

Minnesota Closed Landfill Program

2001 Annual Report

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EXECUTIVE SUMMARY

The 1994 Landfill Cleanup Act (Act) created Minnesota's Closed Landfill Program (CLP). The CLP is an alternative to Superfund for closed landfills and the first of its kind in the nation. The Act (Minn. Stat. § 115B.412, subd. 10) requires the Minnesota Pollution Control Agency (MPCA) to provide a report to the legislature on past fiscal-year activities and anticipated future work. This report fulfills the requirement and covers fiscal year 2001 (FY01), which was from July 1, 2000, to June 30, 2001.

The CLP is in its seventh year and continued progress was made in a number of areas during the past year. During FY01 the following accomplishments were realized:

- 3 Binding Agreements signed;
- 1 Notice of Compliance issued;
- Reimbursements to landfill owners/operators and responsible parties totaling \$6,221,297;
- 11 construction projects underway/completed;
- 22 construction designs underway/completed;
- 64.8 percent reduction to date in the total amount of leachate that can be controlled flowing to ground water due to the placement of adequate covers; and
- 46.8 percent of the landfill gas generated by CLP landfills was economically feasible to be captured and was destroyed prior to being released into the atmosphere.

PROGRAM OVERVIEW

The MPCA is authorized under the CLP to initiate cleanup actions, complete closures, take over long-term operation and maintenance and reimburse eligible parties for past cleanup costs at the 107 qualified closed state-permitted landfills.

In 2000, the legislature enacted amendments to the Act which changed CLP entry qualifications to allow for up to nine additional landfills to enter the CLP. Based on these legislative changes, MPCA staff anticipates that six additional landfills will be joining the CLP in the near future.

There are six (6) new landfills either in the process of, or having completed, all Binding Agreement (BA) requirements. Through June 30, 2001, 104 landfills have signed a BA and 102 have received a Notice of Compliance (NOC), at which time the state typically takes over landfill operations and maintenance.

Program Accomplishments

The following list summarizes accomplishments from the beginning of the CLP through FY01:

- 104 Binding Agreements signed;
- 102 Notices of Compliance issued;
- All reimbursements to landfill owners/operators and responsible parties have been completed totaling \$40,801,649;
- Environmental Protection Agency (EPA) reimbursements totaling \$2,468,268;
- 57 construction projects underway/completed;
- 70 construction designs underway/completed; and

- 1 drinking water well replaced.

FUNDING

Funding for the Program continues to come from four (4) sources of revenue: 1) the Solid Waste Management Tax (SWMT) and associated fees (which also funds other ground water and solid waste-related activities); 2) general obligation bonds; 3) funds transferred from financial assurance accounts of closed landfills entering the program; and 4) settlements from landfill-related insurance coverage. In addition, a one-time transfer of funds from the Metropolitan Landfill Contingency Action Trust (MLCAT) Fund occurred in 1994. Based on actions taken during the previous legislative session, the MLCAT funds were repaid.

During the 2001 special session, several changes were debated that bore upon sources of funding for the Closed Landfill CLP. MPCA monitored these closely. By the end of the session, the MPCA's position was that, considering the changes made, sufficient funding remained available for the CLP as well as other biennial appropriations for certain MPCA environmental programs. Certain more sweeping changes, such as the MPCA's proposed Environmental Tax Reform, were not adopted during the session and likely will return in early 2003, the next budgeting session.

(1) Solid Waste Assessment and Tax Dollars

The SWMT replaced the old Solid Waste Generator Assessment as well as the "SCORE" 6.5 percent tax on garbage-collection services, effective January 1, 1998. Roughly half the revenues from the SWMT now go to the Solid Waste Fund. The tax is composed of a 9.75 percent charge on residential waste collection bills; a 17 percent charge on commercial municipal waste collection bills; and 60 cents per cubic yard of container capacity on industrial, demolition/construction and medical waste. FY01 was the fourth year after the transition to the SWMT funding source. The total of all solid waste assessments and tax collections going into the Solid Waste Fund in FY01 was \$27,058,000.

(2) Bond Dollars

Also during the 2001 session, a state law automatically suspended all unused bonding authorization for the CLP and put it on a July 1 schedule for revocation, unless specifically re-authorized. The amount of CLP bonding authorization to be cancelled was \$56 million, out of the original \$90 million. This law (Minn. Stat. 16A.642) had the effect of revoking all state bonding authorizations more than four (4) years old, regardless of program need or original legislative intent. The MPCA pointed out the problem this law created for the CLP, which is by its nature a long-term program. At MPCA's request, in the closing hours of the special session the Legislature re-authorized \$20.5 million of the cancelled amount. This was the amount forecast to be used through FY 2002. The MPCA will be working with the Legislature for re-authorization of the remaining cancelled amount over the coming years.

(3) Financial Assurance

In FY01, the owners or operators of Winona landfill sent a total of \$1,586,726 to the Department of Revenue for deposit in the Solid Waste Fund as required for entry into the CLP. Since the inception of this CLP, including FY01, the owners or operators of 21 landfills have submitted a total of \$9,832,368 for deposit in the Solid Waste Fund. In past fiscal years, an additional

\$1,781,489 that would have been collected from Waste Management of Minnesota, Inc., (Anoka-Ramsey Municipal Sanitary Landfill) was waived because Anoka-Ramsey Municipal Sanitary Landfill agreed to waive its reimbursement claim from MPCA in an equal amount. As identified in Appendix A and per state statutes, a total of \$4,495,606 financial assurance dollars have been spent on site Operations and Maintenance (O&M), and Bond and Non-Bond dollar construction related contractual activities.

