

# Examples of Pollution Prevention Regulatory Integration in Other States

*“State-based environmental programs have made a unique contribution to pollution prevention through their direct contact with industry and awareness of local needs. Whether they target specific industries for outreach and technical assistance or seek to transform the bureaucracy to accept the pollution prevention ethic, states continue to lead the pollution prevention movement.”*

*from U.S. EPA Pollution Prevention 1997: A National Progress Report*

In recent years, many states have become “champions” for innovation in environmental protection. One of the best examples of this type of innovative excellence is in the area of pollution prevention (P2) regulatory integration. This document describes several recent P2 regulatory integration activities in other states.

## What Is 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. Pollution prevention regulatory integration redirects many of government’s environmental programs from pollution control (collection, treatment and disposal) to pollution prevention (reduction of waste or emissions at the source, and, as a second choice, environmentally sound recycling). Pollution prevention is specifically targeted as the environmental goal, with regulatory innovation and flexibility as one way to achieve this goal. From permitting to enforcement settlements, from rule development to compliance inspections, P2 is becoming an integral part of state environmental protection programs.

### Alabama: P2-Net

P2-Net is the internal pollution prevention roundtable of the Alabama Department of Environmental Management (ADEM). Composed of representatives from ADEM’s regulatory and non-regulatory programs, P2-Net was created to implement the ADEM Pollution Prevention Policy. Specific P2-Net objectives include:



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- assisting ADEM divisions in fulfilling grant efforts regarding P2 efforts;
- facilitating multimedia based P2 training for inspectors and other ADEM personnel; and
- conducting P2 technical seminars for all departmental personnel.

P2-Net has helped to address two challenges to regulatory integration in ADEM:

1) to demonstrate that P2 could be adopted as a priority without diverting scarce resources from existing priorities; and

2) to equip staff level employees with the tools and understanding to implement a voluntary, non-regulatory initiative that extends beyond their specific media focus.

To overcome these challenges, P2-Net was formed, bringing together both management and staff level stakeholders from each of ADEM's major programs. This provided a forum for both management and staff to express needs and voice concerns related to P2 implementation within their program areas.

In less than three years, P2-Net has developed a model P2 strategy and implementation plan, facilitated the P2 training of ADEM inspectors, and published several P2 technical documents.

## Indiana: Rule Development

The Indiana Department of Environmental Management (IDEM), Office of Pollution Prevention and Technical Assistance (OPPTA), reviewed a request by several companies to change an Indiana air emissions rule. The rule provided volatile organic compound (VOC) content limits for coatings as they are applied to metal parts. However, the rule assumed that spray coating would be used and didn't take into account different coating technologies, such as dip coating--the method used by Monaco Coach Corporation (a recreational vehicle manufacturer that initiated the rule change request).

The dip coating process uses less solvent-based paint and therefore fewer toxins than spray coating. However, the dip coating process did not technically meet compliance provisions as written in the existing rule (which was originally based on spray coating technology).

OPPTA reviewed the rule change request and encouraged IDEM's Office of Air Management to make the change to promote pollution prevention and to allow for compliance, while providing flexibility to incorporate P2 methods into the coating process. IDEM recommended that the rule be

changed by replacing the word *applied*, as with spray coating, with *delivered*, which includes all methods. The difference has no impact on spray coating but a dramatic impact on dip coaters.

The Office of Air Management went beyond the original request by Monaco Coach and provided a formula that gives companies regulatory flexibility on VOC content according to their demonstrated transfer efficiency. This approach encourages pollution prevention innovation and has application beyond dip coaters. This rule change is an example of how to encourage the P2 option for compliance by promoting P2 innovation and production efficiency.

## Illinois: P2 Staff Training

In May 1997, the Illinois EPA conducted a series of quality improvement training workshops for field staff at its Chicago regional office. The project was undertaken to increase field staff awareness and understanding of pollution prevention, with the goal of enabling them to assist companies with identifying and taking advantage of P2 opportunities. Trainees learned about the Agency's past and future goals, pollution prevention concepts, and methods for delivering compliance assistance information to regulated businesses. They also "mapped" the oppor-

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tunities, obstacles, and solutions to incorporating P2 into their work. In the final day of training, participants visited a local manufacturing plant to assess P2 activities and identify new opportunities.

