arranged have been outreach, auditing, and training projects, as well as "accelerated compliance projects" for which violators implement a statutory or regulatory requirement (federal, State or local) ahead of schedule. (The accelerated compliance projects sometimes encompass pollution prevention when they include a pollution phase-out or require a change in process, etc.) However, compliance staff feel that the small fines under FIFRA limits the leverage of the Agency, since pollution prevention SEPs costs are often greater than the penalty. There has been a recent clarification of the FIFRA penalty policy with regard to what constitutes each violation (e.g. each shipment), which has increased the fines under the FIFRA penalty policy. Therefore, under the new penalty policy, compliance staff may be able to increase the inclusion of SEPs in FIFRA settlement agreements. The OPTS compliance program will need to evaluate progress in this area after the new policy has been in place for an appropriate time.

---

<sup>5</sup> The FIFRA compliance/ enforcement program is a State and Federal partnership. Under FIFRA, States have primary use enforcement responsibility; and States generally enforce violations as violations of State law. Through enforcement cooperative agreements, EPA helps fund the State activities necessary to support the enforcement of FIFRA and the State pesticide laws. EPA Headquarters issues national guidance which establishes national enforcement priorities and specifies the activities which the States must complete in exchange for cooperative agreement funds. Regions negotiate the cooperative agreements and are responsible for ensuring that national guidance is followed by the States and Indian Tribes and Territories. Additionally, the States also set their own priorities in cooperation with the Regions and in accordance with priority-setting guidance issued by EPA (Enforcement Four-Year Strategic Plan, OE, February 1991).

Compliance staff also identify the small size of the businesses which often commit FIFRA violations as a barrier to expanding SEP agreements. They explain that small owner/operators often will not, or cannot, spend the extra money required when SEPs are in settlement agreements<sup>6</sup>: instead they opt to pay the fine.

## **TSCA/EPCRA**

Overall, compliance staff feel that both TSCA and EPCRA represent a great potential for developing settlements with both pollution prevention projects to redress violations and achieving compliance, and SEPs to mitigate penalties. For TSCA, they cite the history of such settlements under the PCB and AHERA programs, and in association with cases under the §5 and §8 reporting requirements. For EPCRA, they cite the recently demonstrated potential under the Toxic Release Inventory (TRI) Program (EPCRA §313).

Compliance staff consider the potential for cross-program initiatives under EPCRA, and to some degree TSCA, to be high. In particular, EPCRA leads to cross-program cases because the TRI reporting system covers pollutants that can effect different media covered by the programs of Air, Water, Solid Waste, etc. Compliance staff suggest that OPTS should further explore the potential options for targeting specific pollutants, industrial sectors, and geographic regions for cross-program SEP initiatives.

Particularly in comparison to FIFRA, with TSCA and EPCRA the Agency does not face the barriers of low fines or delegation of authority. However, compliance staff identified barriers to developing and implementing SEPs under these statutes which are generic to the settlement process. The section Issue 4 below describes these barriers in more detail.

## **ISSUE 4**

***The complexity of multi-media initiatives challenges the capacity of the compliance program to promote pollution prevention, and pollution prevention SEPs in multi-media case settlements.***

A few multi-media case settlements involving OPTS have successfully included pollution prevention SEPs. However, although the Agency has clearly designated both multi-media initiatives and pollution prevention as key goals, compliance staff did not identify

---

<sup>6</sup> Regional and Headquarters policies require more than \$1 in project dollars spent for every \$1 in penalty dollars mitigated. Often the ratio policy is 2:1 or 3:1, however the actual ratio used can vary greatly from case to case.



formal Agency guidelines for including pollution prevention in multi-media cases. Many OPTS/Regional compliance staff consider the general informality of including pollution prevention SEPs in multi-media cases to be the best approach in light of what is already an overwhelmingly complex and bureaucratic process. Still, they feel that OPTS, and the Agency, must consider ways to enhance the use of SEPs in multi-media cases without giving the multi-media process another layer of formality. One possibility is to explore how the Regional Case Screening process can be used to assess prospects for pollution prevention SEPs in multi-media cases. Some Regions have taken steps in this direction: for example, Region I multi-media teams have a brief pollution prevention questionnaire for companies as part of its multi-media case checklist [see Appendix B].

## ISSUE 5

***To successfully develop and implement SEPs, OPTS/Regional compliance staff must address multiple administrative, resource, and process barriers which face both the Agency and the violators involved.***

OPTS/Regional compliance staff identified several barriers they face within the Agency in developing SEPs for settlements. These include the following:

- \* lack of expertise in identifying good project proposals;
- \* limited resources for developing SEPs (such as review of project proposals, which can be time consuming and also complicated by lack of expertise);
- \* limited resources for tracking a SEPs progress (which may require negotiators to opt to not accept a SEP proposal because of associated costs to the Agency<sup>7</sup>).

Compliance staff want more guidance to help them identify and develop SEP proposals. They suggest some of the following as the type of guidance they would like to see:

- o regular exchanges of information about innovative approaches to developing and tracking projects among the Regions and between the Regions and Headquarters;

---

<sup>7</sup> For example, Region 6 recently declined a SEP proposal to eliminate a source of waste water within the violating facility. Region 6 staff determined that the expenditure required for EPA to successfully track the progress of the proposal outweighed the value of the project.

- o the distribution of a "list" of high-priority SEPs to be targeted to certain pollutants and industries; this could help Regional staff to focus their efforts and resources and could help OPTS make a national impact in particular areas. (OE and PPO staff expect that the enforcement mini-exchange for pollution prevention case/settlements in the PIES database will help in this area.)

