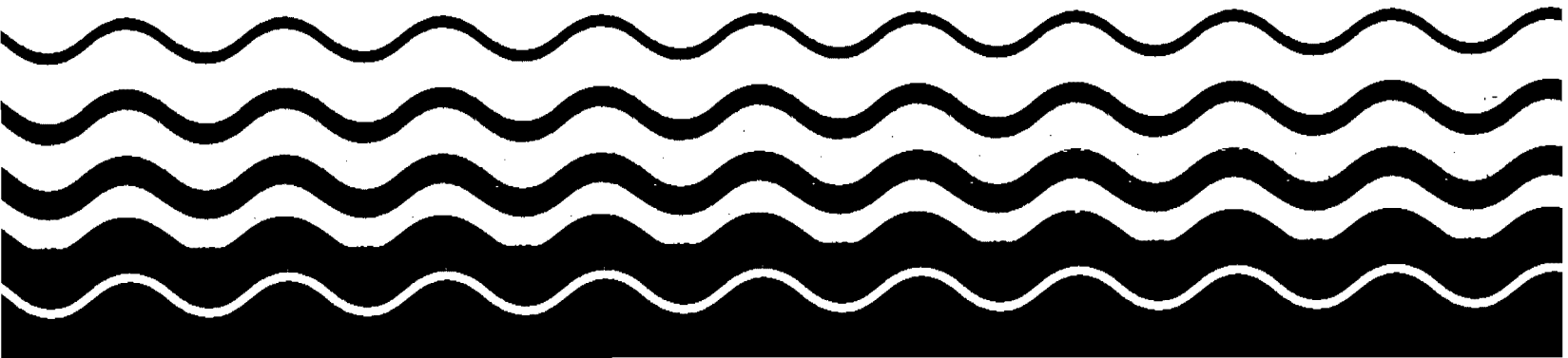




Municipal Water Pollution Prevention Program

**National MWPP Conference
Washington, D.C.
April 27 - 28, 1993**



MUNICIPAL WATER POLLUTION PREVENTION CONFERENCE

April 27 & 28, 1993

The Municipal Water Pollution Prevention (MWPP) program is a cooperative voluntary effort by the U.S. Environmental Protection Agency (EPA), State governments, and municipalities. EPA established the MWPP program to promote State systems that stimulate source reduction, prevent permit violations under the National Pollutant Discharge Elimination System (NPDES), and maximize the useful lives of publicly-owned treatment works (POTWs) through reduced wastewater flows and effective operation and maintenance.

On April 27 and 28, 1993, EPA's Office of Wastewater Enforcement and Compliance (OWEC) hosted a meeting of State and EPA Regional and Headquarters participants in the MWPP program. The purpose of the meeting was to discuss progress made by States and EPA in implementing MWPP, barriers and incentives to the MWPP program, measures of success, and further actions. This report summarizes the major presentations at the Conference and highlights the major issues raised by the participants. The Conference included presentations and discussions of the following subjects:

- the status of State MWPP programs;
- MWPP programs in Region 6;
- enforcement as an MWPP tool;
- Wisconsin's MWPP program;
- the EPA Pollution Prevention Program;
- source reduction activities at POTWs;
- current EPA initiatives in water and energy conservation;
- pollution prevention in the Stormwater Program;
- measures of MWPP program success;
- the future of the MWPP program; and
- issues for EPA Headquarters to consider.

Attachment 1 is the Conference agenda and list of speakers. Attachment 2 is a list of participants.



WELCOME & INTRODUCTION

Mike Quigley (OWEC, Municipal Support Division) and Steve Allbee (OWEC, Municipal Assistance Branch) welcomed the participants and described the goals for the Conference. Mr. Quigley reiterated Administrator Browner's emphasis on pollution prevention (PP). He stated that Ms. Browner intends to ensure that EPA incorporates PP considerations into all of its activities. Mr. Quigley observed that State Revolving Funds (SRFs) are becoming available for more broad use, including use for PP initiatives. Mr. Quigley expressed his enthusiasm for the MWPP program and his sense of encouragement based on the MWPP activity occurring in the States.

Mr. Allbee agreed with Mr. Quigley that PP is among the highest priorities of the new Administration. Mr. Allbee cited the President's report *Vision for America* as evidence of the Administration's commitment to PP. He confirmed that PP is one of the eight priority areas OWEC identifies in its strategic plan; and that PP will be integrated into all areas of activity, including permitting, enforcement, and technical assistance.

Mr. Allbee described the primary mechanisms through which EPA funds MWPP initiatives. OWEC has awarded ten \$50,000 pilot grants during each of the past several years; companion grants have been funded and awarded through EPA's Pollution Prevention Division. In addition to these two primary mechanisms, OWEC provided lesser amounts of funding for MWPP programs through several other *ad hoc* mechanisms. Mr. Allbee acknowledged, however, that he is uncertain of the availability of future funding to sustain the MWPP program.

ROUND TABLE PRESENTATIONS BY REGIONS/STATES ON PROGRAM STATUS

Region 1

Charles Conway (EPA, Region 1) reported that the goal of Region 1's MWPP program is to ensure compliance and maintain the integrity of the wastewater treatment infrastructure. The primary mechanisms for implementing the program are technical assistance and facility self-assessments. Region 1 avoids using enforcement mechanisms to promote MWPP. Instead, the Region has performed over 60 facility audits in the past 10 years. The Region 1 States use an annual self-assessment report to promote adequate program planning. Mr. Conway believes that the self-assessment procedure promotes communication and coordination between wastewater treatment facility operators and local elected officials. Mr. Conway reports that New Hampshire, Rhode Island, Vermont, and Maine



have implemented MWPP programs and that 100 percent of the major and minor dischargers in Region 1 States have performed self-assessments.

