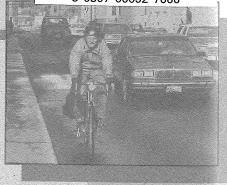
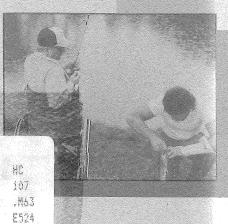
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## **Environmental** Services Guide



645 State Office Suitting Saint Paul, Minuesota 55155

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Cordially. Gerald L. Willet Commissioner

# **Environmental Services Guide Minnesota Pollution Control Agency**



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Text: Laura Fisher
Graphic Carol Pruchnofski

Some photographs courtesy of the Minnesota Department of Natural Resources

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# AIR QUALITY

NOISE MONITORING

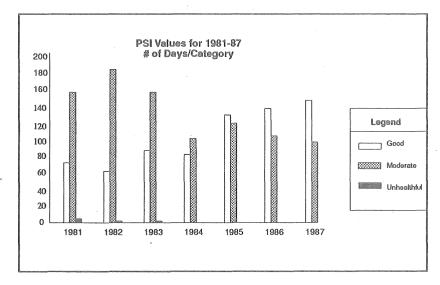
Checking up to keep the volume down

Although excessive noise is a common community pollution problem, municipalities lack the equipment and expertise to test noise levels themselves. On request, staff of the MPCA's Air Quality Division will visit the locations of noise complaints, monitor and graph the noise levels, and report the results to the local government unit for action. Occasionally, staff can also provide monitoring assistance to individuals. With personnel from the central and regional offices, the MPCA can monitor noise anywhere in Minnesota.

POLLUTION STANDARDS INDEX (PSI)

Daily air quality health indicators

During the week, Twin Cities residents can call the MPCA at 612/297-1630 to hear a recorded message giving the daily air pollution concentrations. The report, particularly helpful to those with heart or respiratory diseases, includes the Pollutant Standards Index (PSI - a measurement of each of the major air pollutants that can affect our health), a forecast for the next day, and a pollen count, which the MPCA obtains from the University of Minnesota's allergy laboratory. The threeminute message also includes a report of the rainfall acidity at six sampling stations in Minnesota. The acid rain index compares the acidity of the day's rainfall with normal rain. The MPCA also provides the PSI information to the National Weather Service, making it available to news services throughout the state.



## HAZARDOUS WASTE

HAZARDOUS AND INDUSTRIAL WASTE GRANT PROGRAMS

Funds for waste reduction projects

The MPCA provides grants of up to \$30,000 to businesses to study and implement hazardous or industrial waste reduction methods at their facilities. Ten reduction grants have been awarded to Minnesota companies in the past four years; four more grants will be awarded by the MPCA in early 1989.

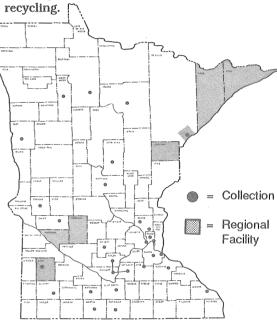
In addition, the MPCA awards matching grants of up to \$50,000 to companies interested in developing facilities or services to process industrial wastes. One such grant was used to develop Minnesota's first commercial hazardous and industrial waste treatment facility in Roseville. The most recent grant is being used to study the feasibility of developing a used-oil recycling facility in the state.



Promoting safe disposal

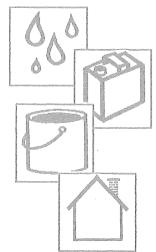
Begun as a Legislative Commission on Minnesota Resources-funded study in 1985, the household hazardous waste project has evolved into an ongoing education and collection program, operated in partnership with local communities. The program was established in response to a growing concern about discarded household chemicals contributing to ground water contamination at landfills and the need for education on safer disposal methods.

Collections: Since 1985, the MPCA has sponsored 32 collections in communities around the state, with at least four planned for the spring of 1989. More than 6,500 households have participated, bringing in over 800 55-gallon drums of household chemicals and more than 10,000 gallons of used motor oil for



Collections and regional facilities

Education: A toll-free telephone advice hotline provides disposal advice, emphasizing reuse, recycling and at-home treatment and disposal of wastes. In the last year, nearly 1,800 calls were received through the hotline — a threefold increase over the first two years of the service — and the MPCA has trained 47 local staff to provide the same service within their communities. Follow-up fact sheets provide step-by-step advice to callers on handling specific wastes. Other



educational materials, including a videotape program, youth materials, a speaker's packet and a news media packet, are available for use in local communities.

Regional Education and Collection
Programs: In the past year, three regional education and collection programs started up — in northeastern, southwestern and west-central Minnesota — operated by local organizations, with partial funding and technical assistance from the agency. The regional facilities serve as permanent household hazardous waste education projects with ongoing, scheduled collections for certain wastes. Several additional regional programs are planned for 1989.