(4) Insurance Recovery

In FY01, the State entered settlements with nine (9) insurance carriers resulting in the payment of \$19.2 million by settling insurance carriers into the Solid Waste Fund. To date, a total of approximately \$31.1 million has been paid into the Solid Waste Fund under settlements entered into pursuant to the Insurance Recovery Effort (see additional information on page 5).

EXPENDITURES

(1) MLCAT and other Solid Waste Fund Transfers

In other action taken during the 2001 session, the Legislature made several new appropriations out of the Solid Waste Fund. The Legislature transferred \$9.525 million from the Solid Waste Fund back to the Metropolitan Landfill Contingency Action Trust ("MLCAT") Fund. This was equal to the money transferred in 1994 from the MLCAT to support the new CLP. This earlier action was considered appropriate because the CLP would be removing the biggest, most expensive landfill cleanup projects from the MLCAT's project list. The Solid Waste Fund was able to return that full amount to the MLCAT in 2001 because of several positive developments in the CLP. Some of those developments include construction cost savings over the past six (6) years, the completion of reimbursement to parties who had been responsible for cleanup of these landfills under Superfund, and funds received from the insurance recovery effort. In the same action, the Legislature appropriated some of the returned MLCAT money for two Metro-area cleanup projects: \$7.1 million for a large, old garbage dump in St. Paul that had once been permitted by the MPCA to dispose of sewage sludge incinerator ash (Pigs Eye Landfill on the Mississippi River); and \$1 million for the cleanup of the Empire Builder contaminated site in St. Paul.

The Legislature also gave the MPCA standing authority to transfer interest that the Solid Waste Fund accrued on the MLCAT money from 1994 to 2001, if money in the Solid Waste Fund is sufficient to do so. This authority extends into future biennia.

Finally, the Legislature also appropriated from the Solid Waste Fund monies to offset certain financial shortfalls in Water Quality and Hazardous Waste fees, and to offset General Fund money that would otherwise have been used to pay for feedlot programs. These appropriations from the Solid Waste Fund will total \$4 million for Fiscal Year 2002, and the appropriations extend through Fiscal Year 2005.

(2) General CLP Expenditures

CLP expenditures are primarily for design, construction, operation and maintenance of landfills, reimbursements and administration (see Table 1). It is important to note that even though design/construction expenditures in FY01 were down from previous years, significant resources

were spent on site designs with construction scheduled for FY02. Expenditures for each landfill are itemized in the FY01 Financial Summary (see Appendix B).

Expenditures	FY01	Cumulative
Closed Landfill Program Administration	\$ 1,169,000	\$ 9,409,251
Design and Construction*1	\$ 2,302,700	\$ 50,850,720
Operation and Maintenance	\$ 3,632,523	\$ 13,243,201
Attorney General CLP Legal Counsel	\$ 158,478	\$ 1,789,831
Insurance Recovery (MPCA & AG)	\$ 454,000	\$ 2,945,355
EPA Reimbursement	\$ 0	\$ 2,450,268
Responsible Party Reimbursements	\$ 6,221,296	\$ 37,883,128
Total	\$ 13,937,997	\$ 118,571,754

Expenditure information is based on MAPS data dated 9/7/01.
 1 These activities include both Bond and non-Bond expenditures.
 *\$163,200 were spent on a disputed claim from FY98.

(3) Reimbursement

The deadline to file a reimbursement claim with the MPCA was October 15, 1996. Sixteen reimbursement claims totaling \$40,801,649 have met all CLP requirements and final dollar amounts have been approved. Reimbursement claims for three sanitary landfills were determined to be either ineligible or those claims have been waived. The MPCA issued \$6,221,296 in reimbursement payments to landfill owners, operators and responsible parties in FY01 (see Table 2). For the landfills which are currently in the CLP and were eligible, the MPCA has fully satisfied all of its reimbursement claims in FY01.

Landfill	Total Approved	Total Past Reimbursements	FY01	Remainder
Anoka-Ramsey*	\$5,187,307	\$3,693,890	\$1,493,417	\$0
Becker Co.	\$146,200	\$81,029	\$65,171	\$0
Crosby American	\$1,413,379	\$783,340	\$630,039	\$0
East Bethel	\$4,079,443	\$4,079,443	\$0	\$0
Hansen	\$488,964	\$488,964	\$0	\$0
Hopkins	\$650,000	\$310,850	\$339,150	\$0
Houston Co.	\$104,902	\$45,361	\$59,541	\$0
Isanti/Chisago	\$282,644	\$185,061	\$97,583	\$0
Kluver	\$563,040	\$563,040	\$0	\$0
Kummer	\$3,026,881	\$3,024,563	\$2,318	\$0
Oak Grove	\$6,515,501	\$6,325,539	\$189,962	\$0
Olmsted Co.	\$2,151,107	\$1,405,634	\$745,473	\$0
Sauk Center	\$234,229	\$153,361	\$80,868	\$0
St. Augusta	\$529,454	\$529,454	\$0	\$0
Washington Co.	\$3,085,415	\$1,868,274	\$1,217,141	\$0
WDE	\$12,343,183	\$11,042,550	\$1,300,633	\$0
Totals*	\$40,801,649	\$34,580,353	\$6,221,296	\$0

*The negotiated settlement amount for Anoka-Ramsey has been satisfied. Except for FY00-01, actual payments were not made in exchange for equal financial assurance amount not collected.

