



MLCAT and CLIF : Long-term funding for Landfills

House Environment and Natural Resources Finance Division

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Three ways to handling pollution: Cleanup is the most expensive



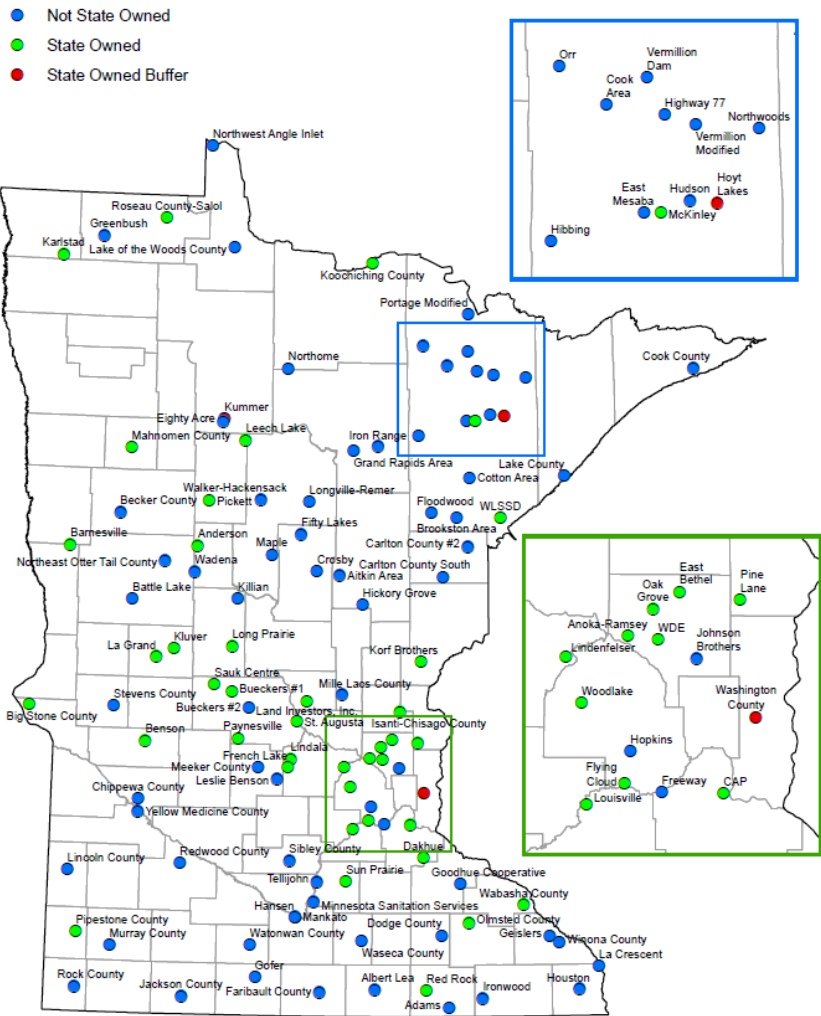
Prevent it

Manage it

Clean it up

Closed Landfill Program

Closed Landfill Site Ownership



The Legislature created the Closed Landfill Program (CLP) in 1994.

MPCA is responsible for managing into perpetuity closed landfills that were permitted to hold mixed municipal solid waste that are enrolled in the program.

Goal: Mitigate risks to the public and the environment.

Today: 110 enrolled closed landfills statewide of 114 landfills eligible

Closed Landfill Program

To prioritize work, closed landfills are scored annually based on:

- presence and degree of hazards at each site - groundwater, surface water, and methane gas (based on monitoring data and field work)
- conditions that exacerbate those hazards (fractured bedrock, drinking water impact)
- likelihood of public exposure to those hazards (distance to wells, homes)
- other risk factors (volume of waste, history of trespass, etc.)

Numerical values are assigned to each of these risks and are totaled to calculate a site's risk priority score.