The greatest PP opportunities at wastewater treatment facilities, according to Mr. Conway, are associated with the following areas:

- energy reduction;
- household hazardous waste management;
- industrial pretreatment;
- water supply system corrosion control;
- beneficial use of sludge;
- reduced use of chemicals; and
- optimized process controls/changes.

Mr. Conway stated that EPA has not adequately demonstrated its support for the MWPP program and that this support is critical to the long-term success of the program.

New Hampshire Brad Foster (NH, WPSCD) described how New Hampshire began its MWPP program. The State first established a baseline measure of the performance of the State's POTWs. Annual self-assessment reports (ASARs) provided data for the baseline. The ASARs are, according to Mr. Foster, a very useful mechanism for enhancing communication between treatment facility operators and local decision makers; both parties must "sign off" on the ASARs prior to submission to the State.

Mr. Foster observed that many facilities are experiencing difficulty in managing their finances. For example, some small facilities collect user charges that do not offset operation and maintenance costs.

New Hampshire emphasizes technical assistance. Mr. Foster said that four State personnel provide ongoing technical assistance to the State's approximately 110 facilities.

Maine Richard Darling (ME, DEP) stated that the MWPP program in Maine is very similar to the program in New Hampshire. He said that Maine took steps at the outset to computerize the ASARs and resulting data. Maine can now complete much of the ASAR form with facility-specific information prior to distributing the form, on computer disk, to the facilities. This technique, according to Mr. Darling, allows better data quality assurance, lessens the burden on the facility operators, and facilitates rapid data analysis. DEP is piloting this computerized approach at eight POTWs. Implementation at all 125 of the State's POTWs is expected in the summer of 1993.

DEP has devoted 12 staff to maintaining this program — three at its headquarters offices and nine in its field offices. The field personnel also provide facility inspections. Mr. Darling stated that he hopes to increase to five the number of staff at headquarters.

Region 2

Hank Mazzucca (EPA, Region 2) reported that New York has targeted 23 of its 800 facilities to test an effort that would provide insight into compliance trends. Difficulty in identifying noncomplying facilities has, according to Mr. Mazzucca, hampered New York's ability to aggressively implement the MWPP program. The initiative involved developing a spreadsheet that could be downloaded by the State from the Permit Compliance System (PCS) to identify facilities that are experiencing compliance problems. The initiative encountered two difficulties, however. Software compatibility problems and a lack of compliance problems at many of the 23 pilot facilities have prevented this test program from yielding insight into noncompliance trends.

Region 3

Dennis Ducko (EPA, Region 3) introduced the Region 3 States. He reported the status of the MWPP program in the States: Virginia does not have an MWPP program; West Virginia and Maryland have both received pilot grants and have begun MWPP activity; and Delaware and Pennsylvania are expected to receive grants soon.

West Virginia Leroy Gilbert (WV, Pollution Prevention Services) reported that West Virginia's MWPP, which is non-regulatory, is well-funded, with two full-time staff positions — one for municipal dischargers and one for industrial dischargers. Funding is provided by federal grants and permit fees generated within the State. The State's program is almost one year old and has been well received by the municipalities, the State, and the EPA Regional office. Mr. Gilbert said that the West Virginia MWPP program has significantly reduced wastewater discharges and violations.

Mr. Gilbert explained that many industrial dischargers have recently become regulated. Therefore, one of the highest priorities of his office is to aggressively provide outreach to the industrial community. West Virginia has successfully used an array of outreach mechanisms, including targeted mailings, trade shows, referral networks, and public news media.

David Byrd (WV, Division of Environmental Protection, Municipal Section) said that outreach, in addition to being vital to the industrial community, is also vital to the municipal community. Mr. Byrd stated that he has contacted over 200 wastewater treatment facilities



and over 100 drinking water treatment facilities to advise them of the MWPP assistance the State can provide. He also targets school districts for technical assistance. Mr. Byrd explained that most of West Virginia is rural and that there are only 10 major NPDES permittees in the State. Because of this rural orientation, Mr. Byrd has implemented a rural demonstration project. This project seeks to identify alternate types of treatment facilities that can be used in small West Virginia communities.

Pennsylvania Tom Brown (PA, Bureau of Water Quality) said that Pennsylvania does not have an MWPP coordinator, but that the State pursues MWPP activities through its Section 104(g) program. Mr. Brown described Pennsylvania's "Peer-Based" training system, through which his office maintains a pool of experienced independent wastewater professionals that he draws upon and assigns to assist municipalities with specific problems. Mr. Brown attributes the tremendous success of the Peer-Based training to the practical "real world" experience that the trainers possess. Mr. Brown reported that his experience indicates that the threat of enforcement action is sometimes required to encourage facilities to take advantage of MWPP outreach and assistance.

Maryland Hal Benson (MD, Department of the Environment) stated that Maryland is just beginning its MWPP efforts. The State has established an advisory team using Department of the Environment employees and has contracted with the Maryland Center for Environmental Training for field support. Mr. Benson pointed out that much POTW-related pollution results from spills, equipment failure, or inadequate funding. Maryland's programs, therefore, emphasize ensuring critical preventative maintenance and providing funding oversight.

Jake Bair (MD, Maryland Center for Environmental Training) described Maryland's aggressive outreach and training initiative. The initiative includes 140 classes per year and 30 energy audits at drinking water and wastewater plants. Mr. Bair alerted the conference participants to the U.S. Department of Energy's "Energy Restitution Trust Fund," which he described as a source of funding for a State's energy audit program.