For Agency compliance programs, SEPs: (1) reduce the total penalty dollars; (2) reduce the average final penalty per case; (3) and restrict the number of total cases. This occurs because the resources needed to produce SEPs take resources away from the pursuit of other potential cases. Staff cite this as a major concern particularly because the Agency has no system to account for the resources required for SEP review and tracking. At this time, the Agency's means of measuring enforcement lies in cases issued or referred, and in penalty dollars. Compliance staff, especially in the Regions, call this "bean-counting" problematic when combined with the lack of accounting for SEPs; they find this to be a barrier or disincentive to doing SEPs. Compliance staff recommend that OPTS institutionalize an accounting/tracking system which would allow Regions credit, at least internal if not external to the program, for producing SEPs. However, they also recommend that the system also assist the compliance program in establishing the "value-added" of SEPs to the Agency mission, including assessing trade-offs between environmental benefit and deterrence. For example, when the Agency reports enforcement accomplishments, Congress focuses on EPA's penalty dollars as the litmus test for progress in enforcing legislation, and does not focus on the benefits of SEPs and their effects on penalty dollars. OE plans to discuss with the regional programs how to best establish a process for Regions to document the cost and expected environmental benefits of SEPs, so that this information can be reported on a national basis annually for this program.

Some staff pointed out that they experience a personal benefit when producing SEPs--through applying creative problem-solving and by having a hand in making environmental gains in areas that are normally outside of the regulatory jurisdiction. However, they feel that acknowledging individual staff efforts would further encourage staff to do settlement cases with SEPs. In this regard, staff recommend some of the following: OPTS awards of recognition, or, letters or notes of acknowledgement from OPTS senior management.

Compliance staff also identified barriers they face in encouraging industry violators to participate in SEPs, including:

- \* the lack of expertise of facility operators in the area of pollution prevention, especially among small and mid-sized owner/operators;
- \* the reluctance of owner/operators to be involved with EPA through monitoring requirements;

- \* the sometimes limited resources of owner-operators, such that they will opt to pay the fine because they do not feel that they can afford the 2:1 or 3:1 ratios required for project cost versus penalty dollars mitigated.

To deal with the lack of expertise and reluctance of owner/operators, compliance staff recommend that OPTS consider the distribution of the OPTS SEP policy during the negotiation process, and the distribution of matrices which describe past SEPs to help respondent/defendants focus on potential pollution prevention activities. For example, Region IX currently uses a package which includes both a stated SEP policy and matrix of past SEPs [see Appendix C]. Finally, in reference to the ratios of project cost to penalty dollars, staff have divided opinions: some think that these ratios are appropriate for all circumstances, citing deterrence considerations; other staff feel that under certain circumstances these ratios should not have to apply, particularly if the environmental benefits are significant. OPTS needs to establish a consistent policy in this area.

Although the above focuses on the negotiation process, the inspection process also plays a role in pollution prevention in SEPs. For example, OPTS/Regional staff suggest that inspections could potentially be targeted to reflect identified national OPTS pollution prevention goals. They also suggested that steps could be taken to increase awareness of pollution prevention facility inspections: for example, inspectors could give a pollution prevention questionnaire after inspections to get facility owner/operators to "think pollution prevention." One model for this could be the Region I pollution prevention questionnaire [see Appendix B]. Also, the Office of Waste Programs Enforcement (OWPE) recently developed a Resource Conservation and Recovery Act (RCRA) policy governing the role of inspectors in promoting waste minimization, which could potentially provide helpful analogies. At this time, the PPO is beginning to promote pollution prevention in inspections through its new course "Pollution Prevention for Inspectors."

## **Section IV**

### ***Next Steps-- What Are They?***

As seen by the case descriptions, OPTS compliance staff in Headquarters and the Regions have established a solid record of accomplishment in incorporating a pollution prevention ethic in its activities. The OPTS compliance program has actively used pollution prevention settlement conditions both as part of the requirements to redress a violation and through SEPs. SEPs in particular have a vital part to play within the OPTS "arsenal" of pollution prevention activities by enhancing the potential of traditional compliance and enforcement activities to measurably benefit the environment. In light of OPTS's record, the transfer of PPO (now the Pollution Prevention Division or PPD) to OPTS constitutes a significant opportunity for the OPTS compliance program to expand its leadership in using compliance to advance pollution prevention.

OPTS needs to take some next steps to facilitate and further expand the capabilities of the OPTS compliance program to promote pollution prevention. OPTS/Regional compliance staff identified a series of potential next steps to assist the compliance program to aggressively pursue pollution prevention in settlement agreements. These steps are outlined below:

#### ***Potential Next Steps***

- o Finalize the OPTS policy and guidelines for SEPs in response to the OE guidelines
- o Develop a system of tracking SEPs for accounting/reporting purpose;
  - track the SEPs for environmental benefit, as well as for cost to the respondent/defendant and the Agency so this can be analyzed on an annual basis
- o Facilitate regular exchanges of information about innovative approaches producing SEPs among the Regions and between the Regions and Headquarters;
  - provide examples of specific success stories, with names and contacts
- o Explore in more depth the different opportunities for gaining pollution prevention within the different OPTS statutes as well as other Agency statutes;

- explore options for targeting specific pollutants, industrial sectors, and geographic regions to focus staff on a national agenda
- explore options for targeting specific pollutants, industrial sectors for cross-program initiatives
- consider ways to enhance the use of SEPs in multi-media cases
- o Provide guidance and technical assistance to staff for producing pollution prevention projects;
  - training/checklists for inspectors
  - training/checklists for negotiators and caseworkers
  - model orders or agreements
  - a list of sources for information on effective prevention approaches

***OPTS Accomplishments:***

***Non-Pollution Prevention SEPs (Case Descriptions)***

**Pollution Reduction**

**Region II**

***Dunkirk Ice Cream***

Dunkirk Ice Cream agreed to pay final penalty of \$12,750 for violation TSCA PCB regulations. EPA's complaint proposed a \$34,000 penalty.

