Minnesota Superfund^{Annual} Report

Minnesota Pollution Control Agency



Introduction

In 1983, when the Minnesota Legislature enacted the state Superfund law, few people understood how large a task assessing and cleaning up old hazardous waste sites would be. Based upon the 1980 federal Superfund law protecting the public from the impacts of past industrial waste disposal, the Minnesota Environmental Response and Liability Act (MERLA) gave state government the authority and funding to leverage cleanups. The "polluter pays" nature of the law requires those who create risk to public health or the environment to take responsibility and mitigate the damage done.

Early on, the number of seriously polluted sites appeared finite and manageable. Experience eroded that confidence. Large industries or facilities turned out to be only part of the problem. Investigations showed that pollution arose from medium and small businesses, landfills, dump sites, government facilities, illegal disposal, leaking tanks, accidents and spills. The more state programs looked for polluted sites, the more we found. Improvements in laboratory analysis of chemicals, as well as new research on chemicals and health risk, led to more sites being identified as health or environmental risks. At times, the job of identifying all of the state's sites appeared endless.



Today, after nearly 20 years of Minnesota Superfund, state cleanup program staff can see daylight ahead. The Minnesota Pollution Control Agency (MPCA) and Minnesota Department of Agriculture (MDA) have a clear understanding of the number and seriousness of state hazardous waste sites. In the next five years, the state will focus on finishing the job -- transitioning the state Superfund program into maintenance mode. As sites posing high or moderate health risk are completed, the number of new sites declines, and voluntary cleanups continue, the state is near to fulfilling the original charge of the Minnesota Legislature and successfully bringing the Superfund program to a close.

Minnesota Superfund

The Minnesota Environmental Response and Liability Act (MERLA) of 1983 established the Environmental Response, Compensation and Compliance Account (Account). MERLA authorized the MPCA to spend funds from the Account to investigate and clean up releases of hazardous substances, pollutants or contaminants that pose a threat or potential threat to public health or the environment.

Slayton Farm Chemical Site

In the City of Slayton, operating and abandoned agricultural chemical sites have been transformed into the site of the First National Bank of Slayton. Minnesota Superfund law, oversight by MDA and cleanup reimbursement from the Agricultural Chemical Response and Reimbursement Account (ACCRA) helped Slayton finish the job.



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Cover Photos:

The MacGillis & Gibbs site in New Brighton was a serious problem when it was first proposed for both the state and federal Superfund lists. Now, it has undergone transformation -- from *a former pole-treating* vard with pentachlorophenol (PCP) contamination to a growing development area for businesses in the north Metro.

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This document is available in other formats, including large type, Braille and audiotape, upon request. The Minnesota Comprehensive Ground Water Protection Act of 1989 amended MERLA to authorize the MDA access to the Account and the authority to investigate and clean up contamination from agricultural chemicals.

The Account is established in the environmental fund in the state treasury. The Minnesota Department of Finance administers the Account.

The MPCA and MDA use the authorities granted under state and federal Superfund laws to identify, evaluate and clean up or direct the cleanup of sites that pose actual or potential health or environmental hazards. As required by M.S. 115B.20, Subd. 6, this report details activities for which Account dollars have been spent during Fiscal Year 2001 (FY01), July 1, 2000 – June 30, 2001, by the MPCA and the MDA. Table 1 (next page) details expenditures and income under MERLA for FY01.

The MPCA's and MDA's administrative costs represent salaries for 38 full-time equivalent positions (34 MPCA and 4



Tackling the Tough Jobs: Pig's Eye Dump

The 2001 Minnesota Legislature appropriated \$7.2 million to begin minimizing risks to the Mississippi River from Pig's Eye Dump in St. Paul, one of the last old dump sites in the Superfund Program. Here, contractors remove drums of PCBs from Battle Creek. MDA). It also covers travel, equipment, non-site-specific legal costs and supplies for responding to emergencies and implementing site cleanups. FY01 Account figures are current as of FY01 financial closing on September 30, 2001; these figures may change slightly as financial statements are computed at year end. All cumulative income and expenditure figures are approximations.

MERLA Responsibilities

The MPCA/MDA Superfund staff fulfills functions specified in MERLA for the 108 sites currently on the state's Permanent List of Priorities (PLP, the state Superfund list). In addition, staff works on more than 552 MPCA projects and 101 MDA projects under voluntary cleanup programs governed by the Land Recycling Act of 1992.