Delaware Bob Zimmerman (DE, Division of Water Resources) described the following MWPP initiatives taking place in Delaware:

- distributing home audit kits;
- providing training for businesses;
- revising NPDES requirements to reflect PP;
- conducting multi-media inspections at industrial and municipal facilities;
- piloting a Wisconsin-like approach;

- proposing a reduction of SRF interest rates for facilities "in good health;" and
- pursuing energy conservation.

Region 4

Ben Chen (EPA, Region 4) reported that Alabama, Georgia, and North Carolina, the leaders in the Region in implementing the MWPP program, may achieve full-scale implementation by the end of this year. He said that the Region has a very good working relationship with the States and that the flexibility of the MWPP program facilitates integrating the program with existing State programs. He described the MWPP program as a partnership in which the States provide practical, "in the trenches" experience and knowledge and the Region provides MWPP resources and promotes education and outreach. MWPP is a component of all of the Region 4 Section 205 workplans.

Alabama Mr. Chen said that Alabama's MWPP program is based on Wisconsin's compliance maintenance annual reporting (CMAR) program, a formal reporting mechanism. The State uses a self-audit questionnaire similar to Wisconsin's, but has added questions related to ammonia and toxicity. Alabama uses the questionnaire during its review of SRF loan, industrial indirect discharge, and federal and State grant applications. The State is in the process of developing a computer system to integrate CMAR with EPA's Permit Compliance System (PCS) and the SRF priority system.

North Carolina Mr. Chen reported that North Carolina is also using a system based on Wisconsin's, but with two differences. The primary difference between Wisconsin's program and North Carolina's is in each program's early warning system (EWS). In North Carolina, the EWS is based on intensive State-level analysis of State-developed PCS data. Based on a linear regression of PCS data for two full years, North Carolina's staff predicts when facilities will become non-compliant. Mr. Chen reported that the State has had excellent success with this approach and is using it on a quarterly basis for all of its 305 facilities. The State targets for performance audits facilities that are expected to become non-compliant within one year. Second, North Carolina's MWPP program is implemented through the construction grants program.

South Carolina South Carolina, according to Mr. Chen, did not actually begin an MWPP program until 1992, although it received an MWPP pilot grant in 1991. South Carolina's EWS is based on a questionnaire, much like Wisconsin's EWS. The State is currently operating a pilot program of the EWS with 12 POTWs — results are expected in Spring, 1993. The State has assembled a 12-member, cross-sector advisory committee that



formulates the MWPP program elements. To encourage participation in the MWPP program, the State has been using participation as a criterion for receipt of SRF loans.

Georgia Ernest U. Earn (GA, Municipal Engineering Program) said that Georgia uses a voluntary approach for its MWPP program and uses incentives to encourage participation by major and minor NPDES permit holders. However, POTWs may participate in the SRF only if they prepare a compliance maintenance plan. While Georgia's CMAR is based on Wisconsin's, the State has revised the reporting form each of the last two years based on comments received from POTWs. Recent modifications to the reporting form include changes designed to ensure that the POTWs in greatest need of funding are given priority over those that less urgently need funds.

Georgia has performed detailed evaluations of 18 to 20 POTWs over the past three years. It found that the rate of compliance by POTWs with their permit requirements has been steadily increasing. In 1991, the State observed a 55 percent compliance rate. In 1992, the compliance rate rose to 60 percent. In 1993, the expected compliance rate is 65 to 70 percent.

Mr. Earn concurred with Mr. Chen that the Region 4 States have a good working relationship with the EPA Regional office. Like other speakers, Mr. Earn believes that the MWPP program has encouraged communication and cooperation between facility operators and local decision-makers.

Mississippi Mike Freiman (MS, Municipal Permit Compliance Branch) said that in Mississippi, as in Georgia, MWPP is a voluntary program. However, he said that the State is considering making MWPP a mandatory requirement of NPDES permits. The present voluntary program targets all major and mechanical NPDES permit holders. The State has recently developed an MWPP training course for facility operators and the elected officials responsible for those facilities — two courses are presently planned.

Mississippi mails an ASAR to its treatment facilities. In 1992, 80 percent of these facilities responded. During its review of the completed ASARs, the State assigned facilities to one of the following three categories:

- (1) no action required or recommended — generally new or recently upgraded facilities;
- (2) action recommended — facilities not yet out of compliance but in need of further evaluation; and

- (3) action required — facilities already under one or more administrative orders.

The State concluded, based on the 1992 self-assessment reports, that 38.6 percent of the treatment facilities did not require action and no actions were recommended. Actions were recommended at 31.6 percent of the facilities and required at 29 percent of the facilities.

Mr. Freiman explained that the State does not associate its MWPP program with any enforcement activity. However, if a municipality chooses not to implement an MWPP but later falls into non-compliance, enforcement actions will be especially swift.

Kentucky Jerry Hurst (KY, Department of Natural Resources and Environmental Protection) explained that Kentucky would like to develop and implement an MWPP program, but that due to resources constraints, has been unable to do so. Despite these constraints, the State is laying the ground work for an MWPP program through its enforcement office. To date, the State has:

- rearranged channels of communication to promote MWPP. It has involved the offices responsible for construction, permitting, and planning in this effort.
- developed a computer program to facilitate communication between EPA's PCS and Kentucky's own mainframe.
- changed existing regulatory language to require submission of plans and specifications when each POTW has reached 80 percent of its design capacity. The language also bans line extensions.
- selected a preliminary list of EWS indications.
- established a goal to impose average and maximum limits on flow.

While the State feels that it has accomplished much as a result of its early efforts through the enforcement office, it does not feel that the enforcement office is an appropriate "home" for an MWPP program. It is looking for another office to lead the MWPP effort.