MINNESOTA TECHNICAL ASSISTANCE PROGRAM (MnTAP)

Confidential help for hazardous waste generators

Since 1985, MnTAP has provided free, confidential waste minimization assistance and advice to Minnesota's small and medium-size hazardous waste generators. MnTAP provides businesses with up-todate information on waste reduction and treatment technologies through its information clearinghouse, newsletter, fact sheets and by telephone consultations. MnTAP staff also arrange on-site technical assistance visits with generators, and each summer the program matches student interns from the University of Minnesota with companies interested in help reducing hazardous or industrial wastes (the student's salary is paid by MnTAP). Since 1987, nine interns have worked with companies around the state on such projects as reducing chromium losses from a chromium plating bath and

identifying options for reducing paint and solvent waste in an auto body repair shop.

In addition, MnTAP funds small-scale projects to research improved waste reduction techniques. Program staff also hold general-audience workshops on waste management and waste reduction, and give workshops for specific industry groups on topics such as improving management of a specific waste or how to comply with state hazardous waste rules.

The program is funded by an MPCA grant to the University of Minnesota, and has assisted over 2500 generators in its first four years.

#### PESTICIDE COLLECTIONS

Helping farmers dispose of waste pesticides

In response to widespread concern over pesticide contamination of ground and surface waters, the 1987 Legislature

funded a statewide study to determine the extent of the problem and to define long-term waste pesticide collection needs. The first phase of the MPCA study — a survey conducted in November and December 1987 — demonstrated that as many as one-third of our farmers may have waste pesticides in storage at their farms.

The second phase of the study involved free and

partially funded waste pesticide collections in Clay, Goodhue, Stevens, Watonwan and Winona counties, which took



place from April through August 1988. In all, 180 farms participated, and the MPCA and local county staff collected 7,782 pounds of solid waste pesticides, and 1,800 gallons of liquids.

A final report on the entire study will be completed in early 1989, recommending permanent status for the program.



#### PETROFUND

Cleaning up pollution from leaking petroleum storage tanks

In 1987, by unanimous vote, the Minnesota Legislature created the Petroleum Tank Release Cleanup Fund (called the "Petrofund") to aid in the cleanup of pollution caused by leaking petroleum storage tanks. The fund provides partial reimbursement to leaking above-

ground and underground storage tank owner/operators who have complied with state regulations for tank maintenance and leak-reporting.

Under the Petrofund's reimbursement provision, tank owners or operators who comply with state law and who clean up their site in cooperation with the MPCA pay the first \$10,000 of the cleanup costs. The Petrofund can then reimburse the owner for 75 percent of the costs between \$10,000 and \$100,000. The tank owner pays any cleanup costs over \$100,000.

If the owner of a leaking petroleum tank is unidentified, uncooperative or bankrupt, the MPCA can clean up the site with money from the Petrofund. The MPCA can also respond to emergencies such as explosive vapor levels, petroleum in

sewers or basements, or drinking water contamination. When the cleanup is complete or the emergency situation has stabilized, the agency will take action against the tank owner to recover the expenses — including investigative, administrative and legal costs — and return the money to the Petrofund.

The MPCA believes that 10 to 30 percent of the estimated 40,000 petroleum storage tanks in Minnesota are leaking or will leak. MPCA staff are currently overseeing investigations and cleanups of more than 800 sites, many of which may be eligible for reimbursement from the Petrofund. To date, ten reimbursements totalling \$303,342.54 have been made from the Petrofund.

SMALL QUANTITY GENERATOR OUTREACH

Helping businesses understand the hazardous waste rules

All Minnesota hazardous waste generators come under state regulations for storing, transporting and treating hazardous waste. Many of the smaller businesses that produce hazardous wastes — such as

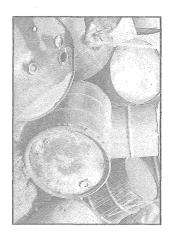
Since 1985, generators and other interested parties have requested over 97,000 copies of hazardous waste fact sheets from the MPCA outreach program.

dry cleaners, service stations and printers— are unaware of their responsibilities or are not sure how to fulfill them. With a grant from the U.S. EPA in 1985, the MPCA began an outreach program to educate and assist these businesses.



The central features of the outreach program are a quarterly newsletter and a series of workshops. The Generator News is sent to a mailing list of 22,500 confirmed and probable generators each quarter. In a January 1988 reader survey, 95 percent of the 1,800 generators who responded thought the newsletter was helpful and easy to understand. MPCA staff also hold rule compliance workshops every year — since the program's beginning in 1985, over 40 workshops have been given to almost 2,000 generators throughout the state.

Other facets of the outreach program include: 50 free fact sheets on a variety of waste-related topics; telephone assistance for questions or problems; an oncall speakers bureau; and a compliance videotape, which is now in production. Funding for the program should continue through 1989.



