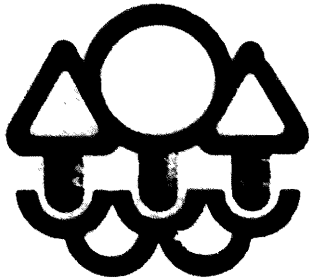
The logo of the Minnesota Pollution Control Agency is a large, stylized, light gray graphic in the background. It features a central vertical element with two circular shapes at the bottom, and a horizontal bar across the middle. The text "MINNESOTA POLLUTION CONTROL AGENCY" is superimposed on this graphic.

# **MINNESOTA POLLUTION CONTROL AGENCY**

**520 Lafayette Road  
St. Paul, Minnesota 55155**

**Minnesota Pollution Control Agency's Report  
on the Use of the Environmental Response,  
Compensation and Compliance Fund  
During Fiscal Year 1988**

**November 1988**



## Minnesota Pollution Control Agency

November 9, 1988

The Honorable Gene Merriam  
Chair, Senate Finance Committee  
122 Capitol  
St. Paul, Minnesota 55155

The Honorable Glen Anderson  
Chair, House Appropriations Committee  
365 State Office Building  
St. Paul, Minnesota 55155

The Honorable Darby Nelson  
Chair, Legislative Commission on Waste Management  
501 State Office Building  
St. Paul, Minnesota 55155

Dear Chairpersons:

It is my pleasure to present to you the Minnesota Pollution Control Agency's (MPCA) report on the use of the Environmental Response, Compensation and Compliance Fund (Fund) during Fiscal Year 1988. This report fulfills the requirements of Minn. Stat. § 115B.20, subd. 6. Although the main focus of this report is a summary of Fund expenditures during Fiscal Year 1988, it also provides a summary of accomplishments under Minnesota's Superfund program and MPCA staff recommendations for future legislative actions.

If you should have any questions concerning the contents of this report, please contact Debra L. McGovern of my staff at 612/296-7397. Thank you.

Sincerely,

Gerald L. Willet  
Commissioner

GLW/jmh

Enclosure

Phone: \_\_\_\_\_

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### Executive Summary

The Minnesota Environmental Response and Liability Act (MERLA) of 1983 established the Environmental Response, Compensation and Compliance Fund (Fund) and authorized the Minnesota Pollution Control Agency (MPCA) to spend Fund dollars to investigate and clean up releases of hazardous substances. The directives of MERLA are carried out through the Minnesota Superfund Program. This report details, as required by Minn. Stat. § 115B.20, subd. 6., the activities for which Fund dollars have been spent during Fiscal Year (FY) 1988. The following is a summary of the accomplishments of the Superfund Program, as well as, detail concerning income to the Fund and expenditures from the Fund.

#### I. Superfund Program Expenditures and Income

<u>Expenditures from the Fund</u>	<u>FY 88</u>	<u>Cumulative Since FY 83</u>
MERLA Fund Expenditures	\$4,036,019	\$12,435,600
<u>Income to the Fund</u>		
Appropriations	4,500,000	9,500,000
Reimbursements by Responsible Parties	1,400,098	4,700,136
Hazardous Waste Tax	1,354,595	5,211,995
Interest on Investments	709,424	2,748,972
<u>MERLA Fund Balance as of June 30, 1988</u>		9,725,503
<u>Federal Superfund Dollars Secured</u>	2,985,856	14,440,000
<u>Federal Superfund Dollars Expended</u>	2,771,343	7,065,173

#### II. Superfund Program Accomplishments

	<u>FY 88</u>	<u>Cumulative Since FY 83</u>
Sites Added to the State's Permanent List of Priorities	10	139
Sites Added to the Federal National Priorities List	0	40
Responsible Party Response Actions Initiated	14	73 *
MERLA Funded Response Actions Initiated	0	17 *
Federally Funded Response Actions Initiated	3	14 *
Remedial Actions Complete or Ongoing	27	38
MPCA Involvement in Lawsuits	1	7

Emergencies	3	17 *
Abandoned Barrels Secured	140	
Property Transfer Assistance		
File Search Requests	667	1000 +
Cleanup-Assistance	20	30

\* Response Actions are ongoing at most of these sites and MERLA Fund, federal, and responsible party dollars continue to finance investigations and cleanups at these sites.

To ensure the continued success of the Superfund Program, the MPCA staff offers the following recommendations:

1. Additional monies must be added to the Fund in the amount of \$8.5 million during the next biennium; \$2.4 million in FY 90 and \$6.1 million in FY 91. Response actions will cease at 23 government financed sites if the requested addition to the Fund is not made. In some cases, these state dollars would be used as the 10 percent match needed to secure federal Superfund dollars for final remedial action construction. Without the additional appropriation, the MPCA estimates that it will not be able to secure \$33 million in federal Superfund dollars for conducting final cleanups.
2. Considering the demand landfills are placing on the Superfund Program funding sources (both federal and state Funds) and the need for a better landfill regulatory program to prevent future contamination problems, a fee on land disposed solid waste should be enacted to provide an appropriate funding source.
3. The municipal liability cap issue should be discussed and clarified during the 1989 Legislative Session.

4. Minn Stat. §§ 115B.17 and 115B.20 should be amended to provide the MPCA the authority to acquire property or an interest in property by purchase, condemnation, donation, easements, and leases for the purpose of conducting response actions including investigation, removal, corrective, or long-term remedial activities. In addition, MPCA staff recommends that the definition of removal actions in Chapter 115B be expanded to include nonemergency removal at sites where nonemergency removal is deemed appropriate. This would expedite and reduce the cost of cleanups at a number of Superfund sites.