In addition to paying the penalty, the company agreed to undertake a pollution reduction project which will reduce the discharge of a pollution beyond the requires of federal State or local law or permit. The company will install a wastewater pretreatment system which will reduce the biological oxygen demand/total solid suspension loading on the Dunkirk POTW. The cost of this project to the company will be \$1,855,000. The SEP allowed the proposed penalty to be mitigated by \$8500.

**Region III**

***Viz Manufacturing Company***

Viz Manufacturing Company, of Philadelphia, PA, agreed to pay final penalty of \$10,000 for EPCRA §313 violations. EPA's complaint alleged failure to report and late reporting during the reporting years of 1988 and 1989; it proposed a \$18,300 penalty.

In addition to paying the penalty, the company agreed to undertake a pollution reduction project. The project required replacing the dust collector with a Day High Performance Jet Baghouse, which would eliminate particles of cuprous chloride, sulfur and graphite from the workplace and will eliminate these substance escape into the environment outside the workplace. The cost of this system to the company was \$32,000. The SEP allowed the proposed penalty to be mitigated by \$4,000.

## **Region IV**

### ***Foam Design, Inc.***

Foam Design, Inc. of Lexington, Kentucky agreed to pay a final penalty of \$14,450 for violation of EPCRA §313. EPA's complaint proposed a \$17,000 penalty.

In addition to paying the penalty, the company agreed to conduct a pollution reduction project. It will recycle foam rubber waste which would otherwise be disposed of at the local landfill. The cost to the company will be \$53,000.

### ***Southern Filter, Inc.***

Southern Filter, Inc. of Birmingham, Alabama agreed to pay final penalty of \$4,250 for violation of EPCRA §313. EPA's complaint proposed a \$10,000 penalty.

In addition to paying the penalty, the company agreed to conduct a pollution reduction project through recycling. It plans to construct a carbon absorption system for the capture of, and significant elimination of, releases of volatile organics (including acetone and styrene). The carbon absorption system shall include a carbon bed scrubber, an exhaust fan, duct and dampers. The cost to the company will be \$41,725.

## **Region V**

### ***Southern Indiana Gas***

Southern Indiana Gas of Evansville, Indiana agreed to pay a final penalty of \$53,000 for violations of TSCA PCB regulations. EPA's complaint alleged the improper use of PCB's in a natural gas distribution system in violation of 40 C.F.R. §761.20(a), during calendar year 1989 and 1990. The proposed penalty was \$429,000. The penalty was mitigated to \$161,000 because of good faith efforts to comply and prompt response.

In addition to paying the penalty, the company agreed to a series of environmental projects. The pollution reduction projects included: to install filters at three regulatory stations; to install of meter filters at affected residences; to implement a five year monitoring program that includes statistical meter sampling and a drip

servicing program; and to remove a PCB transformer from its facility. The total estimated cost to the company was \$175,000. The SEP allowed the proposed penalty to be mitigated by \$212,000.

## **Region VII**

### ***Riverside Fertilizer and Propane, Inc.***

Riverside Fertilizer and Propane, Inc. of Nebraska agreed to pay a final penalty of \$5,000 for violations of FIFRA. EPA's complaint alleged 3 counts of making available for use restricted use pesticides (RUPs) to uncertified persons; it proposed a penalty of \$15,000.

In addition to paying a final penalty, Riverside Fertilizer and Propane, Inc. agreed to do a series of environmental projects, including a pollution reduction project and a public awareness project. For the pollution reduction project the company will construct and put into operation new storage, mixing and rinsate pad facilities. Such facilities will be constructed with secondary containment for all storage areas. The construction of the rinsate pad will reduce the risk of runoff and possible pollution of soil and water in the surrounding area. The estimated cost to the company is \$80,193. For the public awareness project, the company will train its employees at all of its facilities regarding certification requirements for sale of restricted use pesticides. Also, signs have been posted and will remain in place at all of its sales counters stating the certification requirements for sale of RUPs. This training will decrease the use of RUPs by uncertified persons in the company's Ord, Nebraska trade area, and will reduce misuse of RUPs and thus aid in pollution prevention.

### ***Leavenworth County Cooperative Association***

Leavenworth County Cooperative Association of Oskaloosa, Kansas agreed to pay a final penalty of \$750 for violations of FIFRA. EPA's complaint alleged one count of making available for use restricted use pesticides (RUPs) to uncertified persons; it proposed a penalty of \$5,000.

In addition to paying the penalty, the company agreed to undertake a pollution reduction project which resulted in accelerated compliance with Kansas State requirements. The company built a secondary containment structure and rinsate pad for the handling of bulk liquid fertilizer and agricultural products before the Kansas



requirements became effective. This will reduce and/or eliminate potential soil and groundwater contamination. The cost of the project to the company was \$37,240.

### ***Circle B Agri Services, Inc.***

Circle B Agri Services, Inc., of Ansley, Nebraska agreed to pay a final penalty of \$2,000 violation of FIFRA §3. EPA's complaint alleged four counts of making available for use restricted use pesticides (RUPs) to uncertified persons; it proposed a penalty of \$20,000.

In addition to paying the penalty, the company agreed to undertake a pollution reduction project. The agreed to install a diked pesticide rinsate system at the loading/mixing facility. This will reduce the risk of pesticide runoff during pesticide mixing and loading, and during equipment mixing. The estimated cost to the company for this project is \$20,000-\$30,000.

## **Region VIII**

### ***American Gourmet Company***

American Gourmet Company of the Great Salt Lake Region agreed to pay a final penalty of \$25,740 for violations of EPCRA §313. EPA's complaint alleged four counts of failure to report during the reporting years of 1988 and 1989; it proposed a penalty of \$64,350.