#### SUPERFUND

Correcting yesterday's hazardous waste mistakes

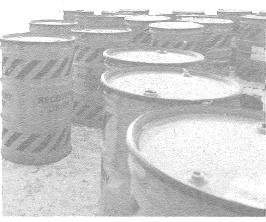
The public knows it as "Superfund" the program and fund established by the Minnesota Environmental Response and Liability Act (MERLA) of 1983 to investigate and clean up releases of hazardous wastes throughout the state. The Minnesota Superfund protects public health and the environment by giving the MPCA authority to: discover sites with possible contamination; identify parties responsible for the contamination and exert authority to bring them into the cleanup process; respond to emergencies (such as contaminated drinking water or leaking barrels); initiate investigations at confirmed sites; assess cleanup options; design and carry out a cleanup; and work with the

U.S. EPA, responsible parties, local governments and the public to assure prompt, effective cleanup. It's a big job, and getting bigger — more than 150 sites are listed on the state Superfund's Permanent List of Priorities (PLP), a roster of confirmed sites requiring cleanup. Thorough investigation and cleanup takes an average of four-and-one-half years at these complex sites. Yet despite the different challenges inherent in each site and the increasing number of additions to the PLP, 104 sites are currently undergoing cleanup (73 of these are being completely funded by the party responsible for the hazardous substance release).

The "fund" in Superfund pays for emergency drinking water for communities at risk from contaminated water supplies; cleanup at sites where no responsible party can or will pay for the necessary remedy; and 10 percent of the cost of federal Superfund cleanups. Since 1983, only \$12 million in state funds has been expended, while responsible parties have committed an estimated \$130 million to cleanups in Minnesota.

#### The Property Transfer Program

Businesses and individuals, understandably concerned about the possibility of contamination on their property, can



benefit from a new Minnesota Superfund service, the MPCA Property Transfer Program. Established in 1988, the program provides funds for MPCA staff to investigate possible pollution problems on land that is being sold. More than 1,500 buyers, sellers, lending institutions and insurance companies have used the service since its inception.

will also participate in the training.

All three staff positions will be filled by early 1989. Program funding currently runs through 1990.

### TRAINING AND TECHNICAL ASSISTANCE

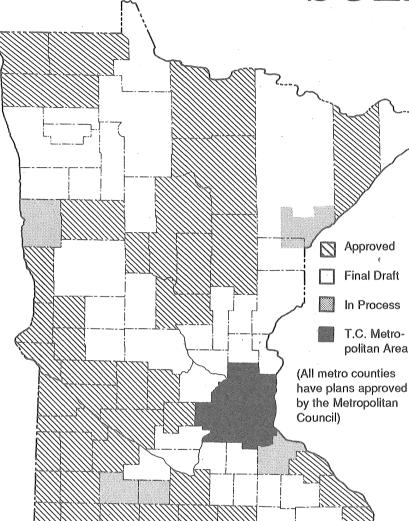
Free waste minimization assistance and advice

Minnesota's hazardous waste generators will soon receive more waste minimization advice and assistance through a federal grant for training and technical assistance. The MPCA, recipient of one of only 11 such grants nationwide, received \$336,000 in September 1988 (including a five percent state matching grant) to begin the program.

The grant provides funding for three positions. Two staffers will oversee a pilot technical assistance program on waste minimization for businesses that generate waste solvents. A staffer based at the MPCA will provide general outreach for small businesses, including fact sheets, a newsletter and telephone advice service, while the other worker (at the Minnesota Technical Assistance Program) will perform intensive on-site solvent waste reduction activities for larger generators.

The third staffer is responsible for developing in-house programs to train regulatory staff to do inspections and technical-assistance visits to generators. City and county staffs as well as employees from other state agencies that occasionally deal with hazardous waste sites

## SOLID WASTE



County planning status plan submittals to State October 15, 1988

COUNTY SOLID WASTE PLANNING ASSISTANCE

Making the transition to resource recovery

State law requires all counties to complete a comprehensive solid waste management plan. The MPCA provides technical assistance to counties to help them examine their current situation, analyze ways of improving the system and develop an integrated waste management program that is environmentally sound and economically viable. The agency also sends out a newsletter to county officials and other interested parties with information on rule changes, technological developments and handling requirements.

The underlying goal of the program is to help counties develop the local decisionmaking process and to implement a solid waste management plan that provides an opportunity to introduce improved waste management practices in the future.

#### LANDFILL OPERATOR TRAINING

A well-trained operator makes all the difference

MPCA staff conduct training programs for landfill operators to help them understand and comply with permit conditions. In addition to annual solid waste seminars which have been attended by more than 600 people, the MPCA also presents operator training classes for land disposal facilities and a training class for operators of composting sites. About 300 landfill

operators and inspectors are now certified, and MPCA staff are currently developing training programs for alternative waste management facilities and investigating the need for a certification program for compost site operators.