MPCA REPORT ON THE USE OF  
THE ENVIRONMENTAL RESPONSE COMPENSATION  
AND COMPLIANCE FUND DURING FISCAL YEAR 1988

I. Introduction

The Minnesota Environmental Response and Liability Act (MERLA) of 1983 established the Environmental Response, Compensation and Compliance Fund (Fund) and authorized the Minnesota Pollution Control Agency (MPCA) to spend Fund dollars to investigate suspected releases of hazardous substances and clean up releases and threatened releases. This report outlines the use of the MERLA Fund during Fiscal Year (FY) 1988 and summarizes the status of the Minnesota Superfund program.

II. Program Overview

The Minnesota Superfund program is composed of the following functions: 1) to discover and conduct preliminary investigations of hazardous substance releases from abandoned hazardous waste or solid waste sites and identify responsible parties; 2) to respond to emergency situations, such as a contaminated drinking water supply or drum removal; 3) to initiate remedial investigations/feasibility studies at identified sites; 4) to develop remedial designs and implement remedial actions for the final cleanup of sites; 5) to conduct the administrative activities for the management of response action contractors, the MERLA Fund, and federal Superfund money secured under Cooperative Agreements with the U.S. Environmental Protection Agency; 6) to conduct public information and community relations activities; and 7) to provide assistance to buyers and sellers in the transfer of property where potential contamination problems and liability issues may or do exist.

The MPCA Property Transfer program was created through legislative action in the 1988 Waste Management Act Amendments in response to requests of the MPCA from business and industry concerning the liability associated with real estate

transactions (i.e., buying and selling property). MERLA imposes liability on parties who knew or reasonably should have known that a hazardous substance, pollutant or contaminant was located on the property at the time right, title or interest in the property was acquired and the buyer associated themselves with the release by their activities on the site. Buyers, sellers, lending institutions and insurers request MPCA staff assistance in determining whether property of interest has been the site of a release or threatened release of a hazardous substance, pollutant, or contaminant. MPCA assistance consists of conducting file searches, reviewing the investigation and response action work plans and assisting in or supervising the implementation of reasonable and necessary response actions. The legislation authorized the MPCA to recover staff costs associated with these actions.

### III. Status of the Fund

The status of the Fund as of June 30, 1988, is detailed in Table 1 (General Ledger). The Fund balance at the end of FY 88 is \$9,725,503.

TABLE 1

GENERAL LEDGER BALANCE AS OF JUNE 30, 1988  
ENVIRONMENTAL RESPONSE FUND

Appropriations to Date	
Original Transfer From General Funds (FY 83)	\$5,000,000
Water Pollution Control Fund (FY 88)	4,500,000
Income to Date (FY 83 - FY 88)	
Interest on Investments	2,748,972
Reimbursements to the Fund	4,700,136
Hazardous Waste Taxes	5,211,995
Expenditures to Date (FY 83 - FY 88)	12,435,600
Fund Balance as of June 30, 1988	9,725,503

In 1983, the Fund was established with a \$5,000,000 transfer from the General Fund. An additional \$4,500,000 was appropriated during FY 88 from the



Water Pollution Control Fund. The Fund investments are managed by the Department of Finance and the Hazardous Waste Tax is collected by the Department of Revenue. The MPCA has recovered \$4,700,136 in the form of penalties and reimbursements from responsible parties since the Fund was established.

A summary of Fund expenditures during FY 88 is presented in Table 2 below.

TABLE 2

FY 88 STATE SUPERFUND EXPENDITURES BY MPCA

Administrative Costs	\$2,407,210
Legal Costs	205,401
Laboratory/Analytical Services	219,695
Site Specific Contractual Costs*	1,203,713
TOTAL	4,036,019