In addition to paying the penalty, company agreed to undertake a pollution reduction project. The company agreed to financially participate in the installation of the sewer system which services their facility. The company's participation in the sewer project was substantiated by a statement from the City of Clearfield, Utah. The new sewer system will significantly reduce the formation of hydrogen sulfide in the area. The cost to the company was \$77,211. This SEP allowed the proposed penalty to be mitigated by \$38,610.

## **Region IX**

### ***Trojan Battery Company***

Trojan Battery Company to pay a final penalty of \$26,137 for violations of EPCRA §313. EPA's complaint proposed a penalty of \$235,000. Based on promptness in taking corrective action and the company's cooperation during negotiations, there was a penalty adjustment down to \$196,137.

In addition to paying the final penalty, Trojan agreed to do a series of pollution reduction projects. One project requires installing equipment at its Clark Street facility to eliminate waste water discharges from the production process. The company also agreed to construct and operate, for two years, a lead-acid battery recycling center targeted to serving households in the greater Los Angeles area. The SEP allowed the proposed penalty to be reduced by \$170,000.

## **Environmental Restoration**

## **Region III**

### ***Johnstown Corporation***

Johnstown Corporation of Pennsylvania agreed to pay final penalty of \$15,000 for TSCA PCB regulations. EPA's complaint proposed a \$31,200 penalty.

In addition to paying the penalty, the company agreed to undertake an environmental restoration project. The company will remove PCB contaminated waste beyond the facility. The cost to the company was \$39,000.

### ***University of Pennsylvania***

The University of Pennsylvania agreed to pay a final penalty of \$68,025 for violations of TSCA PCB regulations. EPA's complaint proposed a \$136,050 penalty.

In addition to paying the penalty, the University agreed to an environmental restoration project which required removing PCB transformers from the campus grounds. The cost to the University was \$500,000.

### ***Howard University***

Howard University of the District of Columbia agreed to pay final penalty of \$60,000 for violations of TSCA PCB regulations. EPA's complaint proposed a \$312,000 penalty.

In addition to paying the penalty, the University agreed to undertake and environmental restoration project which required removing PCB transformers for the campus grounds. The cost to the University for the project was \$900,000.

## **Region IV**

### ***Shadow Ridge Associates, Limited Partnership***

Shadow Ridge Associates, Limited Partnership of Asheville, North Carolina, agreed to pay a final penalty of \$4,000 for violations of TSCA PCB requirements. EPA's complaint proposed a \$17,500 penalty.

In addition to paying the penalty, the company agreed to an environmental restoration project which required clean-up of PCBs in the soil surrounding the facility. This remediation project included a sampling plan and analyses, and was to be complete within 90 days of the date the Consent Agreement and Final Order was signed.

## **Region VI**

### ***Southwestern Portland Cement***

Southwestern Portland Cement of Odessa, TX, agreed to a pay final penalty of \$2,000 for violation of TSCA PCB regulations. EPA's complaint proposed a penalty of \$22,000.

In addition to paying the penalty, the company agreed to undertake an environmental restoration project. It removed and disposed of the PCB transformers used at the facility, and replaced these units with non-PCB transformers, thereby eliminating the need for PCB spill oversight by EPA and the Texas Water Commission. This project cost the company \$88,000.

### ***Goodyear Tire & Rubber***

Goodyear Tire & Rubber of Houston, TX, agreed to pay a final penalty of \$13,500 for 5 violations of TSCA PCB regulations. EPA's complaint proposed a penalty of \$135,000.

In addition to paying the penalty, the company agreed to undertake an environmental restoration project. It removed and disposed of 8 PCB transformers at the facility and replace these units with non-PCB transformers. This project cost the company \$405,000.

## **Region VII**

### ***Arapahoe Cooperative Association***

Arapahoe Cooperative Association of Arapahoe Nebraska, agreed to pay a final penalty of \$3,000 for violations of FIFRA. EPA's complaint alleged use of registered pesticides inconsistent with label directions such that through storage, mixing, loading, application, or disposal of wastes, pesticides entered a nearby creek; it proposed a penalty of \$5,000.

In addition to paying the penalty, the company agreed to undertake an environmental restoration project. The company conducted an Initial Site Assessment of the property where its business was located, and submitted copies of the results to Region VII and the State of Nebraska Department of Environmental Control. As a result ongoing remediation activities are continuing at the site. Although the respondent was going out of business and was working with its subsequent property owner during the site assessment process.

## ***Iowa Electric Light and Power Company***

Iowa Electric Light and Power Company, of Marshalltown, Iowa, agreed to pay final penalty of \$25,000 for violations of TSCA PCB regulations. EPA's complaint proposed a \$87,300 penalty.

In addition to paying the penalty, the company agreed to undertake a series of environmental projects, including environmental restoration and public awareness project. The company agreed to commit at least \$200,000 annually until the year of 1994, for the testing, proper removal and disposal of retrofilling for the purpose of reclassification of all PCB transformers and PCB-contaminated transformers located at the company substations. As part of its public awareness activities, the company agreed to conduct safety tours of all its facilities with PCB transformers with the appropriate local fire departments, and to offer PCB regulation training to its primary metered customers. The estimated cost to the company is \$5,000.

## **Region X**

### ***Oregon Steel Mills***

Oregon Steel Mills, of Portland, OR agreed to pay final penalty of \$143,000 for violations of TSCA PCB regulations. EPA's complaint proposed a \$370,000 penalty; a 15% reduction in the penalty was made due to the respondents good faith efforts to comply and cooperative attitude in reaching settlement.