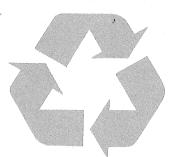
#### MARKET DEVELOPMENT PROGRAM

Developing Minnesota markets for recycled materials

To help develop Minnesota markets for recycled materials, the MPCA encourages proposals from persons interested in developing facilities or services in the state that would serve as end-markets for recycled materials. Participants in the Market Development Program provide 50 percent of each study's cost.

The first program participant is Avon Plastics Inc. of Albany, Minnesota. The company received a \$34,225 grant in 1988 to study the feasibility of expanding its Paynesville plant to recycle waste plastics for use in its lawn care products, as well as for sale to other plastic product manufacturers. The MPCA is also looking for companies interested in studying ways to establish markets for used tin cans and to enhance markets for waste paper.

The Market Development Program also provides technical assistance to public agencies to encourage solid waste reduction and to help increase their purchase of products with recycled materials. And in the 1988 session, the Legislature expanded the program to include market development for composted material as well.



Recycled

### SOLID WASTE TECHNICAL AND GRANT ASSISTANCE

Resource recovery projects for better waste management

To encourage development of alternatives to land disposal of solid waste, the MPCA manages four different financial and technical assistance programs.

#### Solid Waste Processing Facility Demonstration Programs

An \$8.8 million fund was established in 1980 to help local units of government develop solid waste processing demonstration projects. Expenditures from the fund are limited to grants and/or loans to cover the capital costs of the projects. Although some early grants were given for more expensive waste-to-energy incinerators, the program was recently revised to encourage the development of less capital-intensive projects such as recycling or composting. Projects now eligible for a \$400,000 grant or loan package include recycling facilities, special wastestream facilities (e.g. waste tires, wood waste) or chemical, physical or biological modification facilities (e.g. composting). Nine projects have been funded under this program to date: three recycling facilities, two refuse-derived fuel projects, one mass-burn resource recovery facility, two recycling/composting projects, and one waste tire processing project.

#### Solid Waste Processing Facilities Capital Assistance Program

This program differs from the Demonstration Program because it doesn't require funded projects to fulfill a "demonstration" requirement. Since its creation in 1985, the Capital Assistance Program has given financial assistance to fourteen solid waste facilities in the state — five

mass-burn facilities, eight transfer stations, and one waste tire processing facility. Six applications are currently in the review process:

Crow Wing County — \$2 million for development of a municipal composting facility that has a capacity of 100 tons per day;

Swift County — \$623,900 requested for a small-scale composting, recycling and household hazardous waste processing facility;

Aitkin County — \$95,000 for development of a recycling facility;

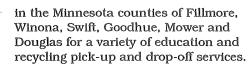
Otter Tail County — \$281,129 requested for a recycling redemption/processing center and eleven drop-off sites throughout the county;

City of Moorhead — \$253,646 for site preparation and development of a leaf and grass-clipping composting project; and Mower County — \$415,589 for development of a recycling facility. Nine additional grant applications are anticipated within the next 12 months.

#### Solid Waste Reduction and Separation Program

The 1987 Legislature appropriated \$300,000 from general revenues to fund

projects involving waste reduction, waste separation and recycling. Program rules require applicants to fund at least 50 percent of the project's first year costs. and limit grants to \$50,000. Grants have been awarded



The program has been well-received, and all funds from the original appropriation have been awarded.

#### **Environmental Testing Grants Program**

This program helps local units of government finance the cost of environmental testing on the pollution control equipment and final products from solid waste processing facilities. Local governments are eligible for grants to cover 100 percent of the eligible costs of their projects. The maximum grant award is \$200,000. To date, projects in Duluth, Fosston, Red Wing and Thief River Falls have received a total of \$252,597 for programs to test particulate emissions and incinerator ash.

#### WASTE EDUCATION PROGRAM

Teaching sound waste management practices

Established by the Legislature in 1987, the program is responsible for providing waste education to Minnesotans of all ages. A fifteen-member task force (representing various public agencies and private groups that deal with waste management issues) operates an information clearinghouse, and is developing educational materials for children and adults designed to increase public awareness of and interest in sound waste management practices.



# WATER QUALITY

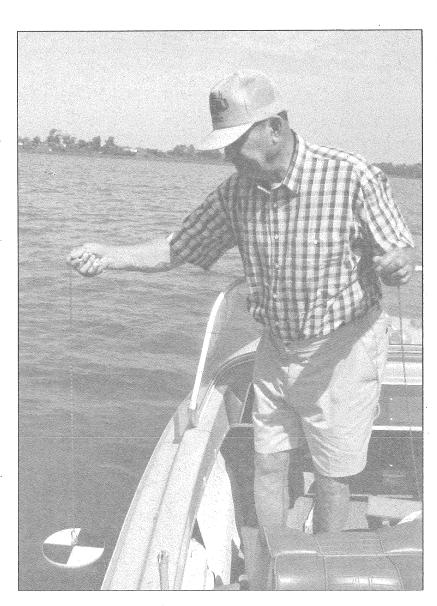
CITIZEN LAKE-MONITORING PROGRAM

Minnesotans keep an eye on their favorite lakes

Every Minnesota lake is a valuable resource, but MPCA staff alone cannot check on the quality of each of the more than 15,000 lakes in our state. The Citizen Lake-Monitoring Program (CLMP) enlists the support of Minnesotans who collect information on nearby lakes and send it to the MPCA.