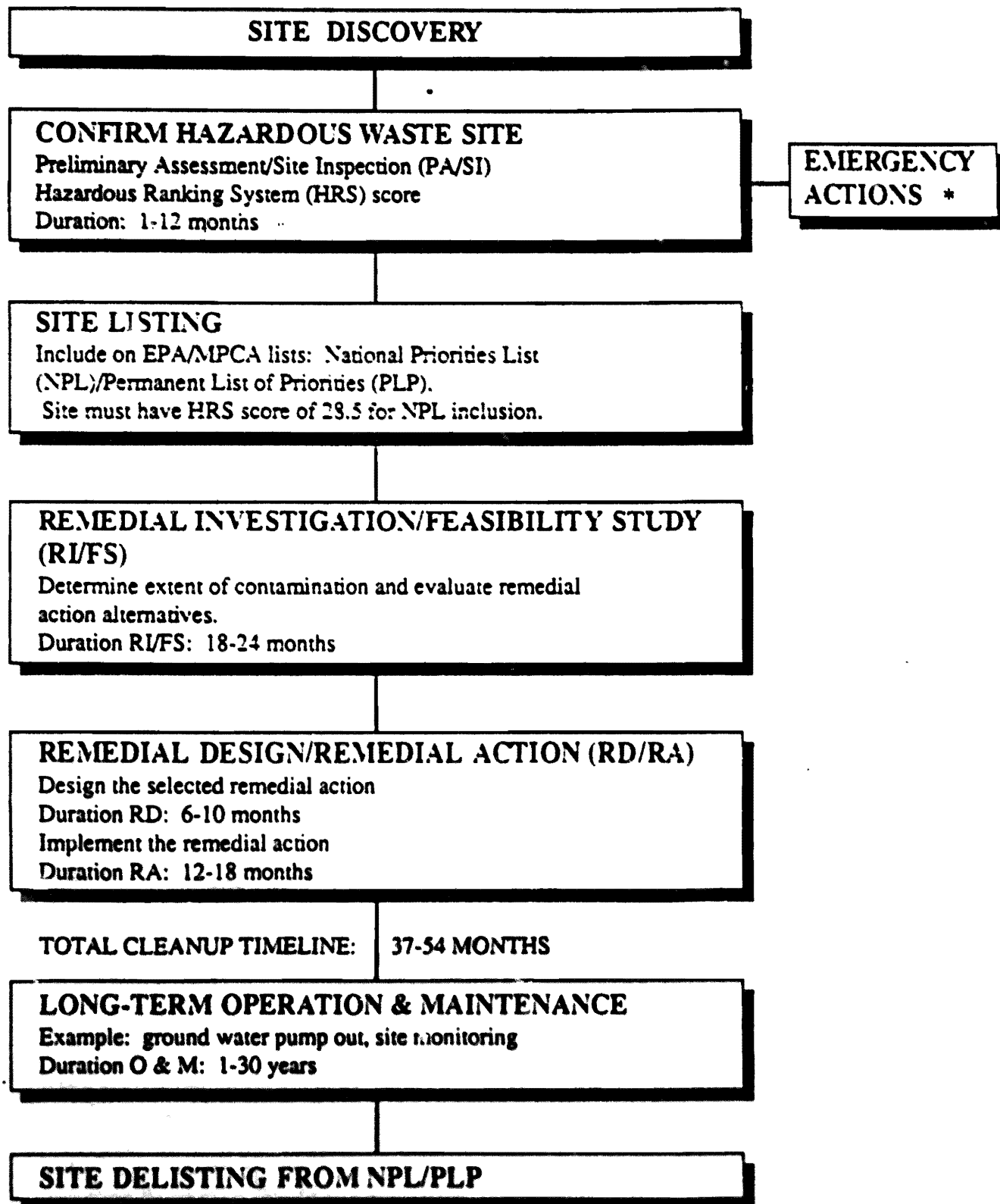
\* Site Specific expenditures provided in Table 4.

The administrative cost represents salaries for 54 positions, as well as office space rental, travel, equipment, and supply expenditures associated with responding to emergencies and implementing site cleanups. Nearly half of the administrative costs that are incurred by MPCA staff are expenditures that result in securing response action commitments from responsible parties. The legal cost represents the cost for services rendered by the State Attorney General's Office. Laboratory costs are expenses paid to the Minnesota Department of Health for analytical services.

IV. Status of the Superfund Program

The Minnesota Superfund process for hazardous waste site cleanup is diagrammed in Figure 1. Potential hazardous waste sites are identified to the MPCA through telephone calls from concerned citizens, routine inspections by MPCA staff, reports of hazardous substance spills, and analyses of drinking water supplies sampled by the Minnesota Department of Health. Through a Cooperative Agreement with the U.S. Environmental Protection Agency (EPA), the

**Figure 1**  
**Minnesota Superfund-Site Cleanup Process**



\* For Emergency Actions, Federal or State funds may be used for alternate drinking water, removal actions, or a limited RI/FS.

MPCA has established a program to assess potential hazardous waste sites in Minnesota. Initially, a Preliminary Assessment is conducted involving a general review of readily accessible information to characterize the site and to determine if the site warrants further action. If further action is warranted, a site investigation is conducted and data collected is used to rank or score a site using the Hazard Ranking System. The Hazard Ranking System scores are used to establish priorities among sites and to determine a site's eligibility for federal and/or state Superfund monies for response actions. If a site is then added to the EPA's and/or MPCA's priorities lists, a remedial investigation/feasibility study is conducted to determine the extent of contamination and to evaluate remedial action alternatives.

The preliminary assessment and initial site investigation process required by EPA has changed over the past several years so that the process and the time needed to conduct the preliminary site investigations (necessary in order to place a site on the federal National Priorities List) has become a lengthy process. This has reduced the number of sites that the MPCA has been able to identify for inclusion on the National Priorities List and the state Permanent List of Priorities. Although the the number of sites that the MPCA will be able to place on the National Priorities List is not likely to increase until perhaps next year, the number of preliminary site investigations conducted by the MPCA is increasing so the number of sites placed on the State's Permanent List of Priorities will increase.

The MPCA has identified 450 potential hazardous waste sites. Fifty of these sites were identified during FY 88. Preliminary Assessments have been conducted at 342 of these sites; 40 were conducted during FY 88.

Currently there are 139 sites listed on the State's Permanent List of Priorities for investigation and cleanup, 10 of these were added to the list

during FY 88. An additional 19 sites are proposed to be added to the Permanent List of Priorities in December 1988 for a total of 158 sites. Forty of the 139 sites currently listed on the State Permanent List of Priorities are also included on the federal National Priorities List, and therefore, activities at those 40 sites are eligible for federal funding, if monies are available.

Since FY 83, response actions (including remedial investigation and feasibility study, selection of a remedy, remedial design and implementation of final remedial action) have been initiated at 104 sites. Response actions at 73 of these sites are being conducted by responsible parties. MERLA Fund dollars have been spent at 17 of these sites for response actions. Federal dollars have been spent at 14 of these sites for response actions. In addition, 250 arsenic contaminated sites have been cleaned up using MERLA Fund dollars. See Attachment A, Site Status Report, for detail on the sites and Attachment B which is a map showing the distribution of sites by county.