In addition to paying the penalty, the company agreed to undertake an environmental restoration project. The company will start the early disposal of PCB transformers at the facility, which is scheduled for completion by 1993. This project will include the disposal of ten PCB or PCB-contaminated transformers, and three transformers will be retro-filled and reclassified to non-PCB status. The projected cost to the company is at least \$286,000. The SEP allowed for a \$143,000 mitigation in the penalty.

### ***Kaiser Aluminum and Chemical Corporation***

Kaiser Aluminum and Chemical Corporation of Spokane, WA agreed to pay final penalty of \$15,300 for violation of TSCA PCB regulations. EPA's complaint proposed a \$62,000 penalty; a 15% reduction in the penalty was made due to the

respondents good faith efforts to comply and cooperative attitude in reaching settlement.

In addition to paying the penalty, the company agreed to undertake an environmental restoration project. The company will start early disposal activity for PCB Transformers at the facility. The projected cost to the company is at least \$30,600. The SEP allowed for a \$15,300 mitigation in the penalty.

## **Headquarters**

### ***Eastman Kodak***

Eastman Kodak agreed to pay final penalty of \$125,000 for violations of TSCA §5. EPA's complaint alleged the manufacture of four chemicals prior to chemicals being listed on the TSCA Inventory; it proposed a \$2,520,000 penalty.

In addition to paying the penalty, the company to agreed to undertake an environmental restoration project. The company's Eastman Chemical Division agreed to remove and destroy 36 PCB-filled transformers and 11 capacitors, which will result in the destruction of more that 14,000 gallons of PCB fluid. The cost to the company for this project was \$1,188,000.

## **Environmental Auditing**

## **Region II**

### ***PR Electric Power Authority***

PR Electric Power Authority, agreed to pay a final penalty of \$32,850 for PCB violations. EPA's complaint proposed a \$73,000 penalty.

In addition to paying the penalty, the company agreed to undertake an environmental auditing/environmental restoration project. The project requires testing all the distribution transformers in its system to determine which of the transformers are PCB, PCB-contaminated or non-PCB. The company expects the testing and analysis of the distribution transformers to be completed by January 2000. The

company estimates that approximately 10% of the distribution transformers will be tested each year until completion of the program. Eventually, the data will be used to initiate removal/disposal or reclassification of transformers.

### ***Village of Freeport***

The Village of Freeport agreed to pay final penalty of \$18,000 for TSCA PCB violations. EPA's complaint proposed a \$15,750 penalty.

In addition to paying the penalty, the company agreed to an environmental auditing. The company will perform testing over the next three years of all its transformers (1700) to determine which contain PCB's above 50 part per million.

## **Region V**

### ***Wehner Construction***

Wehner Construction agreed to pay final penalty of \$3,600 for violations of AHERA. EPA's complaint alleged a failure to inspect school building for suspected asbestos containing materials; it proposed a \$25,000 penalty.

In addition to paying the penalty, the company agreed to undertake an environmental auditing/public awareness project. The company agreed do \$6,000 dollars worth of free asbestos inspections for needy families thorough the "Habitat" for Humanity Project". This program allows for needy families who otherwise would be unable to conduct inspections for asbestos in their homes to become aware of any risk to asbestos exposure.

## **Region VII**

### ***Farmers Cooperative Association***

Farmers Cooperative Association of South Sioux City, Nebraska, agreed to pay a final penalty of \$3,000 for a violation of FIFRA §12. EPA's complaint proposed a penalty of \$5,000.

In addition to paying the penalty, the company agreed to undertake a series of environmental projects including an auditing project and enforcement-related environmental public awareness projects. The company audited its facility, which resulted in the upgrade and modification of the recordkeeping system to include a provision for current information on certified pesticide applicators. For its public awareness projects the company agreed to have published in the local newspaper an advertisement or article dealing with proper purchasing, handling and use of restricted use pesticides, and to circulate literature to its customers. The company also agreed to implement a training program for its employees involving proper safe handling of pesticides.

## **Region IX**

### ***Montgomery Ward Company***

Montgomery Ward Company agreed to pay final penalty of \$10,000 for four counts of violations of TSCA PCB regulations. EPA's complaint proposed a \$50,000 penalty.

In addition to paying the penalty, the company agreed to undertake an environmental auditing/environmental restoration project. The company agreed to conduct an audits at the 400 nationwide locations for the presence of PCB transformers, and then to remove and dispose of all company owned PCB and PCB contaminated electrical equipment within one year, by October 1991. The estimated cost of these activities to the company was \$900,000.

## **Headquarters**

### ***P.D. George***

P.D. George Settlement agreed to pay a final penalty of \$527,850 for violations of TSCA §5 PMN requirements. EPA's complaint proposed a penalty was \$1.9 million.

In addition to paying a final penalty, P.D. George agreed to undertake an environmental auditing and environmental restoration. The company agreed to conduct §5 and §8 compliance audit, and to excavate and incinerate of buried drums of paint wastes and resins.



## ***H.B. Fuller***

H.B. Fuller agreed to pay a final penalty of \$225,000 for a violation of TSCA §5. EPA's complaint proposed a \$1,427,000 penalty.

In addition to paying the penalty, the company agreed to undertake a series of environmental projects, including environmental auditing and enforcement related public awareness projects. The environmental auditing activities include conducting environmental audits of 57 facilities, and developing a TSCA Compliance Plan and developing computer software related to TSCA compliance and retrieval of information from the TSCA public inventory database. The public awareness activities include producing a TSCA compliance Manual and video; conducting TSCA training for 205 employees; and hosting EPCRA Compliance Seminars for customers in at least 8 of the 10 EPA Regions. The cost to the company will be \$800,000.

## **Public Awareness**

### **Region III**

#### ***Electroplate-Rite, Inc.***

Electroplate-Rite, Inc., of Dublin, VA, agreed to pay a final penalty of \$23,000 for violations of EPCRA §313. EPA's complaint alleged six counts of non-reporting during the reporting years of 1987 and 1988; it proposed a penalty of \$30,000.