Interested citizens are provided with a secchi disc, a simple device used to measure water clarity. The test yields valuable information on the amount of algae or other materials suspended in the lake. Volunteers take secchi disc measurements from mid-June through mid-September and send the results to the MPCA by November 15. MPCA staff then enter the monitoring results into STORET, the U.S. Environmental Protection Agency's national water quality data bank, where it can be accessed by researchers, government officials and scientists.

The information provided by CLMP volunteers is often the only information available for a given lake and is essential in defining water quality patterns. Volunteers now provide information on 323 lakes, up from 192 in 1985.



#### CLEAN LAKES PROGRAM

Federal funds to preserve freshwater lakes

The Clean Lakes Program is a federal program created to help states protect and preserve freshwater lakes. Since the program began in 1977, the MPCA has administered the Clean Lakes grants awarded to the state by the U.S. Environmental Protection Agency. The federal matching grants are given to local units of government for specific water quality projects.

Forty-eight lakes in Minnesota have benefitted from Clean Lakes projects in the last 10 years and more than \$8 million in federal grants have been awarded to local governments for lake improvement efforts. Clean Lakes projects have helped reduce or eliminate noxious algae blooms in lakes, improve water clarity, slow the process of eutrophication, provide a more suitable habitat for game fish and improve watershed management.

Local units of government eligible to receive Clean Lakes grants include water-shed districts, lake improvement districts, cities, counties and joint-powers organizations created to manage a water quality project.

#### **CLEAN WATER PARTNERSHIP**

Tracking polluted runoff

Recognizing the seriousness of nonpoint source pollution and the need to establish a comprehensive program for its control, the Legislature created the Clean Water Partnership program in 1987. The program provides local units of govern-

ment with financial and technical resources to protect and improve lakes, streams and ground water degraded by nonpoint source pollution.

The MPCA is the lead agency for the program, coordinating the distribution of about \$1.3 million in grant money allocated for Clean Water Partnership Projects. Cities, counties, lake improvement districts, municipalities, watershed districts, townships and joint-powers organizations can sponsor projects and apply for grant money for up to 50 percent of project costs.

The first Clean Water Partnership grants will be awarded in February 1989. A new application period will open in late summer of 1989.

COMMUNITY ASSISTANCE PROGRAM (CAP)

State and local officials working together for good wastewater treatment

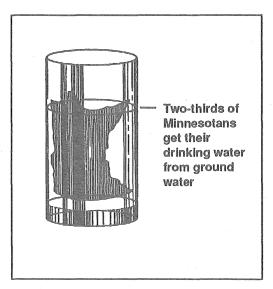
Although no formal program existed, MPCA staff have worked with communities for many years to plan and effectively operate wastewater treatment facilities. A pilot program to formalize this type of regional community assistance for selected municipalities was initiated by the MPCA's North Central Regional Office during 1988.

CAP's goals, established by an advisory committee made up of city officials, officers of wastewater treatment operators' associations and regional staff, are: to establish better communications between the MPCA and cities; to increase expertise of city personnel in managing their wastewater treatment programs; and to increase city officials' knowledge of the planning required to provide adequate

#### The other kind of water pollution

Most people are familiar with the type of pollution that flows out of the end of a pipe -- usually from an industry or municipal wastewater treatment facility. It's typically called "point source" pollution -- because it comes from a single source.

Nonpoint source pollution is not as easy to see. It's the result of a broad variety of land uses and occurs when stormwater runoff and infiltration move pollutants from land into surface and ground waters. Some of the contributors to nonpoint source pollution are: urban density; overuse of fertilizers and pesticides in yards and farm fields; inadequately protected salt storage piles; poorly managed feedlots; failing septic systems; and erosion from fields, gardens and construction sites.



wastewater treatment.

The pilot program provides assistance in long-term planning, sludge management and compliance monitoring. During 1988, five cities received long-term assistance to facilitate communication with the MPCA on grant and operation issues. In one case, MPCA staff helped a community with the decision to build a major treatment plant expansion, and worked with the community's consulting engineer to significantly reduce project costs. Regional staff also helped many cities receiving construction grants understand and manage the sometimes complicated grants process.

In the sludge management portion of the CAP, regional and central office staff met with representatives of eight communities and one sanitary district to discuss issues involving their compliance with sludgemanagement rules. All nine cities now have or are close to having approved sludge-management plans.

In the third phase of the CAP, regional staff invited city officials to accompany them on compliance-monitoring surveys of their wastewater treatment facilities. After completing the surveys, staff reported personally to the city councils on the status of their treatment facilities. The ten communities that participated in the surveys passed along their appreciation for the council report and said that CAP activities clarified their understanding of the MPCA's role in wastewater treatment, personalized their relationship with the agency, educated the council on wastewater treatment and gave the agency an understanding of local government operations.