Tennessee Karen Grubbs (TN, Division of Construction Grants and Loans) said that Tennessee has only recently become active in the MWPP initiative. She said that the MWPP efforts are organized by the assistance bureau, not by the regulatory offices. Although the State is still considering how to proceed with its MWPP program, it has begun working with a university to test its reporting questionnaire. In addition, the State has begun coordinating



with the source reduction branch in order to link MWPP with the State's household hazardous waste program. Ms. Grubbs reported that although Tennessee has not received an MWPP pilot grant, the State intends to proceed, albeit slowly, with implementing its MWPP initiative.

Region 5

Ohio Jim Borton (OH, EPA) described Ohio's MWPP program as being similar to Wisconsin's. While the program is mandatory, it does allow POTWs to adjust the scope of the program, as local circumstances require, within the limits of established guidelines. The State has established a technical advisory group to guide implementation of its MWPP program.

Michigan Doug Erickson (MI, Surface Water Quality Division) said that the Pollution Prevention Unit, which had four full-time staff members, assembled a data base and a ranking system that supports Michigan's MWPP program. The Unit has been disbanded, however. The Unit's data base continues to serve a wide array of needs. For example, the State is using the data base to target selected minor (and all major) POTWs to re-evaluate how these POTWs manage their facilities.

Region 6

Texas Jan Sills (TX, Water Commission) described Texas' "75/90" program. Under this program, all municipalities must initiate development of capacity expansion plans as soon as the facility reaches 75 percent of its design capacity. Once the facility reaches 90 percent of its design capacity, it must implement its expansion plans. The program requires that the facility develop an expansion schedule and an audit tracking system.

Louisiana Bob Paul (LA, Department of Environmental Quality) stated that Louisiana's MWPP program was initiated in 1981 by Section 308 orders. Since 1992, the State has included MWPP language in all discharge permits. The State uses an ASAR form that is 27 pages long and assigns a point value to each operating area. Local governing bodies must review the completed form and pass a resolution to correct deficiencies. Local resolutions are intended to be specific in their description of how deficiencies will be corrected, but they are often very general. The State is considering putting specific language in permits that will ensure the specificity of local resolutions.

Region 7

Harold Owens (EPA, Region 7) reported that the Region considered several MWPP models (e.g., WI, NM) prior to encouraging the States in the Region to design and implement their own program. The Region then worked closely with the States to plan and coordinate the MWPP program. The MWPP programs in Region 7 are based, to varying degrees, on the Wisconsin CMAR.

Of the Region VII States, Nebraska has had the greatest success with MWPP. The State has been conducting a pilot program with small communities. The communities were initially reluctant to cooperate without additional funding. When the State made these communities aware of the potential benefits of MWPP, however, the communities not only agreed to participate, they expanded the scope of the pilot project by addressing effluent *and* influent. Nebraska uses training and up-front assistance, rather than enforcement, to promote MWPP.

Region 8

Harold Thompson (EPA, Region 8) said that Utah was the first State in the Region to receive an MWPP pilot grant. Initially, the State required POTWs to estimate wastewater treatment capacity needs for the next five years and to make plans to meet any anticipated shortages of treatment capacity. However, POTWs were only required to carry out this procedure once, and communities were not required to submit plans to the State or Region. Currently, the State requires POTWs to prepare a compliance maintenance report every two years. The reporting requirement is implemented through the construction grants program and promoted through outreach — it is not a part of the NPDES requirements. In Colorado, on the other hand, the State has implemented planning and reporting requirements through the NPDES program. Several other Region 8 States, including Montana, North Dakota, South Dakota, and Wyoming are in the early stages of implementing MWPP programs.

Region 9

Angela Ivey (EPA, Region 9) reported on the Region 9 States. She said that the Region 9 States have been reluctant to implement a self-audit reporting program. The Region has been working with both State and local organizations to promote MWPP. Despite the States' reluctance, she said, many of the municipalities have chosen to take the lead and implement their own self-audit programs.

Within the Region, a variety of mechanisms are being used to require MWPP, including NPDES permits and Sections 104(g) and 205(g). Permittees must conduct outreach to public



and private users of the wastewater treatment systems and they must identify opportunities and alternatives that will promote MWPP.

Region 9 participates in several pilot programs, including EPA's Industrial Pollution Prevention Program (IP3), opportunity assessments in Arizona and Nevada, and California's South (San Francisco) Bay pilot project. Ms. Ivey pointed out that Hawaii actively performs POTW inspections and corrective action reviews. She reported that Nevada and Arizona are not actively pursuing participation in the MWPP program.

Region 10

Dan Steinborn (EPA, Region 10) reported that the Region 10 States are taking individual approaches towards MWPP. Oregon, according to Mr. Steinborn, has chosen not to implement a formal MWPP program. Alaska is finding that the MWPP program is not well suited to its wastewater treatment infrastructure. The State consists of numerous small, decentralized villages, many of which do not have any treatment systems. Those villages that do have treatment systems have an urgent need for broad-based assistance, including performance of basic maintenance and overall facility management. Idaho has begun its MWPP program by developing a self-assessment procedure. The State is still identifying the target systems, however, and has not yet decided whether or not the self-assessment will be mandatory. Washington has completed a preliminary self-assessment package and will pilot the package at treatment facilities this summer.

FOCUS ON MWPP PROGRAMS IN REGION 6

After the completion of the round table presentations by Regions and States, Roger Hartung (EPA; Enforcement Branch, Region 6) and Harold Smith (EPA; Technical Section, Municipal Facilities Branch, Region 6) described MWPP programs in Region 6 in more detail. Mr. Hartung stated that the process of States assuming delegation for the MWPP program in Region 6 is almost complete, and explained the development of the MWPP program in the States of the Region.