In addition to paying the penalty, the company agreed to undertake an enforcement -related public awareness project. The project was a one-half day seminar for the electroplating industry on the subject of complying with the requirements of EPCRA. Total cost of the seminar to the company was \$6,505. The SEP allowed for a \$3,200 mitigation in the penalty.

## **Region V**

### ***Morehead State University***

Morehead State University, of Morehead, Kentucky, agreed to pay a final penalty of \$45,000 for violation of TSCA PCB requirements. EPA's complaint proposed a \$169,000 penalty.

In addition to paying the penalty, the company agreed to an environmental public awareness project specifically directed to other organizations in its industry (higher education). The project was an outreach PCB program to educate and train physical plant directors at universities and colleges located in Kentucky.

## **Region VII**

### ***Prairie Vu Enterprises, Inc.***

Prairie Vu Enterprises Inc. of Bethany, Missouri, agreed to pay final penalty of \$4,427 for violations of FIFRA. EPA's complaint alleged six counts of making available for use restricted use pesticides (RUPs) to uncertified persons; it proposed a penalty of \$30,000. The respondent submitted reliable financial data which revealed respondent was almost insolvent and had negative returned earnings and was thus unable to pay the proposed penalty in full.

In addition to paying the penalty, the company agreed to undertake an enforcement-related environmental public awareness project. The company agreed to sponsor a seven hour educational seminar on the necessity of complying with FIFRA and the proper use, management, and disposal of household hazardous products. All costs for the teams travel, lodging and materials for the seminar presentation will be paid for by the respondent.

## **Region IX**

### ***Childrens Hospital (Los Angeles)***

Childrens Hospital of Los Angeles, California agreed to pay final penalty of \$20,000 for 31 counts of violations of TSCA PCB regulations. EPA's complaint proposed a \$82,000 penalty.

In addition to paying the penalty, the hospital agreed to undertake an enforcement related environmental public awareness project. The hospital agreed to publish an article about PCB regulations in a magazine called Health Facilities Management. The hospital also agreed to distribute a 12 to 15 page bulletin to hospital administrators across the country.

## **Headquarters**

### ***Bedoukian Research Inc.***

Bedoukian Research Inc., agreed to pay a final penalty of \$62,000 for a violation of TSCA.

In addition to paying the penalty, the company agreed to undertake a public awareness project. The company agreed to publish in a widely-circulated trade journal for the fragrance industry an article on TSCA compliance, particularly with regard to TSCA §5 and §8. Bedoukian agreed to submit a draft of the article for EPA review and comment, and then to submit the article to a trade publication.

## **Other**

### **Region VIII**

#### ***Longmont Foods, Inc.***

Longmont Foods, Inc., located in the Colorado Rocky Mountain Front Range Region, agreed to pay a final penalty of \$44,625 for violation of EPCRA §313. EPA's complaint alleged four counts of failure to report during reporting years of 1988 and 1989. The proposed penalty was \$68,000; the penalty was reduced because of good attitude on the part of the respondent. Sodium hydroxide has been delisted which resulted in a penalty reduction; the penalty was also reduced because the company may have miscalculated the quantity of ammonia used.

In addition to paying the penalty, the company agreed to undertake an experimental environmental project for which the respondent is to become an active participant in an experimental biogas project. Rather than send the solid waste from the slaughter house to the landfill, Longmont will to use the solid waste and financially participate in the biogas project. The cost to the company will be \$53,550 over a two year period.

## **APPENDIX B**

**Note:** *The following questionnaire is used in Region I by inspectors as part of the multi-media enforcement checklist. These questions are used to get owner/operators of the facilities "thinking pollution prevention." Also, this questionnaire is to be used by Region I staff as part of new outreach initiative beginning in fiscal year 1992. The initiative will target mainly small- and medium-sized companies which have been identified on a Regional list that outlines the companies by size, type and industrial sector. Region I staff will set aside one to two hours a month to call these companies to quickly review the questionnaire.*

### **Region I**

#### **Multi-media Checklist**

#### **Pollution Prevention Survey**

1. Has the facility ever made process changes specifically to reduce waste generation, or emissions to any media?
2. Has the facility considered substituting non-toxic materials as inputs for products that are currently made with hazardous substances?
3. Has the facility ever determined how much it costs to manage its wastes?
4. Does the facility or company have a formal pollution prevention policy or waste minimization policy?

## **APPENDIX C**

***Note: The following is the SEP policy summary and the SEP matrix distributed by Region IX to respondent/defendants, as part of its activities to encourage companies to propose SEPs.***



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

**REGION IX**

**75 Hawthorne Street  
San Francisco, CA 94105**

**LIST OF POTENTIAL SUPPLEMENTAL ENFORCEMENT PROJECTS**

**General Considerations**

1. The project merit will be judged with respect to the relative benefit to the Respondent v.s. the benefit to the environment in general. A project that helps to improve or protect human health and the environment but has no direct benefit to the Respondent would be preferable to a project that would have some positive environmental effect but would also result in a fiscal benefit for the Respondent, i.e. a project which represents "sound business practice".
2. In all cases, projects that would simply achieve compliance with existing environmental statutes would not be acceptable.
3. The project should have an accurate cost estimate, measurable output or products, and firm commitments on delivery schedule.