The MPCA withheld this year's payment of \$757,367 to the U.S. Environmental Protection Agency (EPA) pending a request by the MPCA to forgive the remaining reimbursements. After the close of FY01, the EPA rejected the MPCA's request to forgive payment for the last three (3) landfills associated with past federal Superfund actions. Therefore, the MPCA made payment of the FY01 allotment with interest during the first quarter of FY02. However, it should be noted the interest earned on the funds withheld pending EPA's decision exceeded the interest charged by EPA for a late payment.

INSURANCE RECOVERY EFFORT

(1) Background

The Landfill Cleanup Act authorizes the MPCA and the Attorney General's Office to seek to recover a fair share of the State's landfill cleanup costs from insurance carriers based upon insurance policies issued to responsible persons who are liable for cleanup costs under the State Superfund Law. This would include insurance policyholders that owned or operated the landfills, hauled waste containing hazardous substances to the landfills, or arranged for the disposal of waste containing hazardous substances at the landfills. Under the Act, the MPCA and Attorney General may negotiate coverage settlements directly with insurance carriers. If a carrier has had an opportunity to settle with the State and fails to do so, the State may sue the carrier directly to recover cleanup costs to the extent of the insurance coverage issued to responsible persons.

(2) FY01 Activities

In Fiscal Year 2001, the state continued to pursue the insurance coverage litigation that was commenced by the State in Hennepin County District Court in February 2000. The State is represented in this case by Covington & Burling, Special Attorneys appointed by the Attorney General for the landfill insurance recovery effort. The lawsuit seeks to recover the State's environmental response costs for two (2) landfills located in Anoka County (the Oak Grove and East Bethel Landfills), which were the subject of earlier settlement offers by the State.

In March 2001, the Court heard argument on the insurance carriers' motions for summary judgment based on constitutional challenges to the Landfill Cleanup Act (LCA). These challenges were brought under a number of different legal theories including claims under the United States and Minnesota Constitutions for impairment of contract, violation of equal protection of the laws, interference with interstate commerce, and preemption by the federal Superfund law. In June 2001, the court issued its decision denying summary judgment to the insurance carriers on all constitutional issues. The court found that the carriers had not shown sufficient facts to support their impairment of contract and interstate commerce claims, and held against the carriers as a matter of law on their other constitutional claims.

The State also continued to issue new global settlement offers to other insurance carriers who are not defendants in the coverage lawsuit. The State issued 24 new global settlement offers in September 2000, and another 13 settlement offers in February 2001. Settlements are negotiated by the State's Special Attorneys, subject to the approval of the Attorney General and the Commissioner of the MPCA. The State reached global settlements with a total of nine (9)

insurance carriers in FY 2001, resulting in a deposit of a total of \$19,200,000 in the Solid Waste Fund.

(3) Future Activities

By September 2001, all but four (4) of the insurance carriers that the State sued in the coverage lawsuit had entered global settlements with the State in which they settled all of their liability under the LCA. The four (4) non-settling carriers are: Employers Insurance of Wausau, Home Insurance Company, and two (2) affiliates of Travelers Insurance (Travelers Casualty & Surety Company, and Travelers Indemnity Company).

On September 5, 2001, the court granted a motion by the four (4) remaining carriers to dismiss the State's coverage lawsuit on the grounds that the State's claims are time-barred under the statutes of limitations applicable to recovery of environmental response costs under the State Superfund Law (MERLA) and the LCA. The Court reached this decision in spite of statutory provisions in the LCA and the State Superfund law that seems to require a different result. The State is pursuing an appeal of this decision in the Minnesota Court of Appeals.

(4) Natural Resource Damages

Under the LCA, insurance carriers may request that the State's claims for natural resource damages (NRD) at any of the landfills in the CLP be included in settlements with the State. NRD payments received in FY 2001 as a result of settlements amounted to \$1,866,757. Total NRD settlements received up through June 30, 2001 equals \$2,897,231.

The MPCA and the Minnesota Department of Natural Resources (MDNR) are the State's co-trustees regarding the State's NRD claims. It is the MDNR Commissioner's responsibility to rehabilitate, restore, or acquire natural resources to remedy injuries or losses to natural resources resulting from a release of a hazardous substance. The MDNR must, however, provide written notice to the Legislature on how it plans to spend this money.

All money recovered by the State for NRD must be credited to the environmental response, compensation, and compliance account (MERLA account) pursuant to Minn. Stat. § 115B.20, Subd. 1, where it becomes available to the MDNR to carry out its restoration duties. However, since all proceeds from settlements with insurance carriers, including those for NRD, are deposited into the Solid Waste Fund (Minn. Stat. § 115B.445), the NRD payments must be transferred to the MERLA account to be made available to the MDNR. NRD recoveries totaling \$620,935 were transferred in FY01. The remainder of NRD recoveries paid to the State up through June 30, 2001 will be transferred in FY02.

(5) Information Dissemination

The MPCA continues to include information concerning the insurance recovery effort on its Internet site (www.pca.state.mn.us). This allows for information to be reviewed quickly by various customers including insurance carriers from around the world, consultants, attorneys and the general public.

The MPCA is convinced that the dissemination of information is critical to enabling the business community to realize the benefits the LCA provides them when they provide complete disposal and insurance policy information. The dissemination of information also keeps insurance carriers informed of activities conducted by the MPCA and the Attorney General's Office.

PROGRAM ACTIVITIES

(1) Binding Agreements/Notice of Compliance

Through June 30, 2001, the Program has successfully signed 104 Binding Agreements and issued 102 NOC. Table 3 below indicates those landfills which had documents executed during FY01.