During FY 88 a drinking water emergency was declared by the MPCA Commissioner at the former Duluth Dump site. The MPCA responded by using Fund dollars to provide safe drinking water to the affected residence and to conduct a preliminary investigation of the contamination.

Since 1983, the Agency has responded to 17 emergencies involving contaminated drinking water supplies and taken action to provide affected residences with alternate drinking water. These communities include: Adrian, Askov, Atwater, Isanti, Lakeland Township, Lansing, LeHillier, Long Prairie, New Brighton/Arden Hills, Northern Township, St. Anthony, Waite Park, St. Paul Park, Spring Grove, Hadder, Garfield, and residents adjacent to the former Duluth Dump. The MPCA continues to supply safe drinking water to affected residences at 7 of these sites.

In addition, during FY 88 the MPCA has responded to other emergencies which involved a pesticide fire in St. Cloud and a warehouse in Minneapolis containing barrels of pesticides and other hazardous chemicals, as well as numerous other actions handled under the MPCA's Abandoned Barrel-Spills contract including investigating complaints and sampling and securing 140 abandoned drums.

The major cleanup accomplishments, since 1983, of the Minnesota Superfund Program include 38 sites where response actions have been completed and operation and maintenance or long term monitoring are ongoing. The sites include those listed in the Class B category of the state's proposed Permanent List of Priorities listed below, as well as, the 11 sites that have been deleted from the Permanent List of Priorities because cleanup of known contamination at these sites has been completed and no further action is thought to be necessary.

**Sites Deleted from the Permanent List of Priorities (11)**

Above Ground Arsenic Sites  
DNR-Nett Lake/Orr Pesticide Site  
Polymetals Products, Inc.  
43 East Water Street  
Airco Lime Sludge Pit  
Former McKay Mfg. Company  
Maple Plain Dump  
Sonford Products  
Abandoned Trailer Site  
Lost Lake Dump Site  
Morris Arsenic Site

STATE OF MINNESOTA  
Environmental Response and Liability Act  
Proposed December 1988 Permanent List of Priorities

Class B Sites  
Response Actions Completed and  
Operation and Maintenance/Long-Term Monitoring Ongoing  
(27)

Site

FMC Corp-Fridley Plant (vault)  
Boise Cascade/Medtronic, Fridley  
Boise Cascade/Onan, Fridley  
Oakdale Dump  
St. Regis Paper, Cass Lake  
PCI, Inc., Shakope  
Burlington Northern, Brainerd  
Whittaker Corporation, Minneapolis  
General Mills, Minneapolis  
Perham Arsenic Site, Otter Tail County  
Nutting Truck and Caster, Faribault  
Winona County Sanitary Landfill  
Ironwood Sanitary Landfill (Advance  
Transformer), Spring Valley  
Waite Park Ground Water Contamination Site  
Kurt Manufacturing, Fridley  
Atwater Municipal Well Field  
Hastings Former City Dump  
Jackson Municipal Well Field  
Wadena Arsenic Site  
Weisman Scrap, Winona  
Boise Cascade Paint Waste Dump, Ranier  
West Duluth Industrial Site  
DNR-Duxbury Pesticide Site  
3M Kerrick Disposal Site, Kerrick  
Hutchison Technology, Inc.  
Tonka/Woyke Site, Annandale  
Minneapolis Community Development Agency/FMC

Responsible Party Actions

Since the passage of MERLA, responsible parties have committed an estimated \$130 million to the cleanup of hazardous waste sites and have made reimbursements to the Fund of \$4,700,136 to cover penalties and costs incurred by the MPCA in administering the site cleanup activities. During FY 88, \$1,400,098 were reimbursed.

Significant MERLA funded MPCA staff effort has been spent administering the Federal Facility Agreement with the U.S. Army concerning response actions at the Twin Cities Army Ammunition Plant (TCAAP). The U.S. Army will be reimbursing the Fund for the cost incurred by MPCA staff. The Federal Facility Agreement was executed by the MPCA Board in July 1987 and represented a first of its kind agreement in the the nation.

In addition, the MPCA has been involved with 7 major lawsuits related to Superfund activities at sites. These sites included: Ecolotech, Boise-Onan, Reilly, Isanti Solvent Sites, Tonka-Woyke, Dakhue Sanitary Landfill, and Freeway Landfill. During FY 88 the MPCA was involved in the Freeway Landfill lawsuit. The MPCA filed suit against Freeway Landfill to recover, from the responsible parties, past costs incurred by the MPCA in administrating response actions at the site. The responsible parties have counter-sued. The suit is in the discovery phase.

#### Use of Federal Dollars

The MPCA has secured a total of 14.44 million in federal Superfund dollars (\$2,985,856 secured during FY 88) for: 1) conducting preliminary assessments and preliminary site investigations at Minnesota sites included on the federal inventory of potential hazardous waste sites; 2) conducting remedial investigation/feasibility study or remedial design/remedial action activities at Minnesota sites included on the federal National Priorities List; and, 3) administering the agreement with responsible parties at the Reilly Tar site. The federal dollars secured are budgeted to be spent over several fiscal years.

During FY 88 the MPCA spent \$2,771,343 federal Superfund dollars for response action activities at 14 sites. Table 3 details these expenditures. In addition, federal Superfund dollars were used to fund salaries for 31 positions during FY 88.