Closed Landfill Investment Fund

- Closed Landfill Investment Fund (CLIF) established in 1999
- Goal: MN to be able to pay for the long-term care for enrolled closed landfills
 - designed to replicate what is required for financial assurance for open landfills
- CLIF funding, by statute, is not to be used by MPCA until FY2021 (July 1, 2020)
 - Strategy provided 20 years for initial dollars to grow to support long-term care obligations into perpetuity
 - CLP was estimated to have all known major construction completed by then

CLIF – Source of funds

- Initially, \$5.1 million transferred for four years from the former Solid Waste Fund to CLIF
 - \$20.4 million in total from former Solid Waste Fund
- Starting July 1, 2001, state's share of insurance recoveries was split equally between the Remediation Fund and CLIF
 - The state's settlement efforts concluded in FY 2011
 - \$43.6 million in total from insurance recoveries
- No future source of revenue beyond investment revenues by State Board of Investment

CLIF – 2010 legislative transfer

- 2010 session: \$48 million transferred from CLIF to the General Fund to help address budget deficit.
 - Legislation included language to repay the money in four installments, including lost interest and other investment earnings
- Summer 2014: first principal repayment of \$9.9 million made to CLIF, along with a \$51.4 million payment for the lost interest and investment earnings
- 2015 session: Three remaining payment installments (\$38.1 million) and lost interest and other investment earnings from the 2010 legislation were repealed

CLIF – 2015 legislative transfer

- 2015 session: Transfer of \$63.215 million from CLIF to the General Fund during a time of a budget surplus
 - Language was added if after any budget forecast there was an anticipated surplus the \$63.215 million would be repaid
- November 2015: A surplus was projected in the budget forecast, entire \$63.215 million was repaid

CLIF – current status

- Current balance: \$87.3 million (as of 1/22/2019)
- Closed Landfill Investment Fund policy documents guides MPCA's future use of CLIF starting in FY2021
 - Use only the historical interest earnings to ensure long-term viability of the fund to ensure resources for CLP's long-term obligation into perpetuity
 - State Board of Investment stated that a 4% annual rate of earnings was appropriate for planning purpose.

CLIF – future needs

- Estimated obligation for the long-term care of the landfills in CLP is \$277.6 million over the next 30 years
- Starting in FY2021, MPCA will use additional dollars available to address unmet needs of the program
- CLIF alone will not be enough: Remediation Fund and bonding will still be needed

CLIF – future needs

Program Issue	Current Status	Future Need
Methane gas	<ul style="list-style-type: none"> • Closed landfills emitted 160,000 metric tons of GHG in 2018 • 20 methane flare systems • 73 passively vent methane 	<ul style="list-style-type: none"> • Expand offsets to greenhouse gas emitted • Maintain methane destruction systems
Issues of emerging concern	<ul style="list-style-type: none"> • PFAS and 1,4-dioxane haven't been fully tested at closed landfill sites • Only 10 sites tested initially for vapor intrusion 	<ul style="list-style-type: none"> • Test for contaminants of emerging concern • Evaluate new/lowering health values • Test for vapor intrusion
Operations and maintenance	<ul style="list-style-type: none"> • 8 groundwater treatment systems • 72 point of use drinking water systems • Flares and passive gas systems 	<ul style="list-style-type: none"> • Replace aging and failing infrastructure
Infrastructure to support response actions	<ul style="list-style-type: none"> • 17 landfills discharge leachate/groundwater to local wastewater plants or surface water • 20 landfills with substandard covers • 102 landfills do not have bottom liners 	<ul style="list-style-type: none"> • Upgrade leachate treatment and disposal options • Construct new liners and covers

Metropolitan Landfill Contingency Action Trust

- Metropolitan Landfill Contingency Action Trust (MLCAT) established in 1984
- Goal: MN cover long-term care for certain metro closed landfills that accepted mixed municipal solid waste (MMSW)
 - Many of the MLCAT eligible landfills moved into CLP with its creation in 1994
- Emergency funding and long-term care for 7 landfills in the metro area