Table 3: FY01 Binding Agreements/Notice of Compliance

Landfill	Binding Agreement	Notice of Compliance
Freeway	Nov-00	
Ironwood	Jan-01	
Winona County	Feb-01	Apr-01
FY01 Totals	3	1

(2) Deletion of Qualified Landfills from the National List of Priorities (NPL) and Permanent List of Priorities (PLP)

The EPA, under an agreement with the MPCA, has removed eight (8) closed landfills from the NPL (Federal Superfund List). Only one (1) closed landfill, Freeway, remains on the NPL. A Binding Agreement was signed for this site during FY01. Before the Freeway Landfill is eligible to be delisted from the NPL, it must first be issued a NOC.

Since its inception, the CLP has also cleared the way for the removal of 45 closed landfills from the PLP (State Superfund List). Lindala, Winona, and Woodlake Landfills were “qualified landfills” delisted from the PLP in FY01. At the close of FY01, only four (4) closed landfills remained on the PLP: Freeway, Ironwood, Killian, and Pine Lane.

(3) FY01 CLP Design, Oversight, and Construction Activity

Table 4 is a summary of CLP design, oversight, and construction activity for FY01.

Table 4: FY01 CLP Design, Oversight, and Construction Activity*					
Landfill	Class	Landfill Construction Activities	Design & Oversight Costs	Construction Contractor Costs	Construction Completion Date
Anderson- Sebekka	D	Complete cover installation.		\$ 5,000.00	Nov-99
Anoka-Ramsey	B	Complete construction of wetland (Ground Water Treatment System).		\$ 294,689.10	May-01
Becker County	A	Complete oversight of ground water investigation.	\$ 89,407.45		
Big Stone Co.	D	Completion of cover system upgrade/re-grade and improve various other LF features.	\$ 24,668.77	\$ 314,925.29	Sep-00
Cotton	B	Design new cover system with liner and passive gas vents.	\$ 17,838.39		
Eighty Acres	B	Design cover system.	\$ 40,003.35		
Flying Cloud	C	Complete drainageway repairs.		\$ 11,923.53	Nov-00
Freeway	B	Design cover and active gas extraction system.	\$ 9,663.61		
Grand Rapids	B	Design active gas extraction system and complete ground water investigation.	\$ 72,629.79		
Hibbing	D	Oversight of topographic survey.	\$ 3,421.40		
Hopkins	A	Complete installation of security parameter fencing.		\$ 83,973.96	Apr-01
Ironwood	B	Complete hazardous disclosure study.	\$ 4,631.05		
Kluver	B	Complete enhanced gas system collection investigation.	\$ 95,003.48		
Koochiching Co.	B	Designing cover & leachate control improvements.	\$ 12,176.78		
Leech Lake	B	Complete enhanced gas system collection investigation.	\$ 33,808.45		
Lindala	D	Completion of cover/passive gas system		\$ 38,043.27	Jun-01
Lindenfelser	B	Design and oversight of well installation and completion of ground water investigation.	\$ 175,745.19		
Louisville	B	Design cover and active gas extraction system/ completion of hazardous disclosure study.	\$ 61,203.20		
Maple	D	Complete cover system repair.		\$ 5,575.76	Nov-99
Murray County	C	Completion of cover system upgrade/re-grade and improve various other LF features.	\$ 17,681.45	\$ 86,640.38	Oct-01
Oak Grove	B	Design an active gas extraction system	\$ 72,169.20		
Pine Lane	A	Design an active gas extraction system	\$ 117,671.93		
St. Augusta	B	Design a gas venting system.	\$ 462.00		
Tellijohn	B	Design a gas venting system.	\$ 9,912.56		
Vermillion Modified	D	Completion of new cover and leachate control improvements.		\$ 116,274.87	Nov-00
Wabasha Co.	D	Complete cover construction.		\$ 48,768.89	Jan-01
Waseca County	B	Oversight of contamination source identification study.	\$ 71,340.70		
Washington County	D	Design a cascade system.	\$ 74,807.19		
Watonwan County	C	Design a cover and gas venting system.	\$ 50,069.39		
Yellow Medicine Co.	C	Completion of cover system upgrade/re-grade and improve various other LF features.		\$ 42,569.97	
TOTALS			\$ 1,054,315.33	\$ 1,248,385.02	10

*The costs shown in this Table are for invoices paid in FY01 and not total project costs.

**Due to incorrect billing \$150,000.46 charged to Design, Oversight, and/or Construction should have been charged to O&M. For this report, those funds have been re-assigned to the correct category.

Class A = immediate public health and/or environmental concerns.

Class B = pose no immediate public health and/or environmental threat, but require remediation to control gas migration, ground water contamination, and/or to correct a severely inadequate or nonexistent cover.

Class C = pose no immediate public health and/or environmental threat, but lack a cover that meets current MPCA standards.

Class D = pose no threat to public health or the environment and, in most cases, meet current standards for closure.

(4) Site Annual Reports

Every year, the MPCA site teams (made up of an assigned project leader, an engineer, a hydrologist and an on-site inspector) prepare an annual report for each landfill in the CLP. The annual report is divided into three major sections: (1) Site Background contains basic information on the landfill; (2) Site Engineering Summary discusses cover maintenance/construction, leachate management and monitoring, and landfill gas management and monitoring; and (3) Site Environmental Monitoring Summary discusses ground water monitoring, surface water monitoring and ground water remediation system management and maintenance. The purpose of the landfill specific annual report is to reflect current staff assignments, to justify landfill reclassification/rescoring up or down in priority, and to summarize recommendations for the future. These landfill reports are provided to local governmental groups and private property owners for their information and pursuant to state law. The site annual reports for landfills located in the Metro area also are available on the MPCA's web site at www.pca.state.mn.us. It is anticipated that additional outstate site annual reports will also be available on the web site by the end of FY02.