In 1990, Louisiana and New Mexico piloted an MWPP program and were the first States in the Region to do so. The two States adopted a tailored version of Wisconsin's program. After a series of workshops, the States and Region adopted a more generic Region-wide approach. This approach establishes MWPP as a reporting requirement under the NPDES system for all major dischargers and minor dischargers that are under the jurisdiction of majors. The reporting requirements require completion of an ASAR and

adoption of a resolution by local governing bodies that any identified deficiencies will be corrected. Two versions of the ASAR were developed — one for large municipalities and one for smaller municipalities. The questionnaire generated 30,000 pages of paper in the first year and over 25,000 pages in each subsequent year. In total, 183 questionnaires need to be reviewed and followed-up on per quarter.

Mr. Smith, based on the results of the ASARs and audits of 42 facilities, described some of the problems of treatment facilities. Problems are generally associated with small treatment facilities; the three most common problems are associated with overflows and bypasses, infiltration and inflow, and user charges.

ENFORCEMENT AS AN MWPP TOOL

Walter Brodtman (OWEC, Enforcement Division) described enforcement and the MWPP initiative as "hands washing each other;" there is a constant interplay between the two. He identified ways in which the two policy approaches reinforce and support each other.

- Using MWPP as an enforcement tool provides three benefits:
 - (1) MWPP saves time and costly enforcement resources;
 - (2) MWPP identifies pretreatment targets; and
 - (3) MWPP identifies need for corrective actions.
- Using enforcement as an MWPP tool provides three benefits:
 - (1) enforcement can be the "gorilla in the closet" to encourage and promote voluntary cooperation;
 - (2) enforcement settlements can specify MWPP compliance audits; and
 - (3) enforcement can be used to encourage corrective actions.

UPDATE ON WISCONSIN'S PROGRAM

Jim Fratrack (WI, Department of Natural Resources) provided a report on Wisconsin's compliance maintenance (CM) program.

The fundamental principles of CM are to:



- ensure adequate operation and maintenance;
- provide sound fiscal management;
- evaluate the adequacy/performance of the POTW as it approaches the end of its design life;
- commence construction before permit violations occur; and
- maintain the wastewater treatment system to the same extent as other municipal systems.

The principal means of implementing the CM program is through the CMAR. Wisconsin's CMAR consists of the following elements:

- financial information,
- subjective self-evaluation, and
- point scoring.

Like MWPP programs in other States, Wisconsin requires that CMARs be reviewed by local governing bodies and that these bodies pass resolutions to correct deficiencies revealed by the reports. The State prepares and delivers a written follow up to all communities regarding their report. The State uses this follow up as an opportunity to provide comments and encouragement on the communities' compliance maintenance program.

Mr. Fratrack reported that the 1993 Wisconsin CMAR has been amended to more completely address lagoons and ground water discharge systems, which were not adequately addressed by prior CMARs.

Wisconsin has implemented the "Clean Water Fund," a low-interest loan program that provides funds for water-related projects. These projects include, from highest to lowest priority:

- (1) ensuring compliance maintenance,
- (2) responding to new or changed permit limits,
- (3) installing systems in unsewered communities,
- (4) providing urban stormwater controls,
- (5) responding to non-point sources of pollution, and
- (6) correcting violations.

POLLUTION PREVENTION AT EPA

Jim Craig (EPA, Pollution Prevention Division) provided an overview of EPA's PP program. He emphasized that PP is an Agency-wide priority, not a priority in only certain offices. He continued by summarizing Administrator Browner's Earth Day Statement: Administrator Browner referred to PP as the "guiding core" and "central principle" for all EPA activity. The Administrator defined PP as source reduction, with only limited inclusion of in-process or closed-loop recycling.

Mr. Craig described EPA's five PP goals. They are to:

- (1) make PP the principle of choice in mainstream work at EPA;
- (2) help build and facilitate networks of regional, State, and local PP programs;
- (3) identify and pioneer other PP-related programs (e.g., cross-media initiatives and new models for government);
- (4) generate and share information to promote PP and to track progress; and
- (5) engage partnerships with the private sector on technical innovation;

SOURCE REDUCTION ACTIVITIES AT POTWs

North Carolina Lindsey Mize ((NC, Pollution Prevention Program) described the assistance the NC Pollution Prevention Program provides to POTWs. This assistance includes operating an information clearinghouse, training POTW operators and others, identifying waste reduction opportunities, performing audits, and assisting in outreach and education. The Program provides support to large and small POTWs.

North Carolina's program is non-regulatory and relies on six full-time staff members. In 1991, the State received an EPA/PP Division Grant to implement a PP pilot project. North Carolina's goals under the grant were to:

- formalize a State-level MWPP structure,
- establish an MWPP structure at the local level,
- identify incentives and barriers to MWPP at the local level, and
- formalize a system of information transfer.

To help promote these goals, the State has been working with two municipalities on two pilot studies. At the end of these pilot studies, the State hopes to start funding as many municipal challenge grants as staff and funds allow. In addition to providing funds, the State



provides personnel that will work full-time at POTWs for a limited period (e.g., one month) to improve PP. During this period, the State staff person works closely with the facility, its operators, and its indirect dischargers.

Orange County Sanitation District Adriana Renescue (CA, Orange County Sanitation District) described the multi-faceted pretreatment and PP programs that she has helped to implement. The Orange County Sanitation District Authority embraces 23 cities, 454 square miles, 2.1 million people, and 1,200 permittees (400 of whom are significant industrial users). The staff at the Authority includes 40 engineers and inspectors.