MLCAT – eligible sites

- **4 closed construction and demolition landfills** (accepted a small amount of mixed municipal waste)
 - Begin – Hennepin County
 - Herbst & Sons and Vadnais Heights – Ramsey County
 - Rosemount – Dakota County
- **1 old dump**
 - Pigs Eye Dump – Ramsey County
- **2 open landfills**
 - Burnsville and Pine Bend – Dakota County

MLCAT – Source of funds

- 25 percent of Metropolitan Solid Waste Landfill Fee - \$6.66 per ton on MMSW disposed of at the two open MMSW landfills in the metro area
 - Annual average of \$876,000 (based on 5 year historical average)
- Investment revenues by State Board of Investment

MLCAT – 2003 legislative transfer

- 2003 session: \$9.905 million transferred from MLCAT to the General Fund
- Legislation included intent to pay back language, but never did
 - “It is the intent of the legislature to restore these funds to the metropolitan landfill contingency action trust fund as revenues become available in the future to ensure the state meets future financial obligations under Minnesota Statutes, section 473.845.”

MLCAT – 2005 legislative transfer

- 2005 session: \$4 million transferred from MLCAT to the renewable development account
- Legislation included intent to pay back language, but never did
 - “It is the intent of the legislature to restore these funds to the metropolitan landfill contingency action trust account as revenues become available in the future to ensure the state meets future financial obligations under Minnesota Statutes, section 473.845”

MLCAT – 2015 legislative transfer

- 2015 session: Transfer of \$8.1 million from MLCAT to the General Fund during a time of a budget surplus
 - Language was added if after any budget forecast there was an anticipated surplus the \$8.1 million would be repaid
- November 2015: A surplus was projected in the budget forecast, entire \$8.1 million was repaid

MLCAT – current status

- Current balance: \$9.866 million (as of 1/22/2019)
- Use of Metropolitan Landfill Contingency Action Trust Account policy document guides MPCA's use of the funds
 - Response actions at the 4 closed construction and demolition landfills are utilizing MLCAT
 - A response action at the Pigs Eye Dump is expected to utilize MLCAT in the near future.

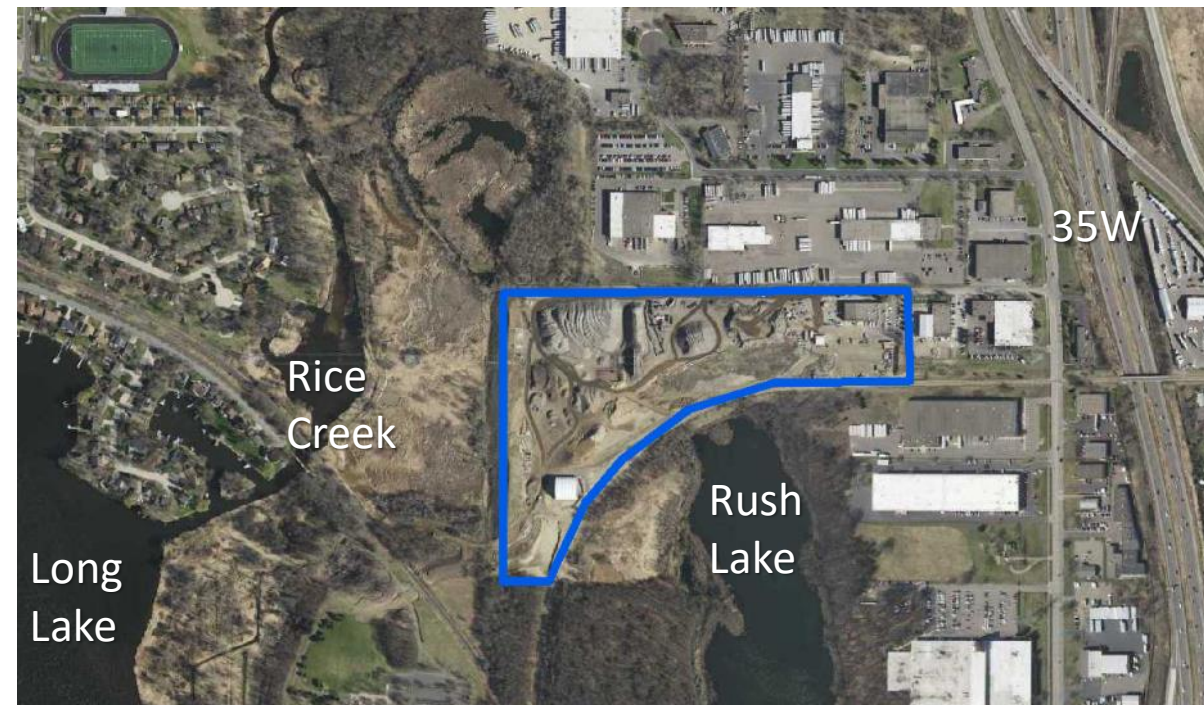
Closed construction and demolition landfills with mixed municipal waste