Table 3

FY 88 Expenditures of Federal Superfund Dollars

<u>Site</u>	<u>Amount Spent</u>	<u>Activity</u>
Adrian	\$ 274,147	Remedial Investigation/Feasibility Study
Arrowhead	16,808	Federal Predesign Oversight
Interlake	168,517	Remedial Investigation/Feasibility Study
Kummer Landfill	269,542	Remedial Investigation/Feasibility Study
LaGrand Landfill	51,644	Remedial Investigation/Feasibility Study
LeHillier	67,229	Remedial Design/Remedial Actions
Long Prairie	96,722	Remedial Investigation/Feasibility Study
New Brighton	238,992	Remedial Investigation/Feasibility Study
Northern Township	736,452	Remedial Design/Remedial Actions
Oak Grove Landfill	182,359	Remedial Investigation/Feasibility Study
PA/SI	339,148	Preliminary Assessments & Site Investigations
Program Management	97,289	Management and Program Development
Reilly	51,333	Responsible Party Oversight
Ritari	50,590	Remedial Investigation/Feasibility Study
South Andover	19,183	Federal Remedial Investigation/Feasibility Study Oversight
Union Scrap	51,388	Remedial Investigation/Feasibility Study
Total	2,771,343	

MERLA Funded Site Cleanups

During FY 88 \$1,203,713 from the Fund was used by the MPCA to cover the contractual costs of responding to releases of hazardous substances at 14 sites listed on the Permanent List of Priorities and responding to numerous reports of abandoned barrel containing potentially hazardous substances. Table 4 details these expenditures.

Table 4

FY 88 Contractual Expenditures of MERLA Dollars

<u>Site</u>	<u>Amount Spent</u>	<u>Activity</u>
Abandoned Barrel	\$ 96,527	responded to reports of abandoned drums
Askov	41,970	treatment of municipal drinking water supply
Atwater	57,728	supply well installation
Duluth Dump	5,264	bottled drinking water and test trenching
Hedder	1,170	bottled drinking water
Isanti	1,904	bottled drinking water



Lakeland	159,312	bottled drinking water and Remedial Investigation
Lansing	94,060	bottled drinking water and Remedial Investigation
LeHillier	133,316	states required 10% of Remedial Actions costs at federally funded sites
Lund Nursery	101,461	removal of pesticide contaminated fire debris
Long Prairie	10,275	investigation of contaminated soil
MacGillis/Gibbs	25,625	Remedial Investigation
Neihorster	59,204	drum removal from abandoned warehouse
St. Paul Park	97,053	bottled drinking water and Remedial Investigation
West Duluth	318,844	Remedial Actions (vault construction)
Total	1,203,713	

V. Status of the Property Transfer Program

Since 1985, the MPCA has responded to in excess of 1,000 file search requests and provided investigation and/or cleanup assistance at 30 sites. Legislation from the 1987-1988 session authorized the MPCA to establish six new positions to enable the MPCA to accommodate the rapidly increasing number of requests. Four of these positions have been filled, the remaining two will be filled shortly. The MPCA anticipates that requests from business and industry concerning property transfers will continue to increase. The MPCA will be charging a fee for conducting file searches and other property transfer services. The fee will be used to reimburse the Fund for the cost of the six positions.

VI. Response Actions at Sanitary Landfills

Over the past several years, the Superfund process has been used to address the release of hazardous substances from MPCA-permitted sanitary landfills. There are currently 51 landfills on the state's Permanent List of Priorities and that number is expected to grow as additional permitted landfills with hazardous substance releases are identified.

The MPCA has consistently attempted to use responsible party dollars to address the cleanup of Superfund sites. While this approach has been successfully employed at "traditional" industrial hazardous waste sites and large corporately-owned landfills, the MPCA staff has been less successful in obtaining responsible party Superfund actions at smaller privately-owned and municipally-owned/operated landfills.

A recent telephone conference with 24 representatives of local government, consultants and attorneys involved in Superfund activities at landfills offered some insight into this problem and suggestions to improve the situation. These include:

- The Hazard Ranking System scoring process and risk assessments for Superfund landfills should better reflect the present impacts of the landfill on human health and welfare and the environment rather than the potential impacts;
- A phased approach of investigating sites would be more efficient than conducting a complete remedial investigation at outset;
- The MPCA should increase its efforts to explain the Superfund process to affected parties and improve its public relations;
- The liability cap for political subdivisions involved in Superfund activities needs to be clarified;
- Use a mechanism other than Superfund to foster a partnership between political subdivisions and state to consistently address municipal landfills;
- Small private landfill owners/operators with limited financial capabilities may not be able or willing to conduct Superfund cleanups nor does the state currently have the resources to conduct Superfund cleanups at all landfills.

The MPCA is acting on these suggestions. Pending federal changes in the Hazard Ranking System scoring process will help the scores to better reflect the current impact of a landfill on human health and the environment. The MPCA is also considering changes in its investigation procedure to make it more efficient. Plans are underway for better education, communication and public relations at Superfund landfill sites. The MPCA met with the Legislative Commission on Waste Management in August of 1988 to draw its attention to the need to clarify the liability limitation language for political subdivisions and to the enormous amount of public funds that will be needed to address the cleanup of landfills.