**Specific Projects**

1. Accelerated PCB transformer removal or retrofit to non-PCB level for transformers not prohibited by the regulations.
2. Reduction of emissions of a chemical listed on the TRI data base beyond the levels mandated by statute. Projects can include installation of more efficient process equipment, substitution of TRI chemical with a less toxic chemical, etc.
3. Compliance audit of all corporate facilities for a single statute or for multiple statutes. Refer to the July 9, 1986 EPA Policy Statement on Environmental Auditing (51 FR 25004). The audits can be designed to do any or all of the following: verify compliance with environmental requirements, evaluate the effectiveness of environmental management systems already in place, or assess risk from regulated or unregulated materials and practices.
4. Projects remediating adverse public health or environmental consequences (Environmental Restoration Projects). An environmental restoration project is defined as a project that not only repairs the damage done to the environment because of a violation, but which goes beyond repair to enhance the environment

in the vicinity of the violating facility.

5. Regulatory outreach within the corporate structure or elsewhere in the regulated community. Outreach can take the form of developing a training program, training materials or presentation, or publishing an article in an industry trade journal that specifically deals with helping the targeted audience comply with environmental requirements.

5. Purchase of emergency response equipment for the community.

6. Recycling - Initiating recycling of solid or hazardous wastes at a facility. Operating a recycling center for hazardous materials in the community.

7. Performing abatement of a toxic or hazardous situation at a non owned or related facility. An example of this is: a large corporation volunteers to dispose of a PCB transformer owned by a small business that can't afford disposal costs.

8. Volunteering to sponsor chemical testing for one or more of the chemicals on the Office of Toxic Substances "Master Testing List". Several hundred chemicals are expected to be on the final 1991 MTL. About one-third of these will be prioritized for testing to begin within the next year. Approximately 150 of the priority chemicals on the MTL will be tested through a voluntary international effort under the aegis of the Organization for Economic Cooperation and Development (OECD). EPA is encouraging the chemical industry to develop specific proposals for voluntary testing of the remaining chemicals; however, the Agency is committed to using the full authorities of TSCA as necessary to obtain the needed information on MTL chemicals, including the use of consent orders and test rules.

9. Perform community outreach for special EPA initiatives such as the "Lead Initiative". Because lead contamination is one of the most highly toxic chemicals and because the potential for exposure exists in low income and or non-English speaking neighborhoods, there is a clear need for outreach efforts that target these groups.

10. Perform outreach to the community on the potential health risks from exposure to various chemicals commonly encountered at home and in the workplace.



List of Environmentally Beneficial Expenditures  
in TSCA Settlements in Region 9.

RESPONDENT	DOCKET #	CAFO DATE	PROPOSED PENALTY	FINAL PENALTY	PENALTY REDUCT- TION	% REDUCT- TION	PROJECT DESCRIPTION	PROJECT COST	REDUCTION TO EBE RATIO
Reno Salvage		11-08-90	\$25,000	\$12,500	\$12,500	50%	Accelerated removal of PCB transformers	\$2,500	0.20
Montgomery Wards	90-0008	10-05-90	\$50,000	\$10,000	\$40,000	80%	PCB Audit of all Properties Nationwide Accelerated removal of PCB equipment owned nationwide	\$900,000	22.50
Vons Companies, Inc.	90-0021	01-25-91	\$65,668	\$20,000	\$45,668	70%	Replace PCB transformers and retrofill six PCB-contaminated units (\$100,134)  Outreach Program at Fire Dept. (\$3,500)  Purchase Spill Response Trailer for the Fire Dept. (\$5K)  Total Project(Von's Co.)	\$108,634	2.38
Safeway Company	90-0021	12-17-90	\$54,332.00	\$20,000	\$34,332	63%	Accelerated removal of PCB transformers nationwide and retrofill of six PCB-contaminated transformers Preparation of PCB training manual Preparation of PCB video  Total Project (Safeway Co.)	\$250,000	7.28
Pioneer Chlor Alkalai/Stauffer	89-0018	02-27-91	\$282,000.00	\$87,900	\$194,100	69%	Removal and retrofill of PCB transformers at Henderson, NV Facility (\$267,226) Preparation of PCB training manual at cost of approximately (\$10,000)	\$277,226	1.43
Marquardt	87-0058	08-02-90	\$40,000.00	\$10,000	\$30,000	75%	Removal and replacement of 9 PCB transformers	\$328,000	10.93
Syar Indust., Inc.	90-0020	02-26-91	\$34,000.00	\$3,300	\$30,700	90%	Removal, replacement, or retrofill		

of 15 PCB transformers (\$96,518)  
 HazMat Course for 65 truck drivers (\$4,100)  
 PCB Regulation training for 3 transformer  
 testing companies (\$500)

								\$101,118	3.29
Calaveras Cement	91-0004	04-16-91	\$38,000.00	\$13,000	\$25,000	66%	Removal or reclassification of PCB transformers (\$100K)	\$100,000	4.00
Childrens Hosp. L.A.	90-0031	07-08-91	\$82,000.00	\$20,000	\$62,000	76%	Mailing outreach to 40,000 hospitals on PCB regs		
Asarco, Inc.	90-0060	09-30-91	\$65,000.00	\$6,500	\$58,500	90%	Removal and/or retrofill of 13 PCB transformers \$400K)	\$400,000	6.84
L.A. Com Col Dist	90-0030	10-08-91	\$82,000.00	\$4,100	\$77,900	95%	Test transformers(\$3,366) Conduct audit, remove or retrofill transformers(\$738.7K) Establish recycling program at all campuses(\$5000)	\$792,000	10.17
TOTALS			\$818,000	\$207,300	\$610,700	75%		\$3,259,478	5.34