Begin Dump & Demolition Landfill Plymouth



Work Completed: Soil Vapor Investigation
\$89,200; Vapor Intrusion mitigation (by owner)

Herbst & Sons Demolition Landfill New Brighton



Work Completed: Soil Vapor Investigation
\$25,900

Closed construction and demolition landfills with mixed municipal waste

Rosemount Demolition Landfill



Work Completed: Soil Vapor Investigation
\$38,200

Vadnais Heights Demolition Landfill



Work Completed: Soil Vapor Investigation
\$59,400

MLCAT – Pig's Eye Dump

Largest unpermitted dump in Minnesota

Located within the Mississippi River floodplain

Operational History:

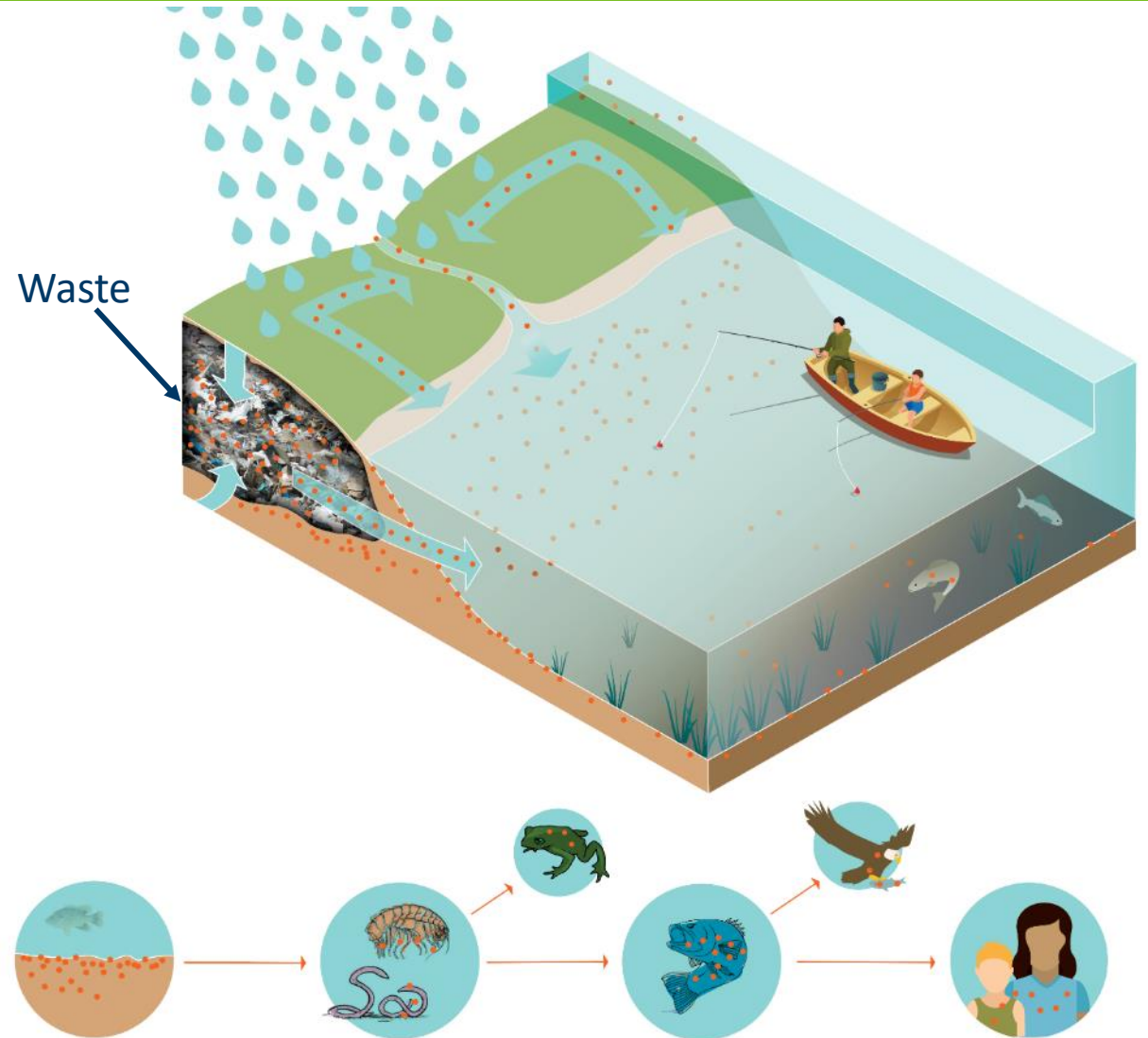
- **1956-1972**
8.3 million cubic yards of industrial, commercial, and municipal wastes disposed of on 230 acres
- **1977-1985**
Permitted MCES sewage sludge ash disposal on 31 acres