(5) State Ownership of Landfills

The MPCA has accepted ownership of 20 landfills across the State as part of the site's entry into the CLP. This has been done in those cases where State ownership provided the best method of controlling access, managing the facility, providing the greatest possible environmental and health safety for the citizens living near the facility, and where the past owners did not have the resources to adequately maintain the landfill. In addition, as a part of providing for adequate human health and safety, adjacent property was acquired at several landfills.

(6) Environmental Indicators

The MPCA staff will use environmental indicators to measure the progress of the CLP and to better manage the program.

There are two (2) basic media that will be measured with the environmental indicators, the reduction of leachate generated and the escape of landfill gas to the environment. Both of these media have the potential to cause significant risk to public health and environmental damage. We will be tracking each year how well the CLP is doing at reducing, to the extent possible, the generation of leachate for the landfills in the program. Totally eliminating leachate generation is impossible given current technology, knowledge, and economics. However, we can do several things to reduce the amount of leachate each landfill generates and by doing so we minimize the potential damage leachate can cause to the State's ground water. Similarly, the total elimination of landfill gas escaping to the environment is not currently possible. However, by installing active gas collection systems at larger sites, significant reductions in landfill gas emissions can be achieved. The benefits of these systems are described on page 13.

(7) CLP Access Database

In FY01 MPCA staff created a CLP Database (DB) to store information and data for all of the landfills currently in an active status in the CLP. The DB was modeled after a similar DB containing information and data for the State Superfund program. The CLP DB became activated and staff started populating the DB with site information in FY01. Staff training and completion of populating the DB will be completed in FY02.

The CLP DB will be used to better manage the CLP. The CLP DB provides management with a tool to review various aspects of the CLP across the entire system without taking away valuable staff time to collect the data they need.

The CLP DB will also be useful to staff who need to respond to public and other interested parties. Data on all CLP landfills will be immediately available to all CLP staff on their individual computer screens whenever they need it. The CLP DB will assist staff in completing individual site annual reports by giving them various screens of project management, engineering, hydrology, and on-site inspection data. Another valuable benefit of the CLP DB will be its use for planning site design, oversight, and construction activities in the future.

PROGRAM CONTRACTS

(1) Land Management Plans

The LCA requires the MPCA to develop a Land Management Plan for each landfill in the CLP. The LCA also requires local governments to make their local land-use plans consistent with the plan developed by the MPCA. Now that staff have made significant progress in undertaking remedial actions to address threats to public health and the environment, their attention is beginning to be focused on developing a mechanism to implement a comprehensive Land Management Plan for every landfill.

Landfill gas migration and ground water and surface water contamination are serious concerns associated with many landfills in the CLP; not only at the landfill, but at adjacent property. In several cases, these situations could pose a threat to the health and safety of persons living close to these landfills or to persons associated with some other activity in the vicinity of these landfills. Specific examples of these potential threats include explosive concentrations of landfill gas in buildings and other structures at and near the landfill, the risk of inducing contaminated groundwater into other aquifers by constructing groundwater wells in multiple aquifers, and the possible consumption of contaminated sources of drinking water as the result of constructing potable wells in contaminated aquifers. Consequently, the future use and development of property in and around these landfills needs to be planned carefully and responsibly.

The purpose of each Land Management Plan is to: 1) protect the integrity of the landfill's remediation systems; 2) protect human health and the environment at, and in the vicinity of, the landfill; 3) ensure that the cleanup and future operation and maintenance of the remediation systems at these landfills are successful; and 4) accommodate local government needs and desires for use of land where health and safety requirements can be met. This can be accomplished not only through the State's cleanup efforts but also through the adoption and implementation of a site-specific Land Management Plan. The Land Management Plan will be coordinated with local zoning and other land-use measures that are consistent with public health and safety needs.

During fiscal year 2001, the MPCA, with assistance from staff at Metropolitan Council, began drafting a Request for Proposal to be used to select one or two contractors to develop Land Management Plan at two (2) closed landfill sites in the seven-county metropolitan area as pilot projects. The pilot projects will allow the MPCA to test and possibly modify the process by

which LMP will be developed and to ensure that an effective product is created. The contractor will also be tasked to develop a generic Land Management Plan that will be available and included in a subsequent Request for Proposal for developing additional Land Management Plans statewide. The MPCA anticipates selecting one or two contractors to begin developing the pilot Land Management Plans in the second half of FY02.

(2) Operation & Maintenance Contracts

Once the MPCA issues a NOC at a site, all operation and maintenance activities become the state’s responsibility. This includes contracting for general and technical maintenance, as well as sampling and analytical work. In FY01, approximately \$3.5 million dollars were spent on these activities.

(3) Priority List Rescoring

According to the Landfill Cleanup Act, the MPCA must update the priority list each fiscal year to reflect any changes due to monitoring and remediation activities. Table 5 indicates the sites with revised classifications and scores in FY01. The classification and score for each landfill in the Program can be found in the Financial Summary for FY01 (see Appendix B).