## SUMMARY OF SUPPLEMENTAL ENFORCEMENT PROJECTS

## THE REGION 9 TRI PROGRAM

RESPONDENT	DOCKET #	CAFO DATE	PROPOSED PENALTY	FINAL PENALTY	PENALTY REDUCT- TION	% REDUCT- TION	PROJECT DESCRIPTION	PROJECT COST	REDUCTION TO EBE RATIO
Sunland Beef	90-0018	07-08-91	\$84,000	\$32,000	\$52,000	62%	Install Evaporative and Ammonia Condensers(\$88,952) Install Blood Dryer System(\$150,000) Publish EPCRA Article in Trade Journal(\$1,000)	\$239,952	4.61
Perkin & Elmer	89-0013	08-07-90	\$17,000	\$5,000	\$12,000	71%	Replace Three Degreasers With New Design Equip.(\$30,800) Implement Procedures to Conserve TCE and TFE(\$1,000)	\$31,800	2.65
New Port Corporation	89-0009	01-29-91	\$34,000	\$25,000	\$9,000	26%	Install a Non-Toxic Degreasing System(\$82,000) Establish Recycling for Stainless Steel Shavings(\$75,252)	\$157,252	17.47
Hemet Casting	89-0011	03-12-91	\$17,000.00	\$2,000	\$15,000	88%	Replace 1,1,2 TCE and 1,2,2 TFE with less toxic Solvent	\$17,000.00	1.13
Matchmaster	89-0004	05-07-90	\$42,000.00	\$11,000	\$31,000	74%	Automatic Dispensing Units to Reduce Spills(\$35,700) Purchase Software for Chemical Tracking(\$17,200)	\$52,900.00	
VLSI	90-0017	07-19-91	\$210,000.00	\$28,000	\$182,000	87%	Upgrade acid neutralization System(\$42,500) Various Projects and Additional Env. Staff(\$752,500)	\$795,500	4.37
Cork Crown & Seal	89-0003	08-28-90	\$76,000.00	\$22,500	\$53,500	70%	Install Regenerative Oxidizer System	\$810,000.00	15.14
Buck Knives	91-0010	07-31-91	\$42,000.00	\$24,000	\$18,000	43%	Install Water Wash System(\$4,500)  Install Recycling Still for 1,1,1 TCA(\$2,500)	\$7,000	0.39
Beringer Vineyards	89-0014	01-23-90	\$17,000.00	\$11,000	\$6,000	35%	Publication Notice to Wineries on EPCRA Regs.	\$3,500.00	0.58
Arizona Plating	91-0005	02-28-91	\$68,000.00	\$57,000	\$11,000	16%	Perform 313 Outreach	\$2,500.00	0.23
Trojan Battery	90-0007	05-01-91	\$277,000.00	\$26,137	\$250,863	91%	Install Closed Cycle Water System(\$171,400) Construct and Operate (2 yrs), lead-acid Battery Recycling Center for Community(\$170,000)	\$341,400.00	1.36
TOTALS			\$884,000	\$243,637	\$640,363	60%		\$2,458,804	3.84

# SUMMARY OF SUPPLEMENTAL ENFORCEMENT PROJECTS FOR THE REGION 9 TRI PROGRAM

RESPONDENT	DOCKET #	CAFO DATE	PROPOSED PENALTY	FINAL PENALTY	PENALTY REDUCT- TION	% REDUCT- TION	PROJECT DESCRIPTION	PROJECT COST	REDUCTION TO EBE RATIO
Sunland Beef	90-0018	07-08-91	\$84,000	\$32,000	\$52,000	62%	Install Evaporative and Ammonia Condensers(\$88,952) Install Blood Dryer System(\$150,000) Publish EPCRA Article in Trade Journal(\$1,000)	\$239,952	4.61
Perkin & Elmer	89-0013	08-07-90	\$17,000	\$5,000	\$12,000	71%	Replace Three Degreasers With New Design Equip.(\$30,800) Implement Procedures to Conserve TCE and TFE(\$1,000)	\$31,800	2.65
New Port Corporation	89-0009	01-29-91	\$34,000	\$25,000	\$9,000	26%	Install a Non-Toxic Degreasing System(\$82,000) Establish Recycling for Stainless Steel Shavings(\$75,252)	\$157,252	17.47
Hemet Casting	89-0011	03-12-91	\$17,000.00	\$2,000	\$15,000	88%	Replace 1,1,2 TCE and 1,2,2 TFE with less toxic Solvent	\$17,000.00	1.13
Matchmaster	89-0004	05-07-90	\$42,000.00	\$11,000	\$31,000	74%	Automatic Dispensing Units to Reduce Spills(\$35,700) Purchase Software for Chemical Tracking(\$17,200)	\$52,900.00	
VLSI	90-0017	07-19-91	\$210,000.00	\$28,000	\$182,000	87%	Upgrade acid neutralization System(\$42,500) Various Projects and Additional Env. Staff(\$752,500)	\$795,500	4.37
Cork Crown & Seal	89-0003	08-28-90	\$76,000.00	\$22,500	\$53,500	70%	Install Regenerative Oxidizer System	\$810,000.00	15.14
Buck Knives	91-0010	07-31-91	\$42,000.00	\$24,000	\$18,000	43%	Install Water Wash System(\$4,500)  Install Recycling Still for 1,1,1 TCA(\$2,500)	\$7,000	0.39
Beringer Vineyards	89-0014	01-23-90	\$17,000.00	\$11,000	\$6,000	35%	Publication Notice to Wineries on EPCRA Regs.	\$3,500.00	0.58
Arizona Plating	91-0005	02-28-91	\$68,000.00	\$57,000	\$11,000	16%	Perform 313 Outreach	\$2,500.00	0.23
Trojan Battery	90-0007	05-01-91	\$277,000.00	\$26,137	\$250,863	91%	Install Closed Cycle Water System(\$171,400) Construct and Operate (2 yrs), lead-acid Battery Recycling Center for Community(\$170,000)	\$341,400.00	1.36
TOTALS			\$884,000	\$243,637	\$640,363	60%		\$2,458,804	3.84