Contaminants of Concern:

PFAS, metals, mercury, PCBs, VOCs, SVOCs, dioxans/furans



MLCAT – Pig's Eye Dump Waste Near Water



MLCAT – Pig's Eye Dump

- **2000-2005 Cleanup = \$5,982,264 (MLCAT-\$4M, old Solid Waste Fund-\$2M)**
 - Remove drums of hazardous waste
 - Cleanup lead contaminated surface soil
 - Soil cap- install 2 ft soil
 - Leachate control- install of select fill in portion of waste water interface
- **2006-2018 Investigations = \$329,202 (MLCAT)**
 - Laboratory studies to enhance leachate control remedy for longevity/performance.
 - Testing of soil, groundwater, surface water, and sediment
- **Proposed Future Site Work (FY19 and FY20) = \$5.368 M**
 - Leachate control- relocate a portion of exposed waste from Battle Creek stream banks, limited placement of select fill, bank stabilization/revegetation, and continued groundwater monitoring



Next Steps

Closed construction and demolition landfills with mixed municipal waste

Landfill	Next Steps*	FY2019	FY2020
Begin	Soil and groundwater investigation Vapor Intrusion mitigation	\$75,000	\$100,000 \$150,000
Herbst & Sons	Soil and groundwater investigation Vapor Intrusion mitigation	\$50,000	\$100,000 \$150,000
Rosemount	Soil and groundwater investigation Vapor Intrusion mitigation	\$50,000	\$100,000 \$150,000
Vadnais Heights	Soil and groundwater investigation Vapor Intrusion mitigation Methane gas control system	\$75,000	\$100,000 \$150,000 \$1.5 M
Pigs Eye Dump	Leachate control- limited placement of select fill and bank stabilization	\$250,000	\$5.118 M
Estimated Next Step Total Cost		\$500,000	\$7.618 M

*There will be work required following the next steps not included in these estimates.

Thank You!

Questions?