Based on the success of the pilot program, the MPCA is requesting additional resources so that CAP activities may be expanded to the rest of the state.

LAKE ASSESSMENT PROGRAM

Communities get involved in lake research and protection

MPCA staff work with lake associations and other local groups on cooperative studies of lakes through the Lake Assessment Program (LAP). These studies provide the local groups with vital information that can be used to protect existing lake water quality or to plan restoration efforts.

An assessment of a lake begins when MPCA staff meet with the lake's sponsoring group to discuss perceived water quality problems and possible solutions. This is followed by two or three sampling tours of the lake. Group members provide the boat, assist in sampling and accompany one MPCA staff member on each tour, pointing out problem areas in the lake. These tours help build the local involvement needed for future restoration efforts.

Agency staff use the sampling data to prepare a report that characterizes the

lake's water quality and provides some basic information on the interaction of the lake and its watershed.

Twenty-six LAP studies have been completed since the program began in 1985.

REGIONAL WATER QUALITY GRANT PROGRAM

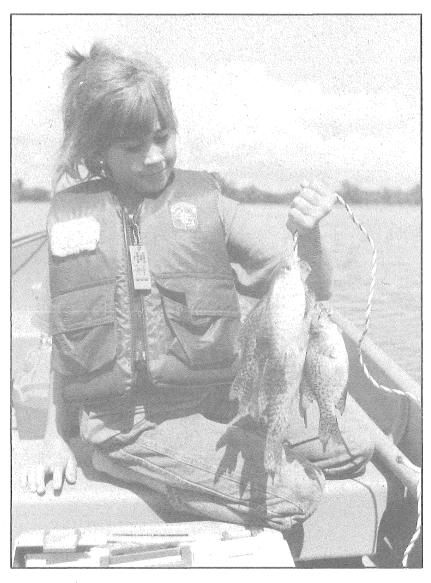
Identifying and meeting local waterquality needs

Federal funding for regional water quality projects was established by Congress in 1987 as part of the Clean Water Act. The MPCA administers this program in Minnesota, awarding grants to regional planning agencies for projects that identify and solve critical local water-quality needs.

The program emphasizes nonpoint source pollution. Projects can address the origins, solutions and economic impact of nonpoint source pollution as well as the benefits of clean water in a specific area.

Grants totaling \$114,200 were awarded to six regional water quality management projects in 1988. The projects will help identify "at risk" lakes, locate abandoned wells and map areas susceptible to nonpoint source pollution. Other projects will expand the usefulness of an agricultural nonpoint source computer model and locate and compile historic sediment data.

Future grants from this program depend on availability of federal funds.



#### SEPTIC SYSTEM TRAINING

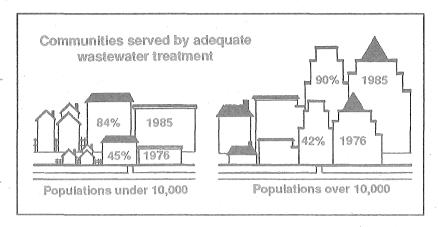
Certification for septic system installers, pumpers

The MPCA and the University of Minnesota began a voluntary certification program in 1980 for personnel involved in work on on-site septic systems. The program includes specific classes for installers, designers, site evaluators, inspectors and pumpers.

Staff from the MPCA and the University offer three-day basic and advanced workshops and one-day site evaluation workshops several times each year at various locations around the state. A certification examination is given after the three-day basic workshops and at one additional time in late summer each year. Individuals passing the exam are given provisional certification and receive full certification when they reach the level of experience required for their job classification.

Since the program began, 2,620 people have taken the certification exam and 1,429 certificates have been issued. To maintain certification, operators must have 15 hours of classroom training every three years; 382 people have renewed their certificates by completing this requirement at advanced workshops.

Although there is no state requirement for certification, many local governments have adopted ordinances requiring certification before they issue local permits or licenses for on-site installations. The Minnesota On-Site Sewage Treatment Contractors Association is recommending that the certification program be mandatory for all persons involved in designing, installing or maintaining individual septic systems.



STATE INDEPENDENT GRANTS PROGRAM

Helping communities fund wastewater treatment systems

The construction and maintenance of a wastewater treatment facility is one of the largest investments a community can make. Since 1977, more than \$875 million in federal, state and community monies has been spent under the MPCA's State Independent Grants Program to plan and construct wastewater treatment facilities.

Thanks to a strong MPCA program, 100 percent of Minnesota's communities with populations over 10,000 had acceptable wastewater treatment facilities in place by the federal Clean Water Act deadline of July 1, 1988. In 1977, only 42 percent of these communities had achieved this standard. In the same eleven-year period, the percent of smaller Minnesota communities served by adequate systems grew from 45 to 84 percent.