MERLA has language on the liability of political subdivisions for Superfund actions. The language is unclear, however, regarding the liability cap of political subdivisions that are responsible parties at Superfund sites. Current statutory language provides a \$400,000 and a \$1.2 million liability cap. Since the liability cap affects the level of state Superfund dollars versus local government dollars that would be required to address Superfund response actions, this ambiguity is of concern to counties, municipalities and the MPCA for Superfund sites at municipally operated landfills.

The EPA is developing a Municipal Settlement Policy that will be applicable at all municipally owned Superfund sites that are included on the federal National Priorities List. MPCA staff represent Minnesota on EPA's Municipal Settlement Work Group to voice the state's perspective of the impact the policy may have on the Superfund program and municipalities in Minnesota.

A number of issues have arisen nationally in the Superfund Program related to municipalities and are being discussed and considered for inclusion in the Municipal Settlement Policy. They are as follows:

1. How to handle notification of municipal (and private party) generators and/or transporters of municipal solid waste as potential responsible parties and bring them into the settlement process;
2. Whether to focus notification of municipal solid waste potential responsible parties on the broad category of municipal solid waste or narrowed to household and/or small quantity generator hazardous wastes;
3. Whether the policy should address the involvement of municipalities and private parties as potential responsible parties for sewage, lime, and other industrial sludges which typically involves small quantities of hazardous substances; and
4. What settlement tools are most useful for promoting negotiated settlements at municipal sites.

These issues are being discussed and debated within the EPA with resolution and guidance coming in the form of a Municipal Settlement Policy to be published in the Federal Register this winter.

#### VII. The Future of the Superfund Program

The MPCA will continue its efforts to identify new hazardous waste sites in the state. Based on the number of sites undergoing preliminary assessment at this time and the number of hazardous waste sites discovered each year historically, the MPCA projects that 189 sites will be on the state's Permanent List of Priorities by the end of FY 91, 50 more sites than in FY 88.

Consistent with the directives of MERLA the MPCA will continue to be aggressive in its efforts to seek out responsible parties and maximize the use of federal Superfund dollars. During FY 89 the MPCA will continue its efforts to secure federal Superfund dollars for program management and response actions at specific sites. In addition, negotiations are underway with EPA in an effort

to obtain federal Superfund dollars for enforcement activities at specific sites. The goals of the Superfund Program for FY 89 and the next biennium are detailed in Tables 6 and 7.

The MPCA will continue to place a high priority on those hazardous waste sites at which response actions are currently underway. New site starts will be considered as a lower priority and will be initiated as staff resources become available. These priorities are consistent with the overall program goals to achieve site cleanups which are adequate to protect the public health and environment, cost-effective and are conducted in an expeditious manner.

#### Superfund Program Initiatives

The MPCA began in FY 88, and intends to finalize in FY 89, a number of initiatives designed to enhance the Minnesota Superfund Program. A brief discussion of each initiative follows.

Ground Water Strategy - Establish Cleanup Criteria. In an effort to assist responsible parties in their investigations and cleanups of contaminated ground water associated with most Superfund sites, the MPCA is developing guidance on establishing site-specific ground water cleanup goals. The cleanup goals for a specific site must be consistent with the overall state ground water protection strategy and EPA policies. Guidance for cleanup targets for soil contamination will be developed later.

Superfund Memorandum of Agreement. The EPA has been directed by Congress to encourage state involvement at Superfund sites listed on the federal National Priorities List. The EPA and the MPCA are negotiating a Superfund Memorandum of Agreement to identify the roles and responsibilities of the lead and support agencies at these Superfund sites. The MPCA's goal is to avoid duplication of efforts and maximize the number of sites being addressed by acting as the lead agency at all National Priorities List sites.

Capacity Assurance. Congress has mandated that by November 1989 each state must certify that it has 20-year capacity for hazardous waste disposal. States who fail to meet this deadline may lose federal funding. The MPCA, in cooperation with the storage and containment facility development program under the Environmental Quality Board, is working towards meeting this Congressional mandate.

MPCA Involvement in National Superfund Issues. The Minnesota Superfund program is recognized nationally as being very effective at insuring the cleanup of hazardous waste sites. Minnesota's streamlined approach and emphasis on responsible party involvement early in the response action process is of considerable interest to EPA and other states with developing Superfund programs. In an effort to share our experience and shape national Superfund policy, during FY 89, the MPCA staff will: 1) maintain an active involvement in the Association of State and Territorial Solid Waste Management Officials and EPA/State Superfund policy development Work Groups; 2) provide formal comments on the proposed National Contingency Plan; and, 3) make contact with the state congressional delegation concerning federal Superfund reauthorization issues. We believe that these efforts will be beneficial to the national Superfund program and the information exchange with EPA and other states will enhance Minnesota's Superfund program.

#### Response Actions Involving Pesticides

MERLA designated the Minnesota Department of Agriculture (MDA) as the lead agency for using Fund dollars to respond to pesticide releases which are not the result of agronomic use. The MPCA and the MDA staff recently entered into a Memorandum of Agreement through which the MPCA and the MDA have agreed to cooperate and assist each other in using Fund dollars to investigate and remedy pesticide releases. During FY 88 Fund dollars were used to respond to releases

from the Lund Nursery in St. Cloud and at the Lansing Ground Water Contamination site. A total of \$195,521 of Fund dollars was spent in FY 88 at pesticide sites.

The MPCA and the MDA expect that other pesticide releases will be discovered and Fund dollars or authorities will be needed to respond to the releases.