The Authority's pretreatment program includes four components:

- (1) ordinances,
- (2) local limits,
- (3) permits, and
- (4) monitoring and inspections.

The Authority weaves PP themes through each of these components. Ms. Renescue described an array of techniques the Authority is actively using or planning to use. Two techniques used by the Authority that Ms. Renescue believes are critical to the success of a PP initiative are:

- (1) Mass Limits The Authority imposed mass-based limits in 1984 to augment concentration-based limits. Only through the use of mass-based limits can a POTW effectively prevent indirect dischargers from using dilution as a management technique to meet concentration-based limits. Ms. Renescue described mass-based limits as PP "enablers."
- (2) Partnership with Industry Ms. Renescue stressed the importance of cooperating with industry as partners jointly seeking resolution to a common set of problems and concerns. This approach is critical to achieving consensus, cooperation, and buy-in. The Authority promotes partnerships by working face-to-face with the industrial community - sitting down together to discuss issues, conflicts, and barriers associated with PP. To date, the Authority has established PP *ad hoc* committees, a mentor system, and an Orange County Advisory Committee - all designed to solidify the partnership between the Authority and industry.

WATER AND ENERGY CONSERVATION: CURRENT AGENCY INITIATIVES

John Flowers (OWEC, Municipal Assistance Branch) provided an overview of EPA's water use efficiency initiative. The Water Use Efficiency Task Force was established in 1988 to develop a statement of principles and develop an incentive grants program. The statement of principles accomplishes the following goals:

- relates water quality to water quantity;
- provides a context for PP;
- addresses municipal, agricultural, and industrial users; and
- establishes EPA's role as a provider of technical assistance and information.

In FY91 and FY92 the incentive grants program provided \$1 million to fund 26 water use efficiency projects. For FY93, EPA allocated \$350,000 to provide seed money for a water use efficiency clearinghouse and to promote the Water Alliances for Voluntary Efficiency (WAVE) program.

The water use efficiency clearinghouse will be targeted to water management professionals needing technical and programmatic information related to water use efficiency. The American Waterworks Association (AWWA) is expected to submit a proposal to EPA to develop and operate the clearinghouse.

The WAVE program is a voluntary, market-driven initiative to promote water use efficiency. Through the WAVE program, EPA will engage in partnerships with water users and suppliers. EPA is planning its initial partnership with the lodging (i.e., hotel and motel) industry, whose most promising water efficiency opportunities are related to fixtures, kitchen and laundry equipment and procedures, cooling, and landscape design and irrigation. EPA estimates that aggregate annual savings to the lodging industry from the WAVE program will be 32 billion gallons of water, 1 trillion BTUs of energy, and \$85 million in avoided energy, water, and sewer costs.

POLLUTION PREVENTION IN THE STORMWATER PROGRAM

Bill Swietlik (EPA, Permits Division) described the first phase of EPA's NPDES stormwater program. Under the stormwater regulations, published in November 1990, POTWs and certain other facilities meeting specified conditions are required to obtain a stormwater permit. In order to obtain a permit, facilities must prepare a PP plan. Facilities must complete the following five steps in order to prepare and implement a PP plan:



- (1) plan and organize;
- (2) evaluate the site;
- (3) identify the best management practices;
- (4) implement the plan; and
- (5) evaluate and monitor of the plan.

Mr. Swietlik identified two resources available to POTWs addressing stormwater issues:

- (1) the Stormwater Hotline: 703/821-4823; and
- (2) the *Stormwater Manual for Industrial Activities* (available from the Stormwater Hotline).

MEASURES OF MWPP PROGRAM SUCCESS

Gary Champy (VT, Department of Conservation) reported that Vermont has an MWPP program that is similar to the programs in Wisconsin and New Mexico. In 1992, the State distributed 42 self-reporting forms to POTWs and received 40 completed forms in return. Mr. Champy attributed this high return rate, in part, to the State's willingness to work closely with the facility operators in the planning and design phase of the program. For example, facility operators wanted a self-reporting form that did not look "regulatory." In response to this, the State worked closely with operators when developing the reporting form, which focuses on sludge and financial management, and on associated training.

Analysis of the returned forms has revealed that municipalities that did not receive outreach do not manage their finances as well as other facilities. The State also concluded that the turnover of operators and local officials is sufficiently high that training must be a long-term, continuous undertaking.

Tom Reich (EPA, Region 6), who has been preparing a report, *MWPP Results and Trends*, identified nine potential measures of long-term program success. He then asked the conference participants to rank the measures from most to least useful/important. The measures and their relative importance, in descending order, are:

- (1) municipal response (e.g., timeliness of response, quality/specificity of response, promptness of implementation);
- (2) accomplishing pollution prevention (e.g., source reduction, reuse, recycling, energy savings);

- (3) establishing State programs;
- (4) trends (e.g., type/severity problems at wastewater treatment facilities);
- (5) projected versus actual cost;
- (6) cost savings;
- (7) useful life (e.g., design life versus projected life versus actual life);
- (8) positive team spirit; and
- (9) extent of operator certification.

Doug Johnson (EPA, Region 8) described the model MWPP program evaluation strategy that Region 8 has been developing. The goals of the model evaluation strategy are to evaluate whether a State's MWPP program goals are being met and to determine the PP potential of each major POTW in the State and the PP potential for the State as a whole. The model strategy is based on the goals articulated in South Dakota's self-assessment report. The model strategy establishes the following evaluation objectives:

- validate the utility and benefit of the MWPP program;
- identify the most prominent characteristics of the MWPP program;
- identify areas to reduce source loadings/capital expenditures;
- inventory and compare NPDES compliance rates of major POTWs;
- determine major POTWs' compliance life;
- identify major POTWs planning and funding incentives; and
- identify the factors limiting POTWs' performance.

