



Pollution Prevention Regulatory Integration

Pollution prevention regulatory integration means changing the focus of regulatory activities from controlling waste and emissions after they have been generated to eliminating waste and emissions at the source - before they are generated.

Regulatory integration is the incorporation of pollution prevention (P2) principles into existing core environmental regulatory programs. Pollution prevention regulatory integration means changing the focus of regulatory activities from controlling waste and emissions after they have been generated to eliminating waste and emissions at the source - before they are generated. Pollution prevention is specifically targeted as the environmental goal, with regulatory innovation and flexibility as one way to achieve this goal. Regulatory integration seeks to include P2 as a part of the natural evolution of existing programs, not a new and additional task. Regulatory integration of P2 looks beyond compliance for opportunities to improve environmental protection in traditional media- specific, end-of-pipe regulatory programs.

How can P2 be integrated into a regulatory environmental agency?

Pollution prevention can be integrated into environmental regulatory activities such as permitting, compliance inspections, enforcement settlements, waste management, regulatory development, remediation projects and in an organization's culture.

Permitting

- Issue multimedia permits.
- Expedite reviews of permit modifications for P2 projects.
- Standardize P2 provisions in general permits.

Compliance Inspections

- Conduct facility-wide multimedia compliance inspections.
- Provide P2 technical assistance to inspectors and industry.
- Single-media inspectors refer facilities to the state technical assistance program.

Enforcement Settlements

- Reduce a penalty when a facility implements P2 to achieve compliance.
- Extend a compliance schedule to allow implementation of a P2 technology.
- Negotiate P2 provisions into Supplemental Environmental Projects (SEPs).
- Avoid compliance strategies that transfer pollution to different media.
- Refer non-complying industries to the state technical assistance program.

Waste Management

- Develop hazardous waste minimization plans.
- Emphasize source reduction in the management of solid waste.

Regulatory Development

- Require assessment of life-cycle impacts as part of new rulemaking standards.
- Define industry regulatory requirements such as Best Management Practices (BMPs) and Maximum Achievable Control Technology (MACT) standards, as P2.
- Include multimedia facility planning requirements with measurable goals.

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Remediation Projects

- Develop remedy that prevents cross-media transfer.
- Use deconstruction rather than demolition at brownfields to reuse building materials.
- Restore and enhance existing natural habitat.
- Construct wetlands treatment systems for wastewater and storm water runoff.

Organization

- Establish a multimedia workgroup to seek new ways to meet P2 objectives.
- Develop a strategy for integrating P2 into mainstream activities.
- Revise the organization's mission and vision to include P2.
- Provide P2 training to regulatory staff to effect change in existing core programs.
- Recognize employee achievements via awards and other incentives.
- Integrate P2 into formal agreements with government agencies and public and private partnerships.
- Provide financial incentives when P2 activities are included in the provisions of contracts and grants documents.

Environmental Benefits

Pollution prevention can help Ohio EPA achieve its mission and environmental goals. For the regulated community, pollution prevention is an attractive means to achieve or go beyond compliance, while improving their relations with environmental regulatory agencies. Not only can companies reduce their regulatory burden through pollution prevention, but Ohio EPA benefits through reduced oversight from increased compliance, thus saving valuable time. For example, through the use of pollution prevention SEPs, enforcement settlements can be resolved faster with far-reaching additional environmental benefits.

Examples of Supplemental Environmental Projects in Ohio

AK Steel Middletown Works

AK Steel Middletown Works manufactures steel and related products. The company agreed to pay a \$1,725,260 penalty for air pollution control violations. The company received credit for establishing a new green buffer zone at its coke yard, which is adjacent to many homes. AK Steel spent more than \$107,000, for which it was credited \$62,077. AK Steel also continued to provide bus service to its employees at an estimated cost of \$800,000 per year. Ohio EPA credited the company \$118,000 for this service because busing is not a required control measure after the new controls are installed on the blast furnace and basic oxygen furnace. The company estimated new tree plantings removed four tons of carbon dioxide from the air. Busing reduced fugitive dust emissions by 30 tons per year from plant roads by reducing vehicle traffic.

Rumpke Waste, Inc.

Rumpke Brown County Sanitary Landfill, in Georgetown, agreed to pay a \$475,000 penalty for various solid waste management violations. \$75,000 was paid to Ohio EPA and given to a nonprofit organization to acquire conservation easements in the White Oak Creek watershed. Conservation easements helped this stream meet its designated uses under the Clean Water Act.

S & T Development

S & T Development is developing a housing complex in Athens County. The company agreed to pay a \$25,000 penalty for water pollution control violations. In lieu of paying the full penalty, the company used \$10,000 to purchase conservation easements for stream segments in the West Branch of Margaret Creek. Conservation easements helped this stream meet its designated uses under the Clean Water Act.

Trutec

Trutec operates a heat treatment and electro-deposition plant in Springfield. The company agreed to pay a \$40,000 penalty for hazardous waste management violations. Trutec received a \$15,000 credit for installing a \$214,000 degreaser unit which reduced the amount of hazardous waste generated.

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The Role of Technical Assistance in P2 Regulatory Integration

Informing businesses about more efficient production technologies and encouraging the use of P2 techniques can help business comply with environment regulations.

Technical assistance programs can also provide the technical information needed to integrate P2 into regulatory activities such as enforcement settlements, permitting, compliance inspections and rules. These programs can provide checklists that may aid in incorporating P2 into compliance inspections or provide resources to help cover P2 issues.

The Office of Compliance Assistance and Pollution Prevention (OCAPP) provides compliance and pollution prevention assistance for environmental issues related to air, land and water. Information obtained by the office is not shared with Ohio EPA inspection or enforcement staff. The compliance assistance program helps businesses understand and comply with the environmental regulations that apply to them. The P2 program provides free technical assistance to help Ohio businesses reduce pollution and improve Ohio's environment.

Conclusion

There are many opportunities to incorporate pollution prevention into regulatory environmental programs. We need to recognize the motivation behind pollution prevention regulatory integration. For example, the environmental benefits are greater, businesses may find it easier to comply and regulatory agencies can reduce the time and effort associated with overseeing non-compliant facilities. Integrating pollution prevention into the regulatory structure requires the cooperation of those involved in permitting, inspections, enforcement, compliance assistance and rulemaking. It also requires a commitment to change and a willingness to do things differently — perhaps the biggest challenge for any organization.

References and Resources

- Ohio EPA Office of Compliance Assistance and Pollution Prevention, Pollution Prevention Supplemental Environmental Projects Annual Enforcement Report Information for 2004, January 2005.
- U.S. Environmental Protection Agency Pollution Prevention — epa.gov/p2
- Great Lakes Regional Pollution Prevention Roundtable Topic Hub for Regulatory Integration — glrppr.org/hubs