#### VIII. Superfund Program Needs

For FY 89 the legislature has appropriated \$5.9 million to the Fund from the Water Pollution Control Fund. Based upon the site cleanup work which is currently underway, it is anticipated that the Fund will be depleted by the middle of FY 1990. The MPCA is requesting a \$8.5 million change level to the Fund. Table 7 lists the sites and Fund dollar amounts that the MPCA anticipates needing for response actions at those sites during FY 89 and the next biennium.

The Superfund program has matured over the past five years. As a result, the cleanup activities at sites have progressed from investigations into the remedial action implementation phases. Because the major cost of response actions at a site is in the implementation of remedial actions, the draw down of the Fund will accelerate during the next biennium.

A significant amount of state funds will be needed to address the cleanup of landfills. Because of political subdivision liability limits and inability on the part of many private landfill owners/operators to fund response actions, the state will be required to fund a significant portion of cleanup activities at landfills. The following is an illustration of what the state may have to consider in terms of funding to address Superfund landfills in the next 6 years.

Table 5

Total Potential State Costs for Landfill Cleanup FY 89-94  
(In Millions of Dollars)

Limit	Dollar Commitment						Total
	FY 89	FY 90	FY 91	FY 92	FY 93	FY 94	
<u>\$400,000</u>							
MUNICIPAL COSTS*	\$0.90	\$3.00	\$2.50	\$1.10	\$0.40	\$0.10	\$ 8.00
STATE COSTS							
Municipal LF **	0.00	0.00	0.45	55.30	20.80	20.60	97.15
Nonmunicipal LF***	1.10	2.25	1.125	12.90	10.40	10.30	38.075
TOTAL OF ALL STATE COSTS	\$1.10	\$2.25	\$1.575	\$68.20	\$31.20	\$30.90	\$135.225
TOTAL COSTS	\$2.00	\$5.25	\$4.075	\$69.30	\$31.60	\$31.00	\$143.225
 <u>\$1,200,000</u>							
MUNICIPAL COSTS*	\$0.90	\$3.00	\$2.95	\$10.90	\$3.60	\$3.10	\$24.45
STATE COSTS							
Municipal LF**	0.00	0.00	0.00	45.50	17.60	17.60	80.70
Nonmunicipal LF***	1.10	2.25	1.125	12.90	10.40	10.30	38.075
TOTAL OF ALL STATE COSTS	\$1.10	\$2.25	\$1.125	\$58.40	\$28.00	\$27.90	\$118.775
TOTAL COSTS	\$2.00	\$5.25	\$4.075	\$69.30	\$31.60	\$31.00	\$143.225

20 Municipal Landfill Sites In Six Years  
11 Nonmunicipal Landfill Sites In Six Years

\*Municipal share if this liability cap is in effect  
\*\*State share if this liability cap is in effect  
\*\*\*Private landfills which could become insolvent

As indicated in Table 5 above, if the municipal liability cap is \$400,000 the state share of response action at 20 municipal sanitary landfills could be more than \$97 million over the next 6 years. Even if the liability cap is \$1.2 million, the state share over the same time period at municipal landfills could be more than \$80 million. In addition, the MPCA estimates that cleanup costs at 11 privately owned sanitary landfills could reach nearly \$38 million over the next 6 years and that the responsible parties at these sites may be unwilling or unable to fund the necessary cleanup activities.



## IX. Conclusions and Recommendations

The Minnesota Superfund Program has been very effective. Response actions are underway at 104 sites. Responsible parties are undertaking the work at 73 of these sites. The MPCA has been successful in its efforts to seek out responsible parties and secure federal dollars to fund cleanup activities. Despite these efforts, the continued success of the Superfund program is dependent on the availability of Fund dollars to encourage cooperation by responsible parties, provide the state's required 10% match for federally funded cleanups, and conduct cleanups of sites not eligible for federal funding (i.e., sites typically located in rural, less populated areas and not included on the federal National Priorities List).

Landfills are becoming increasingly important within the Superfund program. Fifty-one landfills are currently listed on the state's Permanent List of Priorities and that will number increase. It is anticipated that significant additional state Fund monies will be necessary to address these sites. In the 1990-1991 biennium, almost \$4 million is projected for Superfund activities at 10 landfills, of which more than \$2 million would be used for 10 percent state match of federal money for remedial action implementation. The costs to the state Fund are expected to rise as cleanups begin at more landfills. Fewer landfills will qualify for federal funding support due to not scoring sufficiently high on the Hazard Ranking System. In addition, government owned landfills have liability caps which shift the burden to the Fund.

In conclusion, if \$2.4 million is not added in FY 90 and \$6.1 million in FY 91, response actions will not proceed at 23 government financed sites. In some cases, these state dollars would be used as the 10 percent match needed to secure federal Superfund dollars for remedial action implementation. Without the additional appropriation, the MPCA estimates that it will not be able to

secure \$33 million in federal Superfund dollars. In addition, with the depletion of the Fund, MPCA enforcement and oversight of cleanup activities by responsible parties will be severely curtailed.