The model strategy uses a qualitative approach based on data elements taken from the State's self-assessment report. Mr. Johnson reported that data confidentiality is a critical issue. Efforts should be taken to ensure that direct comparisons are not made between POTWs and that data are used and published only anonymously or in aggregate. Mr. Johnson said that program evaluation is critical to the long-term success of a State's MWPP program and that a standardized evaluation procedure can increase the utility of any program evaluation.

Katherine Dawes (EPA, OPPE) commented that those who do not evaluate the past are doomed to repeat it. She identified three critical program evaluation questions:

- (1) is MWPP doing the right things (i.e., is the program following guidelines and directives)?;
- (2) is MWPP doing the right things right (i.e., are success stories accruing)?; and



- (3) is MWPP really making a difference (i.e., is the water any cleaner)?

The greatest utility comes from evaluations, according to Ms. Dawes, only when the results/findings of the evaluation are passed "up the chain" to State and ultimately to national decisionmakers *and* "down the chain" to local partners that will use the information to make changes.

ROUND TABLE PRESENTATION: WHERE DO WE GO FROM HERE AND HOW DO WE GET THERE?

Jeffrey Lape (OWEC, Special Assistant to Director) discussed EPA's efforts to incorporate PP into NPDES programs. His presentation began by describing four kinds of NPDES programs:

- (1) municipal sources (e.g. POTWs),
- (2) nonmunicipal sources (e.g., industrial facilities),
- (3) stormwater, and
- (4) pretreatment.

Mr. Lape then provided the following examples of EPA's efforts to integrate PP into NPDES programs:

- industry case studies,
- PP workshops for permit writers,
- review of State legal authorities,
- model PP language for NPDES permits,
- PP guidance for stormwater management,
- PP training for pretreatment coordinators, and
- PP assessments.

The IP3 Task Force, according to Mr. Lape, is investigating ways to address effluent guidelines and categorical limits, which, in some cases, are expressed as concentration-based standards. The Task Force is responding to potential barriers to PP, such as those expressed by Ms. Renescue (i.e., concentration-based limits promote dilution and do not encourage PP). The Task Force has not yet made any recommendations on this issue.

Mr. Flowers provided brief overviews of two recent statutory initiatives that affect the MWPP program.

- (1) Energy Policy Act of 1992 This Act includes water use efficiency standards for newly manufactured toilets (1.6 gallons per flush), faucets (2.5 gallons per minute), and showerheads (2.5 gallons per minute). The Act also requires that federal agencies must install in all federally-owned buildings all energy and water conservation measures whose payback is less than or equal to ten years.
- (2) Clean Water Act A proposal prepared by the National Wildlife Federation would consider water use efficiency projects eligible for funding by SRFs. The proposal would require all drinking water and wastewater utilities applying for loans or grants to meet certain standards (i.e., the former must implement monthly billing, leak detection controls, and pressure controls; the latter would have to meter all connections, base its rates on meter readings, and restrict block rates). All applicants for funds would have to complete integrated planning efforts that compare life cycle costs of demand management to other alternatives.

Mr. Brodtman discussed Supplemental Environmental Projects (SEPs) and how EPA has used them to accomplish PP. According to Mr. Brodtman, there are five categories of SEPs:

- (1) pollution prevention,
- (2) pretreatment,
- (3) environmental restoration,
- (4) public awareness, and
- (5) environmental auditing.

One or more of these categories of SEPs may be incorporated into an EPA enforcement order. By so doing, the noncomplying facility must undertake the specified environmental project. In return, the facility receives certain penalty reductions. SEPs, according to Mr. Brodtman, have been used primarily with industrial facilities. EPA is rethinking its penalty policy, he said, to allow greater use of SEPs with municipalities. Likely areas in which SEPs may be considered include water use efficiency, beneficial use of sludge, and household hazardous waste.

Mr. Brodtman said that the Agency has been challenged on the appropriateness of SEPs and that it is seeking clarification of its authority to use SEPs. In the interim, the Agency is continuing to study the data that are needed to facilitate implementing SEPs and is developing model SEP language to make the drafting of SEPs more efficient.



ITEMS FOR EPA HEADQUARTERS

Mr. Allbee led the conference wrap-up by asking the participants to prepare a list of issues that EPA Headquarters should consider further. The issues were as follows:

- Prepare a written memo to Division Directors articulating the Agency's top-level commitment to MWPP.
- MWPP should be voluntary for States, but it should include funding incentives for the first two or three years.
- Provide long-term funding for the MWPP program.
- Give the States the flexibility to use two percent of the SRF for MWPP.
- Provide recognition and awards similar to those it now provides for operation and maintenance.
- Provide more/better information about PP opportunities for POTWs.
- Provide strategies for evaluating and demonstrating MWPP program effectiveness.
- Provide examples of source reduction, energy conservation, water use efficiency, and audits for facilities to use as guides.
- Emphasize the importance of operation and maintenance.
- Provide training.
- Negotiate partnerships among the various players.
- Provide better identification/diagnosis of POTW problems/weaknesses.
- Provide training/guidance to facility personnel on operation fundamentals and management of local governing boards.
- Promote "peer-help" programs.

- Encourage use of appropriate technology.
- Ensure anti-backsliding/anti-degradation requirements.
- Provide consistent guidelines, policies, and interpretations.