The difference between this training and previous P2 training (that failed to result in increased P2) was the follow-up to the training sessions. A cross-media management/employee workgroup was formed so field staff could better understand each other's programs and participate in determining how P2 strategies can be incorporated into field activities. The group selected a geographic area in northern Illinois to focus a multimedia P2 approach. To date, workgroup members are in the process of deciding how to implement several pilot P2 projects in this geographic area.

## Massachusetts: P2 in Automotive Refinishing Regulations

The Massachusetts Department of Environmental Protection (DEP) is incorporating P2 into regulations to solve environmental problems not easily solved through traditional "end-of-pipe" control measures. For example, the DEP had limited control over automotive refinishing facilities' VOC releases. There were a few large facilities with permits for VOC releases, but the majority of facilities

were too small to require a permit. For large facilities that did have permits, the regulatory method was end-of-pipe control. The DEP's Bureau of Waste Prevention (BWP) wanted to limit the release of VOCs at the source rather than attempt to capture VOCs already in the air. Also, BWP lacked an efficient method of controlling the amount of VOCs present in the paints and lacquers used in the refinishing process.

In 1994, the Massachusetts DEP solved this problem by issuing a new regulation that went straight to the source of the VOC emissions. The regulation aimed to reduce the VOC emissions from these facilities by forty percent. The new "P2-based" regulation required the following:

- 1) the use of High Volume Low Pressure (HVLP) spray guns;
- 2) the spray guns must be cleaned in an enclosed device that minimizes solvent evaporation, reuses the solvent when possible, and properly disposes of spent solvent;
- 3) any solvent containers that are not used must be kept sealed at all times to eliminate spillage and evaporation;
- 4) regulation on the amount of VOCs, per unit volume, in various coatings; and

5) training of employees on proper spray gun operation and cleaning practices.

The DEP is now able to regulate all facets of automotive refinishing down to the smallest facility using a P2 approach. Most facilities inspected by the DEP have met the requirements of the regulation. Presently, the DEP is evaluating the effectiveness of the regulation on reducing VOCs.

Several lessons have been learned from this experience. For example, it's important to keep the language in the rule clear and concise so it can be easily understood. Also, input from individuals with working knowledge of the on-site problems--e.g., inspectors, autobody shop owners and operators--must be brought into the regulation's development.

## Texas: Flexible Permit Program

The voluntary Flexible Permit Program was established in 1994 by a Texas Natural Resource Conservation Commission (TNRCC) rule to provide for a single permit that sets plant wide emission caps for pollutants. Emission caps are decreased over a ten year period until the facility achieves emission reductions equivalent to installing Best Available Control Technology equipment on all emission points.

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This rulemaking provides an opportunity to convert existing air permits, standard exemptions, and grandfathered facilities into a single flexible permit. The flexible permit concept establishes plant wide emission caps which provide operational flexibility, and it allows flexibility in how emission reductions are actually achieved. It also enables facilities to phase in control or prevention projects so that costs can be managed over time.

To date, eleven flexible air permits have been issued by TNRCC. The companies involved made binding commitments to reduce 116 million pounds of emissions annually in return for operational flexibility. These same rules allow companies to make permit and equipment changes with reduced processing as long as total emissions at the facility remain below allowable levels. Thus, potential regulatory barriers to P2 are minimized. Presently, TNRCC is seeking additional applicants to participate in the program.

## Virginia: Hazardous Waste Inspections

For the past three years, the Virginia Office of Pollution Prevention (OPP) has been educating hazardous waste inspectors on how to help regulated facilities recognize and implement P2 opportunities. All inspectors attended a

one day workshop on conducting P2 assessments. Next, joint inspections were conducted by having an OPP staff person accompany a hazardous waste inspector on facility visits. The OPP person would conduct a P2 assessment during the compliance inspection to demonstrate how to recognize P2 opportunities.

The project was initiated to assist facilities in their waste minimization/P2 activities and encourage compliance assistance through P2 actions. In the past, inspectors would simply inform facilities of OPP's services. However, many companies did not recognize the benefits of using this free service. Now, the inspectors are trained to recognize specific P2 opportunities and discuss the benefits with the facilities. This approach has increased the number of requests that OPP receives for technical assistance. Several facilities were able to become small quantity generators by

implementing the P2 suggestions recommended by the inspectors or OPP. Currently, all inspectors are receiving training on Internet P2 resources to further assist the companies that they inspect.

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**This is one in a series of documents Ohio EPA has prepared on pollution prevention. For more information, call the Office of Pollution Prevention at (614) 644-3469.**

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