To ensure the continued success of the Superfund Program, the MPCA staff offers the following recommendations:

1. Additional monies must be added to the Fund in the amount of \$8.5 million during the next biennium; \$2.4 million in FY 90 and \$6.1 million in FY 91. Response actions will cease at 23 government financed sites if the requested addition to the Fund is not made.
2. Considering the demand landfills are placing on the Superfund Program funding sources (both federal and state Funds) and the need for a better landfill regulatory program to prevent future contamination problems, a fee on land disposed solid waste should be enacted to provide an appropriate funding source.
3. The municipal liability cap issue should be discussed and clarified during the 1989 Legislative Session.
4. Minn Stat. §§ 115B.17 and 115B.20 should be amended to provide the MPCA the authority to acquire property or an interest in property by purchase, condemnation, donation, easements, and leases for the purpose of conducting response actions including investigation, removal, corrective, or long-term remedial activities. In addition, MPCA staff recommends that the definition of removal actions in Chapter 115B be expanded to include nonemergency removal at sites where nonemergency removal is deemed appropriate. This would expedite and reduce the cost of cleanups at a number of Superfund sites.

Table 6

Superfund Program Projections

<u>EFFECTIVENESS:</u>	<u>FY 1989</u>	<u>FY 1990</u>	<u>FY 1991</u>
Sites on Permanent List of Priorities (cumulative)	158	174	189
Sites Undergoing Response Action by Responsible Parties (cumulative)	85	99	106
Sites Undergoing Response Action Using State or Federal Superfund Money (cumulative)	37	47	53
Total Response Actions (cumulative)	122	146	159
<u>STATISTICS:</u>			
A. <u>Hazardous Waste Site Verification</u>			
Additions to Federal Site Inventory	45	40	40
Preliminary Assessments	40	40	40
Site Inspections	15	15	15
Additions to the Permanent List of Priorities	20	15	15
B. <u>Property Transfer Program</u>			
File Search Requests	840	900	960
Review of Submittals	90	130	170
Cleanup Assistance	10	10	10
C. <u>Expenditures Under Superfund</u>			
Estimated Dollar Value of Responsible Parties Actions (millions) (cumulative)	150.00	180.00	210.00
Federal Superfund Monies Secured (millions) (cumulative)	23.51	42.56	81.36
Site Specific Expenditures from State Superfund (millions) (cumulative)	10.61	18.60	25.78

Agency Administrative Expenditures (millions) (cumulative)	10.78	13.86	17.00
Estimated Responsible Party Reimbursement of Agency Administrative Costs (millions) (cumulative)	5.12	6.12	7.12
Actual Agency Administrative Costs (millions) (cumulative)	5.66	7.74	9.88
Ratio of Actual Agency Administrative Costs to Estimated Responsible Parties Expenditures	1 to 27	1 to 23	1 to 21
<u>REVENUE:</u>			
Taxes, Interest, and Penalties	2.90	2.45	2.40

Table 7: Projections for MERLA Fund Usage

BALANCE FORWARD IN	\$9,725,503	\$9,965,207	\$3,110,707
EST. FINES	\$1,000,000	\$1,000,000	\$1,000,000
EST. TAXES	\$1,350,000	\$1,350,000	\$1,350,000
EST. INTEREST	\$550,000	\$100,000	\$50,000
APPROPRIATION-MFC FUND FOR 89, GEN FUND FOR 90-91	\$5,900,000	\$1,000,000	\$3,150,000
APPROPRIATION-SOLID WASTE TAX (1.50 PER TON)		\$1,400,000	\$2,950,000
EST. FUNDS AVAILABLE	\$10,525,503	\$14,815,207	\$11,610,707
OBLIGATIONS			
FCA ADMINISTRATION	\$2,960,572	\$3,076,500	\$3,150,000
INDIRECT	\$0	\$638,000	\$638,000
SITE CLEANUP	\$4,890,000	\$7,990,000	\$7,475,000
OUTSTANDING COMMITMENTS	\$793,724		
BALANCE FORWARD OUT	\$3,965,207	\$3,110,707	\$247,707

## Projections for Site Specific Cleanup Costs

STATE FINANCIAL SERVICES (SFS) STATE FINANCIAL SERVICES (SFS)[illegible]

## September 1988

1960 - NEW CITIES ACQUITT CLINT, II. PAS

[illegible]



**CLEARING PHASE**

[illegible]

[illegible][illegible]

# RESPONSIBLE PARTY CODES

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- 1 - COMPLETED
- 2 - ON GOING
- 3 - COMPLETED FROM 10 CURRENT MONTH
- 4 - COMPLETED UNDER CURRENT MODEL, SUPPLEMENTAL AGREEMENT OR DIA
- 10 - SUSPENDED AND OPERATING

## GOVERNMENT-FINANCED CODES

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- 01 - ON GOING-NO LONG STATE SUPPORTED MONIES
- 02 - ON GOING-NO LONG FEDERAL SUPPORTED MONIES
- 03 - COMPLETED-NO LONG STATE SUPPORTED MONIES
- 04 - COMPLETED-NO LONG FEDERAL SUPPORTED MONIES
- 05 - COMPLETED-NO LONG STATE AND FEDERAL SUPPORTED MONIES
- 06 - ON GOING-NO LONG STATE AND FEDERAL SUPPORTED MONIES

# LIST OF ACRONYMS

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- MS - MAJOR BANKING SYSTEM
- ML - NATIONAL TRADING SYSTEM
- MA - MARKET FOR BUSINESS ACTIVITY
- MB - INFORMATION OF INDUSTRIAL RESOURCES
- LEDA - ENVIRONMENTAL INVESTMENT, CONSTRUCTION AND LIABILITY ACT
- MAIA - MINOR INVESTMENT, RESOURCES AND LIABILITY ACT
- RE - REGIONAL INVESTMENT
- TS - TRANSITION SYSTEM
- DR - REGIONAL ACTION
- PA - REGIONAL ACTION
- GR - REGIONAL INVESTMENT

## Attachment B

