
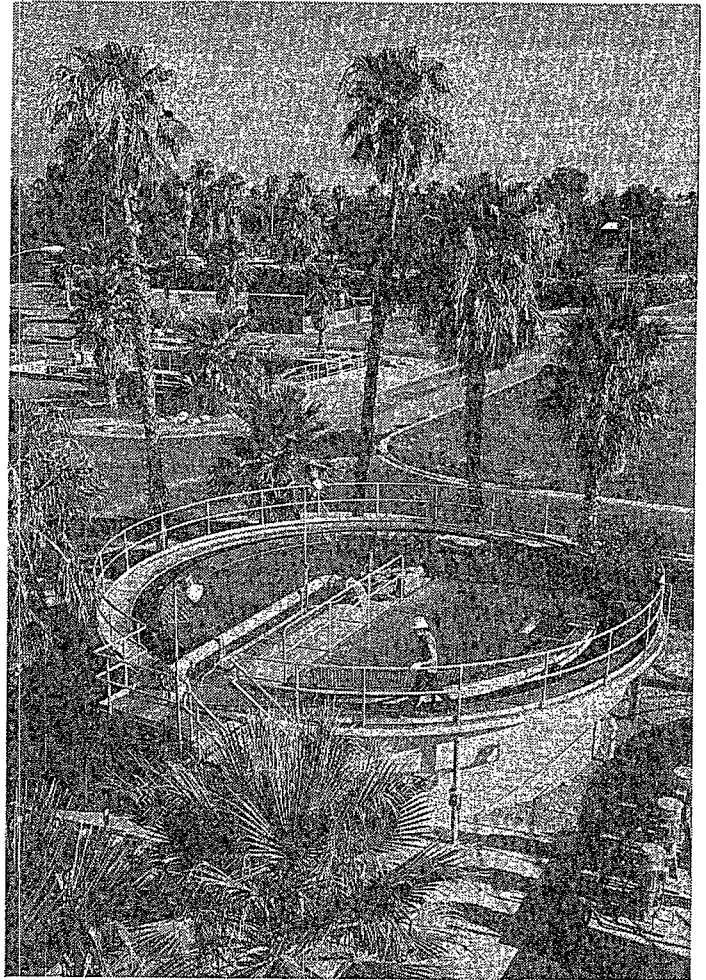


United States  
Environmental Protection  
Agency

832-F-92-001  
May 1992

Office of Water (WH-547)

 **Source Reduction**  
An Integral Part of  
the MWPP Program



United States Environmental Protection Agency  
401 M Street, SW  
Washington, DC 20460  
(202) 260-5810

Official Business  
Penalty for Private Use \$300

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## INTRODUCTION

The Pollution Prevention Act of 1990 established pollution prevention as national policy. This Act sets forth a formal legislative charter for EPA to establish programs that promote pollution prevention. Specifically, the Act establishes a hierarchy of waste management activities placing source reduction as the most preferred option. Source reduction refers to preventing or reducing the generation of waste at the source before it becomes a waste management problem. To accomplish this goal in the area of domestic waste treatment, EPA is initiating the Municipal Water Pollution Prevention (MWPP) program.

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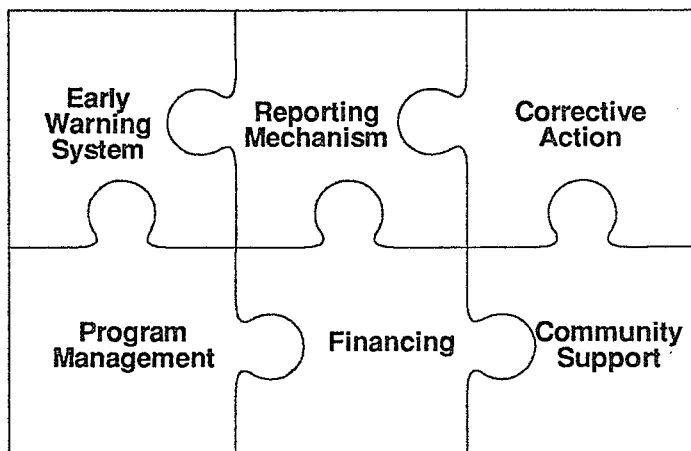
## WHAT IS THE MWPP PROGRAM?

The MWPP Program is a voluntary and cooperative effort by EPA, State governments, and municipalities to:

- ✓ Prevent NPDES permit violations and maintain high compliance rates by publicly owned treatment works (POTWs);
- ✓ Maximize the useful lives of POTWs through reduced wastewater flows and loading, and effective operation and maintenance; and
- ✓ Ensure effective and timely planning and financing for future needs and growth, before permit violations occur.