Table 5: FY01 Rescored Landfills

Site Name	Class/Score	Revised Class/Score	Comments
Albert Lea	D/25	B/25	Monitoring data indicates need for remediation
Big Stone	C/22	D/2	Construction remedy completed
Crosby American Properties	A/19	B/7	Change in development potential
East Bethel	D/35	B/40	Monitoring data indicates need for remediation
Faribault	B/43	C/15	Construction remedy completed
Hopkins	A/31	B/22	Construction remedy completed
Leech Lake	D/5	B/13	Monitoring data indicates need for remediation
Lindenfelser	B/19	A/38	Monitoring data indicates need for remediation
Northwoods	B/9	D/9	Construction remedy completed
St. Augusta	D/6	B/21	Monitoring data indicates need for remediation
Vermilion Modified	B/9	D/11	Construction remedy completed
Waseca	D/10	B/21	Monitoring data indicates need for remediation
Winona	C/23	N.A.	New site

In FY01, six landfills were downgraded to a lower classification, while another six were upgraded to a higher classification. The reason for landfills moving to a higher classification is because of the dynamic nature of landfills, especially larger landfills, and improved monitoring uncovering problems we didn’t know existed previously. Various public health and/or environmental issues, such as landfill gas concerns and potential contaminant migration will continually reoccur. This means some landfills will need to be reclassified upward to address those concerns as is reflected in Table 6 above. In FY02, a significant number of sites should be reclassified to a lower risk class based on anticipated completion of construction work.

Table 6 illustrates how CLP activities have resulted in an overall reduction in relative risk to human health and the environment over the past seven years.

Table 6: Annual Changes to the Closed Landfill Priority List

	December	December	July	September	July	July	July	July
Classification	1994	1995	1996	1997	1998	1999	2000	2001
A	9	9	9	1	2	3	4	3
B	34	39	38	38	35	33	25	28
C	29	34	34	36	34	34	34	35
D	22	24	25	31	35	36	43	41
Total Landfills	94	106	106	106	106	106	106	107

LOOKING AHEAD TO FY02

(1) Proposed New Projects

MPCA staff anticipate the CLP will have construction projects started or completed at the following landfills during FY02:

- Becker Co: Install a ground water remediation system.
- Eighty Acre: Install a new cover system.
- Grand Rapids: Install an active gas extraction system.
- Kliver: Purchase land around the Landfill or install an active gas extraction system.
- Leech Lake: Expand a gas extraction system.
- St. Augusta: Install an active gas extraction system.

- Lindenfelser: Begin construction on a cover and an active gas extraction system.
- Louisville: Begin construction on a cover and an active gas extraction system.
- Oak Grove: Construct an active gas extraction system.
- Pine Lane: Begin construction of an active gas extraction system (dependent upon entry into the CLP).
- Woodlake: Design and upgrade/modify current cover and an active gas extraction system.

- Albert Lea: Design and complete repairs to major settlement area.
- Faribault Co, Minnesota Sanitation, and Red Rock: Complete design and construction of repairs to address settlement and erosion problems.
- Ironwood: Complete design and bidding for a new cover system, gas control system and rehabilitate the ground water pump out system.
- Rock Co: Design a cover, passive gas system, monitoring well access trails, and upgrade the fencing.
- Waseca Co: Complete an investigation of ground water contamination and design corrective action.
- Watonwan Co: Complete construction of a new cover and active gas extraction system.
- Tellijohn: Complete design and construction of an expanded active gas extraction system.

(2) Emerging Issues

A. Landfill Gas

Landfill gas was discussed in the 1997 annual report as an emerging issue for the CLP. Currently, 60 landfills in the CLP have some type of passive gas extraction system. Eight landfills currently have an active gas extraction system. Another 14 landfills have been identified as having a large enough volume of waste to support an active gas extraction system. Active landfill gas extraction systems are increasingly being considered for the following beneficial uses:

- Reduction in methane migration and vegetative loss,
- greenhouse gas reduction,
- reduction of volatile organic compounds migrating to ground water,
- as a potential electrical power generation, and
- as a potential alternative fuel or fuel supplement for industry.

Active gas extraction systems are proposed in FY02 for design and/or construction at Grand Rapids, Kluver, Lindenfelser, Louisville, Oak Grove, Pine Lane, Watonwan, and possibly St. Augusta.

B. Environmental Data Management (EDM)

MPCA staff initiated a design project in September 2000 to complete a Environmental Database Management System for all environmental data generated at closed landfills in the Metropolitan area (18 sites). The data tracked by this system includes ground water (both analytical and volumes removed), surface water, leachate, gas condensate data, active flare performance, and landfill gas emissions. The system was also linked to a common geographic software package called ArcView so that Geographic Information Systems (GIS) projects can be viewed for all features on and surrounding the landfill including but not limited to appurtenances, landfill boundaries and roads.

The system was populated with historical data from the beginning of the CLP (1994) and will go on-line at the end of November 2001. Queries and reports will be generated by the Environmental Data Management (EDM) to produce Discharge Reports, MDNR water use reports, trend reports, plume maps and other queries to populate the site Annual Reports. Phase 2 of the EDM will include populating the EDM with the remaining outstate sites (91) in the program and should be complete by the spring or summer of 2002.

Appendix A: FINANCIAL ASSURANCE

Site Name	Financial Assurance	Total Amount	Financial Assurance
	Received	Spent	Balance
Anoka-Ramsey	\$ 1,781,489	\$ 1,781,489	\$ -
Cass County (L-R)	\$ 84,496	\$ 18,857	\$ 65,640
Cass County (W-H)	\$ 84,497	\$ 24,212	\$ 60,285
Chippewa County	\$ 362,515	\$ 60,505	\$ 302,011
Dakhue	\$ 150,411	\$ 139,224	\$ 11,187
Dodge County	\$ 1,189,672	\$ 105,008	\$ 1,084,664
East Mesaba	\$ 696,244	\$ 173,452	\$ 522,792
French Lake	\$ 14,931	\$ 14,931	\$ -
Grand Rapids	\$ 1,750,000	\$ 209,758	\$ 1,540,242
Hibbing	\$ 468,020	\$ 94,141	\$ 373,879
Isanti-Chisago	\$ 333,839	\$ 333,839	\$ -
Lindenfelser	\$ 400,827	\$ 400,827	\$ -
Long Prairie	\$ 72,972	\$ 43,975	\$ 28,998
Louisville	\$ 337,129	\$ 108,473	\$ 228,657
Meeker County	\$ 378,001	\$ 105,303	\$ 272,699
Paynesville	\$ 111,641	\$ 111,641	\$ -
Pipestone County	\$ 16,622	\$ 16,622	\$ -
Redwood County	\$ 81,688	\$ 81,689	\$ -
Sun Prairie	\$ 10,725	\$ 10,725	\$ -
Tellijohn	\$ 351,405	\$ 126,612	\$ 224,794
Winona	\$ 1,586,726	\$ 22,309	\$ 1,564,417
Woodlake	\$ 1,350,000	\$ 512,013	\$ 837,987
Total	\$ 11,613,856	\$ 4,495,606	\$ 7,118,251