The federal government, which provided three-fourths of all dollars spent on wastewater treatment plants to date, is withdrawing support for this program. From 1989 through 1994, federal funds

will be used to capitalize a state revolving-loan program; by 1990, no new federal grants will be awarded to communities for the construction of wastewater treatment facilities.

The State Independent Grants Program will continue to help Minnesota communities meet wastewater treatment needs. In 1989, the Department of Trade and Economic Development will begin to award grants to communities, while the MPCA continues to administer the program, providing review and technical assistance to community grantees.

Most of the communities in Minnesota without adequate wastewater treatment facilities are very small and, as a result, have little money to fund local costs for wastewater projects. Three new set-aside programs within the State Independent Grants Program were created by the Legislature in 1987 with these small communities in mind. The programs, and their current status, are:

## Capital Cost Component Grants or "Privatization" Program

Up to \$1.5 million may be set aside annually for grants to cities contracting with private vendors to plan, design, construct and operate wastewater treatment facilities. The first grants will be awarded in spring 1989.

### Individual On-Site Wastewater Treatment Grants Program

Up to \$1 million will be available to reimburse homeowners for 50 percent of the costs of upgrading individual on-site septic systems.

The program enables small municipalities to help homeowners upgrade their on-site systems as an alternative to the much more costly approach of constructing a sewer system and centralized treatment facility under the regular grants program.

#### Corrective Action Grants Program

This \$1 million set-aside from the State Independent Grants Program is earmarked for communities that have experienced failures in treatment facilities funded under either state or federal construction grants programs. Three communities already have received corrective action grants totaling over \$700,000. Cities receiving these funds must evaluate liability for their failed systems and pursue litigation when appropriate.

#### WASTEWATER OPERATOR TRAIN-ING UNIT (OTU)

A certified operator is the key to clean water

Wastewater treatment facilities must be well-operated and well-maintained to provide clean water. The Legislature recognized this fact when it established mandatory certification for wastewater treatment facility operators in 1971 and made the MPCA responsible for providing that training. The MPCA's Operator Training Unit (OTU) has received national recognition for its training programs for Minnesota's wastewater treatment operators.

Annually, over 400 operators complete MPCA operator training workshops. During 1988, OTU staff conducted 12 different wastewater training courses around the state with a total enrollment of 1,188.

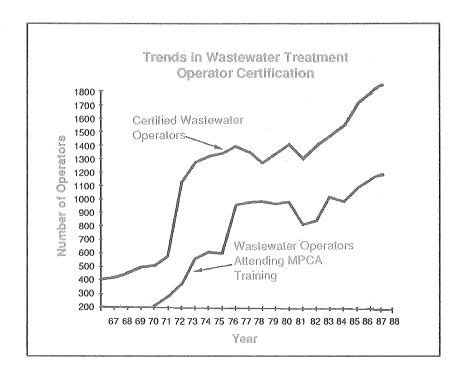
Programs offered by OTU every year are:

- a three-day Wastewater Operations
   Seminar held in Bloomington which has drawn an average of 450 operators per session for the last five years;
- Stabilization Pond Operator Training, a four-day format given four times a year in various locations around the state;
- Collection System Operators Seminar, a three-day workshop offered around the state and averaging 350 students per session over the past ten years; and
- Wastewater Treatment Technology, which has served 1,365 operators in the last twelve years.

Other courses given periodically to fulfill more specialized training needs include Upgrading Plant Operations, Trickling Filter Workshops and On-Land Disposal of Wastewater.

The newest operator training program, Land Application of Sludge, offers workshops in both three-day and one-and-ahalf day formats. More than 100 people attended the four initial presentations of this program in 1988, and 747 have registered for future land application workshops.

The Operator Outreach Program complements the basic and specialized training by providing on-site assistance to dischargers who are having operating problems. OTU staff have provided hands-on assistance and training to about 50 communities through this program. Although the primary goal is to bring communities into permit compliance, participation in the program also often lowers operating costs, improves operator morale, and extends a facility's useful life.



## OTHER PROGRAMS

COMPLAINTS AND TIPS

Citizens protecting the environment

Each year the MPCA receives and responds to hundreds of citizen complaints and tips about illegal dumping, leaks and spills, illegal burning and airborne pollution that can harm Minnesota's air, water, and land. The MPCA depends on all residents to be environmental watchdogs — many of the state's most serious pollution problems were first identified because a concerned citizen called the MPCA. The identities of complainants are kept strictly confidential, as required by law.

The MPCA and its five regional offices work closely with other state and federal agencies and with county, township and city officials statewide to investigate and respond to citizen complaints and information about possible violations of pollution laws. This cooperative effort between citizens and governments is crucial to the discovery and cleanup of pollution problems that can threaten the health, homes and livelihoods of Minnesota's residents.

The public can report pollution emergencies by calling the MPCA switchboard, the 24-hour emergency telephone number, or the appropriate regional office (see inside back cover for phone numbers).