SUMMARY REMARKS

Mike Cook (OWEC, Office Director) confirmed previous commenters' observations that MWPP and water use efficiency are priority initiatives on Capital Hill, within EPA, and among the national organizations. He said that Administrator Browner's priorities are clear with respect to PP – PP will be a central component of all EPA programs. Mr. Cook acknowledged that some individuals may have questioned the Agency's previous commitment and top management support for the MWPP program. He believes, however, that the Administrator's clearly articulated support will provide the demonstration of commitment that many individuals seek. Mr. Cook predicted that reauthorization of the Clean Water Act will result in more rigorous PP planning requirements and echoed Mr. Brodtman's comment that the Agency is soliciting clarification of its authority to use SEPs.



ATTACHMENT 1

CONFERENCE AGENDA



MUNICIPAL WATER POLLUTION PREVENTION CONFERENCE
SHERATON CITY CENTRE
1143 NEW HAMPSHIRE AVENUE, NW
WASHINGTON, D.C. 20037
April 27 - 28, 1993
AGENDA

Day 1:

- 8:30 - 8:40 Welcome and Introduction
Michael Quigley, Director
Municipal Support Division
U.S. EPA Headquarters
- 8:40 - 9:10 MWPP Program Overview: Headquarters Perspective
Steve Allbee, Chief
Municipal Assistance Branch
U.S. EPA Headquarters
- 9:10 - 10:15 Round Table Team Presentation by Regions/States
on Status of MWPP Programs
- Type of Program
 - Use of the Compliance Maintenance Annual Report (CMAR)
 - Region/State Relationship
 - Community Buy-In
 - Enforcement's Role
 - Funding
- 10:15 - 10:30 Break
- 10:30 - 12:00 Continuation of Round Table Presentations
- 12:00 - 1:30 Lunch
- 1:30 - 2:30 Region VI MWPP Programs
Harold Smith, Chief
Technical Section
Municipal Facilities Branch,
U.S. EPA - Region VI
- Roger Hartung, Chief
Enforcement Branch
U.S. EPA - Region VI
- Issues Encountered
 - Issue Resolution
 - Results/Trends/EPA Response
 - Initiating MWPP through Use of 308 Orders

2:30 - 3:00 Enforcement as an MWPP Tool

Walter Brodtman
Enforcement Division
US EPA Headquarters

3:00 - 3:15 Break

3:15 - 4:30 Update of Wisconsin's Program

Jim Fratrick
Area Engineer
Wisconsin Department of Natural Resources

- Overcoming Issues in Rulemaking
- Program Direction
- Funding

Day 2:

8:00 - 9:00 Pollution Prevention at EPA

James W. Craig, Chief
Pollution Prevention Division
Policy Analysis Branch
U.S. EPA Headquarters

9:00 - 10:00 Source Reduction Activities at POTWS

Lindsey Mize
Environmental Engineer
North Carolina Pollution Prevention Program

Adriana Renescu
Special Projects Engineer
Orange County Sanitation District

10:00 - 10:15 Break

10:15 - 10:45 Water and Energy Conservation: Current Agency Initiatives

John Flowers, Chair, Water Use Efficiency Task Force; WAVE Program Manager
U.S. EPA Headquarters

10:45 - 11:15 Pollution Prevention in the Stormwater Program

Ephraim King, Chief
NPDES Program Branch
U.S. EPA Headquarters

11:15 - 12:15 Measures of Program Success Panel
Harold Thompson (Moderator)
U.S. EPA - Region VIII
Denver, CO

Gary Champy
Vermont Department of Environmental
Conservation

Tom Reich
U.S. EPA - Region VI

Douglas Johnson
U.S. EPA - Region VIII
Office of Policy and Management

Katherine Dawes
U.S. EPA Headquarters
Office of Policy, Planning and Evaluation

12:15 - 1:30 Lunch

1:30 - 3:00 Round Table Discussion: Where do we go from here
and how do we get there?
-Institutionalizing Programs
-Long Term Funding
-Incorporating Pollution Prevention
-Energy Act
-CWA
-National Wildlife Federation Proposal

Steve Allbee, Chief, Municipal
Assistance Branch (Moderator)
U.S. EPA Headquarters

Panel Members: Walter Brodtman
Enforcement Division
U.S. EPA Headquarters

Jeff Lape, Special Assistant
to Director of OWEC
U.S. EPA Headquarters

John Flowers, Program Manager
WAVE
U.S. EPA Headquarters

3:00-3:30 Summary Remarks

Michael B. Cook, Director
Office of Wastewater Enforcement and Compliance

AGENDA FOR ROUND TABLE TEAM PRESENTATION

April 27, 1993

9:10 a.m - 12:00 noon

Status of MWPP Programs

Each Region/State will discuss the development of their MWPP Program including Region/State Relationship, community buy-in, problems encountered and solutions, use of the CMAR, funding and any other relevant information. Each Region is allocated 15 minutes. If more time is needed, please advise.

Region	Presentations by
I	Richard Darling, Maine Gary Champy, Vermont Brad Foster, New Hampshire
II	Hank Mazucca, U.S. EPA New York
III	David Byrd, West Virginia Tom Brown, Pennsylvania Hal Benson } Maryland Jake Bair } Robert Zimmerman, Delaware
IV	Ben Chen, U.S. EPA Ernest Earn, Georgia Michael Freiman, Mississippi Jerry Hurst, Kentucky
V	Peter Smith, U.S. EPA Heidi Sorin, Ohio
VI	Jan Sills, Texas Bob Paul, Louisiana
VII	Harold Owens, U.S. EPA
VIII	Harold Thompson, U.S. EPA
IX	Angela Ivey, U.S. EPA
X	Dan Steinborn, U.S. EPA

ATTACHMENT 2

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