MPCA/MDA Superfund responsibilities fall into three main categories: emergency response, investigation and cleanup, and working with voluntary parties.

Responding to Emergencies and Spills

Emergency response teams at the MPCA and MDA are on call 24 hours a day throughout the year. The MPCA received 2,390 reports of emergencies and spills in FY01. The MDA received an additional 193 incident reports.

In most cases, the state's role is to provide advice and oversight to responsible parties as they clean up the spills. In some cases, however, Superfund Account dollars are used to respond to high-priority emergency situations for which no responsible persons are able or willing to respond.

Examples include contaminated drinkingwater supplies, abandoned chemical wastes, landfill fires, fuel spills, natural Balance Forward 7-1-00

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The state is near to fulfilling the original charge of the Minnesota Legislature and successfully bringing the Superfund program to a close.

Table 1: MERLA Account Expenditures and Income

Balance Forward /-1-00		12,820,000
Plus Prior Year Adjustment	\$,
Adjusted Balance Forward	\$	13,172,000
Income to the Fund (FY01)		
Transfer from Motor Vehicle Account	\$	3,200,000
Hazardous Waste Generator Tax		1,687,000
Superfund Reimbursement	Ŝ	
(M D A = \$8,000)	Ψ	1,121,000
Investment Income	\$	931,000
VIC/Property Transfer Reimbursement	ŝ	643,000
(M D A = \$120,000)	Ψ	045,000
Transfer from Solid Waste Fund (NRD)	\$	621,000
Transfer from Drycleaner Account	\$	49,000
Penalties	\$	3,000
Other	» \$	
Less Revenue Refund	5 \$	174,000 (304,000)
		$(304\ 000)$
	4	
Total	4	21.300,000
Total	4	
Total Expenditures from the Fund (FY01)	\$	21.300,000
Total Expenditures from the Fund (FY01) Oversight/A dministrative	\$	
Total Expenditures from the Fund (FY01) Oversight/A dministrative (M D A = \$338,000)	\$ \$	21.300,000 4,741,000
Total Expenditures from the Fund (FY01) Oversight/A dministrative (M D A = \$338,000) Site-specific and Support Costs	\$ \$	21.300,000
Total Expenditures from the Fund (FY01) Oversight/A dministrative (M D A = \$338,000) Site-specific and Support Costs (M D A = \$422,000)	\$ \$	21.300,000 4,741,000
Total Expenditures from the Fund (FY01) Oversight/A dministrative (M D A = \$338,000) Site-specific and Support Costs	\$ \$ \$ \$	21.300,000 4,741,000 4,117,000 865,000
Total Expenditures from the Fund (FY01) Oversight/A dministrative (M D A = \$338,000) Site-specific and Support Costs (M D A = \$422,000) Transfer for Basin Monitoring Trade and Economic Development	\$ \$ \$ \$ \$	21.300,000 4,741,000 4,117,000 865,000 700,000
Total Expenditures from the Fund (FY01) Oversight/A dministrative (M D A = \$338,000) Site-specific and Support Costs (M D A = \$422,000) Transfer for Basin Monitoring	\$ \$ \$ \$ \$ \$ \$	21.300,000 4,741,000 4,117,000 865,000
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Total Expenditures from the Fund (FY01) Oversight/A dministrative (M D A = \$338,000) Site-specific and Support Costs (M D A = \$422,000) Transfer for Basin Monitoring Trade and Economic Development Information Systems Initiative	\$ \$ \$ \$ \$ \$ \$ \$	21.300,000 4,741,000 4,117,000 865,000 700,000 150,000
Total Expenditures from the Fund (FY01) Oversight/A dministrative (M D A = \$338,000) Site-specific and Support Costs (M D A = \$422,000) Transfer for Basin Monitoring Trade and Economic Development Information Systems Initiative Department of Revenue (processing charge)	\$ \$ \$ \$ \$ \$ \$ \$	21.300,000 4,741,000 4,117,000 865,000 700,000 150,000 84,000

disasters, or other situations which the Commissioners of either the MPCA or the MDA have declared emergencies or which have been determined by the Minnesota Department of Health (MDH) to be imminent health hazards.

In FY01, 54 emergencies were declared under MERLA authorities. The MPCA spent \$181,017 from the Superfund Account to respond to these emergencies. The MDA spent an additional \$27,770 from the Account in responding to pesticide- or fertilizerrelated emergencies.