INFORMATION AND EDUCATION

Pollution-fighting tools for the public

The MPCA's information and education services reach thousands of agency clients and the public each year. Included in the available services are developing and distributing information materials explaining the agency's programs and other environmental issues, providing staff speakers for a variety of audiences, assisting educators, and coordinating outreach efforts.

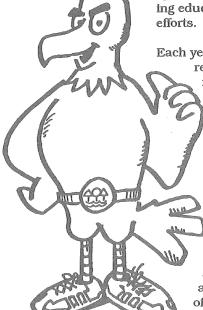
Each year, the agency's information office receives and responds to about 1200

requests from teachers, students, civic organizations, businesses and others for brochures, fact sheets, films and speakers on pollution-control topics. To improve the coordination of requests for speakers, a speaker's bureau was set up. Each year the bureau provides staff for nearly 100 audiences -classrooms, citizen and neighborhood organizations, and trade and business associations - in the seven-county metropolitan area. In addition, the agency's five regional offices regularly make presentations and distribute information materials

schools, and other organizations in their regions.

to lake associations, county boards,

Elementary and secondary-school teachers are major clients of the agency. To fill a void in environmental materials for elementary students, the MPCA developed its "Pollution-Fighter Workbook" and accompanying teacher's packet. To date, more than



The MPCA Pollution Fighter Eagle and "Pollution-Fighter Training Camp" are favorites of students and teachers across the state

4000 teacher's packets and 75,000 Handbook have been distri- buted to instructors and students.

Outreach efforts to educate Minnesotans and respond to their questions and concerns include participation in the State Fair and a number of other regional fairs and conferences. At the State Fair, the agency continues its pollution-fighter theme with a "Pollution-Fighter Training Camp," allowing kids to test their environmental knowledge in an enjoyable way. The success of the exhibit can be measured by the numbers of participants — 25,000 kids and their parents "went to camp" in 1988, and 750 adults requested further information on agency programs and environmental issues.

#### PERMITTING

#### Operating for environmental quality

Many environmental protection laws are implemented through the issuance of permits. The MPCA protects Minnesota's residents and natural resources from the damaging effects of pollution by issuing permits to facilities that could release pollutants to the air or water, or those that manage hazardous or solid wastes. The permits, written on a case-by-case basis, ensure environmentally sound operating conditions by including details of specific, enforceable pollution control measures designed to keep the permittee operating within the law. Some permits may even include remedies for pre-existing pollution problems.

The MPCA has recently streamlined its procedure for reviewing permit applications prior to their consideration by the MPCA Citizens Board. This process is designed to be both expeditious and thorough, with opportunities for input

from both the affected public and the applicant.

#### REGIONAL OFFICES

MPCA services extend throughout the state

The five MPCA Regional Offices fulfill an important communication function: they give Minnesotans access to the MPCA's services throughout the state, and they assure that the agency remains responsive to the needs of local communities.

Since their creation in 1972, the Regional Offices have worked with local governments, industries, community groups, environmentalists and individuals to address local environmental issues and concerns. Re-

gional staff reflect the diversity of the agency as a whole, working on water quality, air quality, and solid and hazardous waste issues and educational goals.

The five Regional
Offices include the
Northeast office in
Duluth, the Southeast office in Rochester, the Southwest
office in Marshall, the
North Central office in
Brainerd and the
Northwest office in
Detroit Lakes.



#### USED OIL GRANT AND LOAN PROGRAM

#### Promoting used-oil recycling

The MPCA is now drafting rules for a program to loan businesses money to purchase used-oil processing equipment. In 1989, the MPCA will begin to award grants to counties to purchase and install storage tanks for collecting used oil from the public for recycling.

#### WASTE TIRES

#### Waste Tire Dump Abatement

On July 1, 1985, the State Legislature prohibited land disposal of waste tires. In the three years since the prohibition began, tire stockpiles have increased throughout Minnesota. According to state rules, if a tire dump owner cooperates with the state and develops an acceptable plan for removal and processing of tires stockpiled before November 21, 1985, the MPCA will reimburse the owner for a portion of the costs incurred. Under this program, the state has entered into six

agreements with waste tire collectors who have proposed abatement plans for their sites.

The 1988 Legislature added a provision to this law which authorizes counties to take abatement actions at tire sites.

To participate in the program, the county must submit an abatement plan to the MPCA for approval. Once the plan has been approved, the state may fund up to 85 percent of the county's costs, including costs for "amnesty days" to collect household quantities of waste tires.



### Waste Tire Facility Development Programs

Grants under the Facility Development Program are awarded for projects studying the technical and financial feasibility of waste-tire processing facilities. One grant from this program funded the study of a facility that would process over-sized tires (such as those used in the mining industry) by peeling the rubber from the casings.

Under the same program, the MPCA may loan money for the capital costs of wastetire recyling facilities. Interest in the program is high and several applications are currently being reviewed. Action on loan applications is expected in early 1989.