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## MWPP PROGRAM COMPONENTS



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## WHY IS POLLUTION PREVENTION IMPORTANT?

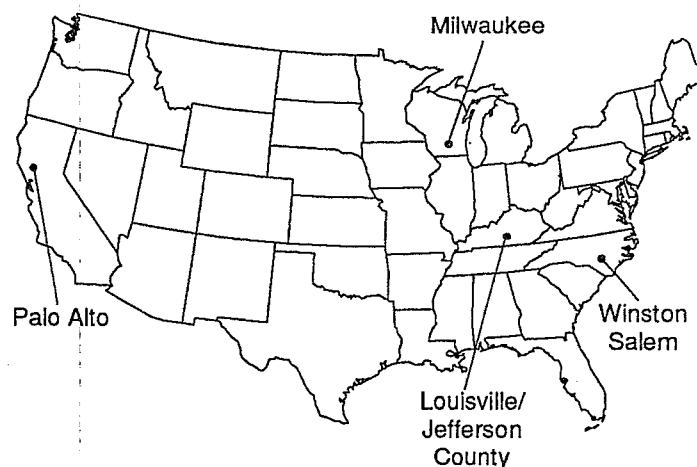
Large capital investments and effective enforcement activities have been responsible for the high quality of municipal pollution control infrastructure established in this country. Growing concerns regarding the termination of Federal financial assistance, continuing municipal growth, and the emergence of new pollutants, places increased demands on this infrastructure and future compliance capabilities.

Pollution prevention can reduce the need for substantial investment in the infrastructure by emphasizing source reduction at the facility, instead of increases in the size and complexity of the treatment works. An MWPP program should focus attention on a series of actions to prevent pollution in advance rather than taking more expensive corrective actions. These approaches contribute to:

- ✓ Improving the usability of sludge;
- ✓ Increasing the ability of local community expansion;
- ✓ Reducing operation and compliance costs; and
- ✓ Enhancing worker safety.

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## POLLUTION PREVENTION



## A STATE AND LOCAL SOLUTION

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## GREATER MILWAUKEE TOXICS MINIMIZATION TASK FORCE

### *Method: Strategic Planning*

The Milwaukee Metropolitan Sewerage District (MMSD) has sponsored a Toxics Minimization Task Force in the greater Milwaukee area to implement a Toxics Reduction Strategy. The Task Force consists of representatives from the business community, state and local government, labor unions, public interest groups, and law firms. The group's primary goal is to minimize the discharge of toxic substances to the sewer system, surface and ground water, air, and soil from both regulated and nonregulated sources.

To achieve this goal, the Task Force meets on a regular basis to provide a forum for discussion among the diverse groups who may be affected by pollution prevention legislation. In addition, the group is developing public outreach programs to educate industry and the general public about how to reduce the amount of pollutants that are being discharged to several media, including the sewer system. Once the Task Force solicits public opinion through these channels, it makes recommendations to the City Council regarding potential pollution prevention legislation.

For additional information, call 414-225-2174.

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## PALO ALTO SILVER REDUCTION PILOT PROJECT

### *Method: Regulatory Approach*

The Silver Reduction Pilot Program was initiated by the City of Palo Alto's Regional Water Quality Control Plant (RWQCP) in 1990 to reduce by 75 percent the amount of silver being discharged to the South San Francisco Bay. The pilot program is supported by a Silver Reduction Ordinance, passed by RWQCP's five member communities. Under the ordinance, RWQCP regulates all dischargers of silver in spent photochemicals within the service area.

Those affected by the ordinance include any business that develops photo and X-ray film including dentists, medical clinics, photo labs, and newspapers. To comply with the ordinance, businesses are required to install filtration equipment onsite or ship the materials offsite for treatment and disposal.

To encourage compliance with the ordinance, Palo Alto has used several tools, including:

- ✓ Involving the affected community in the planning stages of the ordinance so as to identify potential problems that could cause delays later;
- ✓ Publishing brochures, newsletters, and articles in the local paper describing compliance requirements and reminding the public of important compliance dates; and
- ✓ Hosting workshops on compliance requirements and on- and off-site treatment and disposal options.

For additional information, call 415-329-2514.