Abandonment of waste oil and chemicals continues to be a problem. About one-fifth of the incidents for which the MPCA takes direct emergency action using MERLA authorities involve the classic abandoned barrels or "orphan spills" for which no responsible parties are immediately identifiable. Oil and paint-related liquid wastes contained in 55-gallon drums and gallon jugs are the most commonly abandoned materials.

\$ 12 826 000

The MPCA investigates reports of such abandonments in partnership with local officials. Some of these wastes are cleaned up by MPCA contractors using Superfund Account funds, some are handled by county hazardous waste programs, and others are tested and recycled by municipalities. The MPCA's Emergency Response Team also works with state and local law-enforcement personnel to apprehend and prosecute perpetrators who abandon wastes.

The experience of recent years (200new projects per year) indicates that the state should expect continued strong demand for VIC assistance and liability assurances. The emergence of foot-and-mouth disease (FMD) in Europe spurred Minnesota state agencies to conduct planning and preparedness activities. The MDA and the Minnesota Board of Animal Health are taking a leadership role in the development of the Minnesota FMD Emergency Response Plans. Efforts have included overall plan development and producing contingency plans for euthanasia and cleaning and disinfection on exposed and infected farms. The MPCA Emergency Response Team participates in the state's planning and has produced an MPCA contingency plan for disposing of exposed and infected herds.

Following the September 11 acts of terrorism in New York City and Washington, D.C., Minnesota's emergency responders have begun planning prevention and response strategies regarding biological, chemical and nuclear attacks. Most MPCA planning has focused on disposal options for contaminated water, soils or debris. If either foot-and-mouth disease or terrorism occurs in Minnesota, response costs will be high.

Voluntary Investigation and Cleanup

Minnesota has long been at the forefront of the national movement to return property with known or suspected environmental problems to productive use. A coalition of legislators, state agencies, local governments, environmental attorneys, environmental consultants, business and industry representatives, and nonprofit organizations worked together to design the Land Recycling Act of 1992. The Act facilitates cleanup and redevelopment of properties which developers and lenders might otherwise avoid due to potential Superfund liability, by providing a process for seeking liability assurances.

The voluntary cleanup programs of the MPCA and the MDA are involved to

varying degrees in most of Minnesota's redevelopment projects on "brownfield" properties. These programs offer a menu of liability assurances that responsible and/or voluntary parties may obtain after sufficiently investigating and, if necessary, cleaning up sites.

Since 1988, the MPCA's Voluntary Investigation and Cleanup (VIC) Program has overseen a total of 1,813 projects. Of those properties, 1,264 have been either cleaned up; found acceptable for purchase, refinancing or redevelopment; or transferred to other regulatory programs for appropriate decision-making and actions. The experience of recent years (200 new projects per year) indicates that the state should expect continued strong demand for VIC assistance and liability assurances.

Last year, 23 new sites entered the MDA's Agricultural Voluntary Investigation and Program (AgVIC), begun in 1996. Currently, 101 sites remain "open" cases. The AgVIC has closed a total of 71 sites to date, of which 10 were closed in FY01. The combination of releases from liability under MERLA and eligibility for partial reimbursement of corrective-action costs from the Agricultural Chemical Response and Reimbursement (ACRRA) Account combine to form a strong, incentive-driven program, which has been positively received by MDA clientele.

Superfund Investigation and Cleanup

Potential Superfund sites identified by or reported to the MPCA/MDA (where responsible parties do not volunteer) enter a formal assessment managed in conjunction with the Superfund process. Sites posing a potential risk to public health or the environment may be added

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to the MPCA's Permanent List of Priorities (PLP, the state Superfund list) and/or the U.S. Environmental Protection Agency's (EPA's) National Priorities List (NPL). Before sites are proposed for either list, responsible parties are encouraged to enter voluntary cleanup programs of the MPCA or MDA.

At sites contaminated with agricultural chemicals, responsible parties who choose not to voluntarily conduct response actions may be requested by the MDA to conduct cleanups under MDA oversight. Responsible parties usually qualify for partial reimbursement of cleanup costs from the ACRRA Account. If responsible parties are unwilling or unable to clean up, the MDA may also propose a site for listing on the PLP and/or NPL.

At the close of FY01, the federal NPL included 24 Minnesota sites, with no sites proposed to be added or removed during the fiscal year. There are 108 sites on the PLP; 12 sites were taken off the PLP during the fiscal year, and 3 sites were added. (Listing a site on the PLP does not automatically qualify it for listing on the NPL.) A detailed summary of past delisted sites is available from the MPCA.