Appendix B: FY01 FINANCIAL SUMMARY

Landfill Name	Class & Score	MPCA Salary & Expenses	AG Salary	Operation & Maintenance	Design/ Construction Non-Bond	Design/ Construction Bond	Landfill Totals
ADAMS	D/0	\$630		\$163			\$793
AITKIN AREA	B/27	\$623		\$12,107			\$12,730
ALBERT LEA	B/25	\$1,903		\$10,101			\$12,004
ANDERSON-SEBEKA	D/2	\$3,369		\$4,715		\$5,000	\$13,085
ANOKA-RAMSEY	B/16	\$36,395	\$9,253	\$647,677		\$294,689	\$988,014
BARNESVILLE	C/1	\$1,733	\$17	\$15,332			\$17,082
BATTLE LAKE	D/1	\$1,934		\$20,350			\$22,285
BECKER COUNTY	A/29	\$9,505		\$144,703	\$89,407		\$243,615
BENSON	D/3	\$590		\$7,318			\$7,907
BIG STONE COUNTY	D/2	\$28,093	\$1,067	\$9,109	\$24,669	\$314,925	\$377,863
BROOKSTON AREA	C/2	\$587		\$6,967			\$7,554
BUECKERS #1	D/4	\$1,280		\$11,282			\$12,562
BUECKERS #2	D/10						\$0
CARLTON COUNTY #2	B/10	\$2,234	\$42	\$12,546			\$14,822
CARLTON COUNTY S.	D/5	\$1,509		\$16,578			\$18,087
CASS COUNTY (L-R)	D/5	\$1,308	\$34	\$2,697			\$4,039
CASS COUNTY (W-H)	D/2	\$1,284		\$3,988			\$5,272
CHIPPEWA COUNTY	D/38	\$1,009		\$9,330			\$10,339
COOK (AREA)*	C/4	\$901		\$6,905			\$7,805
COOK COUNTY	NEW	\$425		\$2,533			\$2,958
COTTON	B/4	\$8,937	\$794	\$6,133	\$17,838		\$33,702
CROSBY	D/2	\$1,187		\$3,743			\$4,930
CROSBY AMER. PROP.	B/7	\$3,064	\$539	\$18,731			\$22,334
CROW WING COUNTY	NEW	\$2,611	\$151				\$2,763
DAKHUE	B/11	\$5,692	\$521	\$21,296			\$27,509
DODGE COUNTY	D/30	\$1,950		\$6,358			\$8,308
EAST BETHEL	B/40	\$17,491	\$706	\$100,280			\$118,477
EAST MESABA	C/18	\$1,431		\$9,060			\$10,491
EIGHTY ACRE	B/15	\$6,002		\$7,606		\$40,003	\$53,611
FARIBAULT COUNTY	C/15	\$2,698	\$655	\$11,339			\$14,692
FIFTY LAKES	D/4	\$889		\$4,207			\$5,096
FLOODWOOD	C/5	\$1,108		\$12,325			\$13,433
FLYING CLOUD	C/12	\$6,205	\$42	\$37,475	\$11,924		\$55,645
FREEWAY	B/100	\$27,349	\$80,758	\$0	\$9,664		\$117,771
FRENCH LAKE	D/3	\$2,630		\$8,030			\$10,660
GEISLERS	D/2	\$2,766		\$4,898			\$7,664
GOFER	C/17	\$968		\$4,585			\$5,553
GOODHUE COOP	C/11	\$2,891		\$28,735			\$31,627
GRAND RAPIDS	B/36	\$14,321	\$2,705	\$16,708	\$72,630		\$106,364
GREENBUSH	D/0	\$30					\$30
HANSEN	C/14	\$821		\$2,237			\$3,058
HIBBING	D/7	\$1,089		\$18,191	\$3,421		\$22,701
HICKORY GROVE	D/2	\$784		\$25,966			\$26,750
HIGHWAY 77	C/2	\$579		\$11,267			\$11,846
HOPKINS	B/22	\$12,200	\$118	\$91,052		\$83,974	\$187,343
HOUSTON COUNTY	D/25	\$1,607		\$14,097			\$15,704
HOYT LAKES	C/3	\$658		\$6,436			\$7,095
HUDSON	C/5	\$491		\$6,452			\$6,943
IRON RANGE	C/4	\$238		\$8,331			\$8,569