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## PUBLIC OUTREACH IN WINSTON-SALEM

### *Method: Public Education*

Winston-Salem, North Carolina conducts targeted outreach efforts to educate local businesses (e.g., auto mechanics, battery manufacturers, and metal finishers) about source reduction opportunities. For example, the City distributed materials to the auto mechanics addressing the hazards associated with disposing antifreeze in the sewer system and providing several alternatives for antifreeze disposal. Included in the materials was a list of vendors who recover antifreeze and information on purchasing individual recovery systems.

The City also targets individual households in its efforts to discourage unnecessary discharges to the sewer system and promote source reduction. By hosting a regular "Household Hazardous Waste Day," the City encourages residents to conduct responsible disposal practices. The City also has set up a hotline directing residents to alternative disposal options. For example, a battery manufacturer collects used household batteries and disposes them in a lead smelter; the City collects used paint to use for its own purposes; and recycling facilities collect used oil.

For additional information, call 919-765-0134.

## KENTUCKY PARTNERS' WASTE REDUCTION ASSESSMENTS

*Method: Technical Assistance*

The Kentucky Partners State Waste Minimization Center (Kentucky Partners) was established by the Kentucky Natural Resources and Environmental Protection Cabinet in 1988. Kentucky Partners is a free, non-regulatory, and confidential service for businesses and industries to provide information and technical assistance about reducing wastes and preventing pollution.

Kentucky Partners is currently working on a waste reduction assessment for the Louisville/Jefferson County Metropolitan Sewer District. This effort involves site visits and assessments to identify source reduction opportunities at the County's 40 POTWs. The Kentucky Partners' assessment concluded that POTWs are practicing responsible waste reduction techniques, and it plans to assist these POTWs in developing innovative processes for continued pollution reductions.

For additional information, call 800-334-8635.

### EPA Regional Office MWPP Coordinators:

**Region 1: Boston, MA**  
(CT, ME, MA, NH, RI, VT)  
JFK Federal Bldg.  
Boston, MA 02203  
617-565-3517

**Region 2: New York, NY**  
(NJ, NY, PR, VI)  
26 Federal Plaza  
New York, NY 10278  
212-264-8958

**Region 3: Philadelphia, PA**  
(DE, MD, PA, VA, WV, DC)  
841 Chestnut Bldg.  
Philadelphia, PA 19107  
215-597-9131

**Region 4: Atlanta, GA**  
(AL, GA, FL, MS, NC, SC, TN, KY)  
345 Courtland St., NE  
Atlanta, GA 30365  
404-347-3633

**Region 5: Chicago, IL**  
(IL, IN, OH, MI, MN, WI)  
230 S. Dearborn St.  
Chicago, IL 60604  
312-886-0212

**Region 6: Dallas, TX**  
(AR, LA, OK, TX, NM)  
1445 Ross Ave.  
Dallas, TX 75202  
214-655-7130

**Region 7: Kansas City, MO**  
(IA, KS, MO, NE)  
726 Minnesota Ave.  
Kansas City, KS 66101  
913-551-7371

**Region 8: Denver, CO**  
(CO, UT, WY, MT, ND, SD)  
One Denver Place  
999-18th St., Suite 500  
Denver, CO 80202-2405  
303-293-1560

**Region 9: San Francisco, CA**  
(AZ, CA, GU, HI, NV, RP, MP, AS)  
75 Hawthorne St.  
San Francisco, CA 94105  
415-744-1945

**Region 10: Seattle, WA**  
(AK, ID, OR, WA)  
1200 Sixth Ave. (WD-085)  
Seattle, WA 98101  
206-553-8575

## SOURCE REDUCTION FOR THE POTW AND THE INDIRECT DISCHARGER

The MWPP program encourages POTWs to apply elements of the pollution prevention hierarchy. POTWs not only discharge wastewater, but may contribute to, and play a valuable role in addressing, the releases of various air emissions and solid waste streams as a result of their activities and the activities of their indirect dischargers. Thus, MWPP programs are directed at preventing pollution from both influent to the POTWs and through activities at the POTWs themselves.

Several source reduction methods that a POTW may implement at its own plant or encourage indirect dischargers to implement include:

- ✓ Process modifications;
- ✓ Feed stock substitutions or improvements in purity;
- ✓ Good housekeeping and management practices; and
- ✓ Recycling within a process.

Source reduction is the most preferred option to prevent or reduce the generation of waste. Other options include water and energy conservation. Some POTWs and their industrial users are recognizing the benefits derived from these options. These benefits not only accrue to the environment but also result in significant cost savings to the facility.

## CASE STUDIES

POTWs and state and local waste management authorities are incorporating successful source reduction efforts into their MWPP programs. Four case studies, representing four different approaches to source reduction within the context of MWPP, are included in this brochure.