The MPCA/MDA may use funds from the Account to conduct an investigation and/or a cleanup at PLP or NPL sites where a

responsible party either cannot be identified or is unable or unwilling to take appropriate action. The MPCA/MDA conducts a remedial investigation/ feasibility study to determine the extent of contamination and evaluate cleanup alternatives.

Following a decision on the needed activities, staff or consultants prepare remedial design/remedial action plans. If financially viable responsible parties are identified at any point during investigation or cleanup, the state may attempt to secure their cooperation and recover costs already expended by the state.

After cleanup is complete, or when a site no longer poses risks to public health or the environment, the site may be delisted from the PLP or the NPL. Some sites may need continued monitoring or maintenance following delisting to ensure that risks have been eliminated or controlled.

Minnesota's 24 NPL sites are eligible for federal funding for cleanup activities based on national priority. But access to these funds requires a commitment from the state to fulfill match requirements. The Comprehensive Environmental Response, Compensation, and Liability Act (the federal Superfund law) requires a state match of either 10 percent of the Of the 45 Minnesota sites that have ever been placed on the federal Superfund list, 21 have been delisted.



Martin Bush Iron and Metal Site

The VIC Program provides flexibility and options for cleaning up brownfield sites. The Minneapolis Community Development Agency received \$1 million from the Department of Trade and Economic Development to clean up petroluem contamination at a a former industrial property. The new property owner brought an estimated 79 new jobs and \$545,000 in tax base to the City of Minneapolis.

Upon the completion of this Baseline Effort assessment in 1999 of the 2,200 old dumps, the state concluded that fewer than 100 needed further investigation. cost of site-specific remedial actions when no state or local government has been identified as a responsible party, or 50 percent if the site was owned or operated by a state or local governmental entity. During FY01, \$362,000 was spent on statematch requirements to leverage federal dollars.

Most of the worst Superfund sites in Minnesota have already been listed on the PLP, and many have been cleaned up or are currently undergoing response actions. Overall, Minnesota Superfund sites are now being delisted from the NPL and PLP faster than they are being added. Figure 1 (page 7) shows the number of sites added to and delisted from the PLP each year since the beginning of the program. Nevertheless, the Superfund program remains responsible for identifying and addressing problems which continue to pose threats to the health and environment of Minnesota citizens. Due to the accomplishments of the program's site assessment activities, however, it is likely that the worst Superfund sites in Minnesota have been discovered.

Over its history, the Superfund program has discovered more than 3,000 sites, often with little background information.

Table 2: Site-specific Use of MERLA Fund Dollars in FY01

	Dona		
Arrowhead	\$	52,018	
Blaine Municipal Wellfield	\$	104,729	
Castle Rock (MDA)		308,602	
Doc's Auto Salvage	\$	83,923	
Duluth Dump	\$	36,900	
General Fabrication	\$	1,687	
Interlake	\$ \$ \$ \$ \$ \$ \$ \$	126,505	
LeHillier	\$	7,555	
Littlefork	\$	337	
Long Prairie	\$	22,933	
MacGillis and Gibbs	\$	357,054	
Perham	\$	186,089	
Pig's Eye Dump	\$1	,796,819	
Pilgrim Cleaners	\$	29,579	
Red Hanson	\$	724	
Ritari	\$	5,811	
Schloff Chemical and Supply	\$	769	
U.S. Steel	\$ \$ \$ \$	310	
Whiteway Cleaners	\$	79,937	
Winona GW Contamination	\$	111,468	
PA/SI	\$	35,440	
Community Well Assessment	\$ \$ \$ \$	70,668	
Monitoring Well Abandonment	\$	4,814	
Harmful Substance Compensation		163	
Hazardous Waste Spills, Emergencies (PCA)		181,017	
Emergencies (MDA)	\$	27,770	
Subtotal (site-specific)	\$3	,633,621	
Site-specific legal expenses (PCA)	\$	154,566	
Site-specific lab analytical services (PCA)	\$	62,799	
Site-specific legal expenses (MDA)	\$	143	
Site-specific lab analytical services (MDA)	\$	8,730	
Subtotal (site-specific support)	\$	226,238	
Total FY01 site-specific expenditures	\$3	,859,859	

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Figure 1: Permanent List of Priority Sites, FY'84 - FY01 30 25 20 15 10 5 0 '84 '85 '86 '87 '88 '89 '90 '91 '92 '93 '94 '95 '96 '97 '98 '99 '00 '01

The Minnesota Superfund program has entered its mature stage, moving toward a maintenance level over the next five years.