IRONWOOD	B/25	\$17,561	\$2,470	\$90,028	\$4,631	\$114,690
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Landfill Name	Class & Score	MPCA Salary & Expenses	AG Salary	Operation & Maintenance	Design/ Construction Non-Bond	Design/ Construction Bond	Landfill Totals
ISANTI-CHISAGO	D/11	\$4,368		\$74,382			\$78,749
JACKSON COUNTY	C/6	\$1,055		\$4,727			\$5,783
JOHNSON BROS.	C/11	\$1,919	\$176	\$5,402			\$7,498
KARLSTAD	C/4	\$1,577		\$16,748			\$18,325
KILLIAN	B/5	\$3,399	\$1,075	\$7,718			\$12,191
KLUVER	B/15	\$9,094		\$7,207	\$95,003		\$111,305
KOOCHICHING CO.	B/24	\$9,130	\$3,478	\$36,487	\$12,177		\$61,272
KORF BROS.	D/15	\$1,340		\$26,654			\$27,994
KUMMER	B/16	\$3,565	\$59	\$40,699			\$44,323
LAGRAND	C/6	\$2,566		\$20,337			\$22,904
LAKE COUNTY*	C/15	\$541		\$8,488			\$9,029
LAKE OF THE WOODS CO.	C/8	\$2,221		\$20,645			\$22,866
LANDFILL INVEST, INC.	C/5	\$670		\$4,875			\$5,545
LEECH LAKE	B/13	\$6,185		\$10,848		\$33,808	\$50,842
LINCOLN COUNTY	D/2	\$66					\$66
LINDALA	D/11	\$2,812	\$30	\$7,192		\$38,043	\$48,077
LINDENFELSER	A/38	\$26,729	\$2,369	\$63,169	\$175,745		\$268,012
LONG PRAIRIE	D/7	\$2,293	\$17	\$6,726			\$9,036
LOUISVILLE	B/40	\$24,038	\$962	\$15,504	\$61,203		\$101,707
MAHNOMEN COUNTY	C/10	\$1,752		\$6,918			\$8,670
MANKATO	D/23	\$876		\$2,293			\$3,169
MAPLE	D/23	\$3,507		\$4,093	\$5,576		\$13,175
MCKINLEY	C/4	\$401		\$16,707			\$17,108
MEEKER COUNTY	C/13	\$1,123		\$13,697			\$14,820
MILLE LACS COUNTY	B/12	\$55		\$2,652			\$2,707
MN SANITATION	D/7	\$3,850		\$13,282			\$17,132
MURRAY COUNTY	C/103	\$21,644		\$17,375	\$72,580	\$31,742	\$143,340
NE OTTERTAIL	NEW	\$2,329	\$1,134				\$3,463
NORTHOME	D/3	\$588		\$4,773			\$5,361
NORTHWEST ANGLE	B/2	\$1,044		\$13,812			\$14,855
NORTHWOODS	D/9	\$2,661		\$12,059			\$14,720
OAK GROVE	B/16	\$21,694	\$59	\$31,657	\$72,169		\$125,579
OLMSTED COUNTY	C/13	\$3,657	\$845	\$47,634			\$52,136
ORR	B/5	\$270					\$270
PAYNESVILLE	D/7	\$3,454		\$21,876			\$25,331
PICKETT	B/3	\$4,074		\$24,610			\$28,684
PINE LANE	A/20	\$12,111	\$10,983	\$7,753	\$117,672		\$148,520
PIPESTONE COUNTY	C/8	\$884		\$9,624			\$10,508
PORTAGE MOD.	D/0						\$0
RED ROCK	D/26	\$1,948		\$13,722			\$15,670
REDWOOD COUNTY	C/8	\$1,339		\$12,182			\$13,520
ROCK COUNTY	C/16	\$2,364		\$7,179			\$9,543
SALOL/ROSEAU	D/4	\$2,178		\$11,630			\$13,807
SAUK CENTRE	C/8	\$3,172		\$11,345			\$14,516
SIBLEY COUNTY	C/7	\$558		\$6,960			\$7,518
ST. AUGUSTA	B/21	\$12,105		\$17,684	\$462		\$30,251
STEVENS COUNTY	B/30	\$3,876		\$19,655			\$23,531
SUN PRAIRIE	D/22	\$1,732		\$7,924			\$9,656
TELLIJOHN	B/34	\$5,861		\$58,251	\$9,913		\$74,025
VERMILLION DAM	D/0	\$247		\$0			\$247
VERMILLION MOD.	D/11	\$4,861		\$6,953	\$41,361	\$74,914	\$128,089

Landfill Name	Class & Score	MPCA Salary & Expenses	AG Salary	Operation & Maintenance	Design/ Construction Non-Bond	Design/ Construction Bond	Landfill Totals
WABASHA COUNTY	D/11	\$5,498	\$8	\$6,846		\$48,769	\$61,121
WADENA	D/5	\$3,005	\$25	\$5,360			\$8,390
WASECA COUNTY	B/21	\$10,960		\$23,833	\$71,341		\$106,134
WASHINGTON CO.	D/5	\$18,314		\$115,987	\$74,807		\$209,108
WATONWAN COUNTY	C/50	\$16,544		\$9,367	\$27,292	\$22,777	\$75,981
WDE	D/117	\$20,813	\$14,834	\$311,663			\$347,310
WINONA COUNTY	C/23	\$8,619	\$949	\$22,309			\$31,878
WLSSD	NEW	\$2,314	\$1,529				\$3,843
WOODLAKE*	C/8	\$18,008	\$386	\$442,238			\$460,632
YELLOW MEDICINE CO	C/2	\$20,088	\$42	\$8,748	\$242,570		\$271,448
Non-site specific charges		\$573,490	\$19,647	\$364,103			\$957,240
GRAND TOTALS		\$1,169,000	\$158,478	\$3,632,523	\$1,314,055	\$988,645	\$7,262,701

* Due to incorrect billing \$150,000.46 charged to Design, Oversight, and/or Construction should have been charged to O&M. For this report, those funds have been re-assigned to the correct category.