Most of these sites were listed on what was known as the Open Dump Inventory. Program staff screened these to

approximately 2,200 sites to be evaluated by the "Baseline Effort." Upon the completion of this Baseline Effort assessment in 1999 of the 2,200 old dumps, the state concluded that fewer than 100 needed further investigation. Because almost 75 of these 100 sites were municipal dumps, the Legislature authorized the MPCA to use up to \$1 million of solid waste funding for the assessment of dumps. (The MPCA and MDH screened an estimated 1,800 sites, selected 46 to study in depth, and found potential risks at four.)

Superfund staff also recently completed a study of potentially contaminated community wells, based on data provided by the Minnesota Department of Health (MDH). Data from approximately 400 wells were evaluated in the assessment. Staff has developed recommendations and will meet with MDH staff to discuss and plan future action at three sites.

Superfund and Healthy, Sustainable Communities

Minnesota Superfund's history illustrates how well-considered laws and effective government action can benefit citizens, improve communities, and end in success. The program has successfully reduced or eliminated risks to public health and the environment at almost all of the high- and medium-priority sites that have *ever* been listed over the 20-year lifespan of the Superfund program (see Figure 2).

The state Superfund program tackled the "worst sites first." The scope of the problem is now clear, because of statewide assessments of suspected sites and a program maintenance level is in sight. This progress contributes to healthy, sustainable communities in obvious ways (reduced health risk, clean environment).

But the Superfund program also contributes to sustainability by recycling formerly unusable property for redevelopment -- new businesses, new parks or green spaces, new residences. The Minnesota Superfund program, through its VIC and AgVIC components, has fast-tracked voluntary actions that reduce health and environmental risk. Several federal and state Superfund sites have been revamped into business parks that provide new jobs and taxes to the



Figure 2. Cumulative Sites Listed and Delisted

The state Superfund program now is tied not to the state's industrial past, but to the future of evolving Minnesota communities. communities nearby. Rebuilding urban core areas also reduces sprawl and the accompanying transportation and wastewater infrastructure.

The Minnesota Superfund program has entered its mature stage, moving toward a maintenance level. By concentrating on the completion of remaining sites, MPCA hopes to reduce the number of sites on the state Superfund list from the current 108 to 25 within five years. In moving the program to completion, the MPCA and MDA may be able to shift resources to other priority environmental issues.

As the economy evolves and large industrial sites are cleaned up or controlled, the "average" new site may be smaller, not necessarily urban, nor owned by a large corporation. In fact, many contaminated sites are no longer owned by any financially solvent party, and may be tax-forfeited. Such sites often come to the attention of local governments and regulators in the course of redevelopment efforts.

These sites still may pose risks, depending on their proximity to and impact on drinking water supplies or potential for redevelopment that could expose wastes. Such sites can be crucial to an area's economy, particularly in rural counties and smaller communities, where even a few additional businesses can noticeably boost economic vitality and the range of services available to citizens. So, from a community standpoint, such sites represent lost opportunities to recycle properties back into viable businesses.

By helping to "recycle" this land, the state Superfund program can make real contributions to the economic vitality and sustainability of communities. The Superfund program is available to investigate such sites in order to determine whether they pose significant human health or environmental risks and, if so, the program can help fund cleanup.

Green space also must be considered for healthy, sustainable communities. Potentially contaminated sites can hamper local governments' long-term planning for green corridors, critical habitat, flood prevention or water quality -- all of which are emerging priorities.

The state Superfund program now is tied not to the state's industrial past, but to the future of evolving Minnesota communities. By assisting with sites that pose obstacles to vital, healthy communities, the Minnesota Superfund program will end as it began -- as a national model of how to reduce risks and protect public health and the environment.

For more information

Contact MPCA Superfund program manager Gary Pulford, (651) 296-7340 or toll-free/ TDD (800) 657-3864 for more information about the future of Superfund in Minnesota.



This Washington County site was formerly a "brownfield" and now is a baseball field.

Brownfields to Green Space

The MPCA seeks contaminated properties with the potential to be redeveloped into parks, natural areas or other green space. Funding may be available for local governments seeking assistance in turning brownfields to green space. Contact MPCA planner Bill Dunn at (651) 282-2663 for more information.