

Payment rate estimate table instructions

Annual cost estimate updates

All permitted solid waste facilities are required to prepare closure and contingency action plans. The only exception is that Permit By Rule (PBR) recycling facilities are not required to prepare a closure plan. In addition to closure and contingency action plans, land disposal facilities must also prepare a postclosure care plan. All three plans require the facility to provide estimates of all costs related to implementing the plans. See MN Rules 7035 for plan details.

As part of the annual report, all facilities are required to review their closure, postclosure care, and contingency action plans and make updates as needed. Cost estimates must be based on the cost of paying a third party to perform closure, postclosure care, and corrective action activities. The cost estimates associated with each should also be updated for inflation. The table below can be used to calculate revised cost estimates based on the current inflation rates. This is something all facilities must do, regardless if a financial assurance mechanism is required.

Annual financial assurance mechanism update

Some solid waste permits require a facility to establish and maintain a financial assurance mechanism for closure, postclosure care and corrective actions at the facility. Minnesota rule requires the mechanism be updated annually for inflation. The payment rate estimate table must be used to calculate the facility's financial assurance obligation and the updated monthly payments when using a trust fund as a financial assurance mechanism.

Minn. R. 7035.2755 allows the use of multiple financial assurance mechanisms. An owner or operator may satisfy the financial assurance requirements by establishing more than one mechanism for financial assurance per facility. These mechanisms could be dedicated long-term care trust fund, financial test with corporate guarantee, letter of credit, self-test (i.e., self-insurance) with other collateral, self-test with reduced letter of credit, surety bond guaranteeing payment into a trust fund, surety bond guaranteeing performance, trust fund.

The Payment Rate Estimate Table calculates both an updated Current Value and Present Value for the following year's annual cost estimates. Facility owner's making trust fund or dedicated long-term trust fund payments into a trust fund AND applying all interest earned from the fund to the fund balance may base their monthly trust fund payments on the discounted value (i.e., Present Value) for closure and post-closure care, plus the Current Value for Contingency Action estimates.

A trustee must provide an annual statement affirming the value of the trust fund to the MPCA Financial Assurance coordinator. Statements along with the updated Payment Rate Estimate Table can be sent via electronic mail to: FACoordinator.MPCA@state.mn.us

The form is locked except for the yellow highlight cells. These cells must be completed by the facility.

Submit with 2022 Annual Report

Instructions: go to <https://www.pca.state.mn.us/waste/solid-waste-reporting>

Facility name

SW#

Type of mechanism used (select one):

2022 approved closure cost estimate

2022 approved annual postclosure care cost estimate

2022 approved contingency action cost estimate

Trust Fund and Dedicated Trust Fund

Account balance on December 31, 2022

Operating life in months (maximum 120)

Letter of Credit, Surety Bond, Self Insurance, or other mechanism

Value of guarantee on December 31, 2022

(Letter of Credit or Surety Bond)

For a Trust Fund or Dedicated Trust Fund, enter the account balance as of the end of the reporting year. And enter the remaining life of the facility in months, not to exceed 120 months.

For other mechanism such as Letter of Credit, Surety Bond, or Self-Insurance, enter the account balance as of the end of the reporting year.

Enter the most recently approved cost estimates. If estimates were approved via permit issuance or revised in the previous year, use the most recently approved estimates. If estimates were not revised the previous year, use the inflated estimates from the previous year's Payment Rate Estimate Table.

Enter facility's permit number (SW-###)

Enter facility's name

Select the facility's financial assurance mechanism from the dropdown list (arrow just to the right of the box). If none is required by the MPCA solid waste permit, select "none required by MPCA permit"

The inflation factor and discount rate will be determined by the MPCA. This is derived from the annual Implicit Price Deflator for Gross National Product as found in the Survey of Current Business issued by the United States Department of Commerce. The example below is only an example and the actual inflation factor and discount rate **will be different each year**.

Inflation factor = 7.575%
Discount rate = 1.00%

The next year’s cost estimates and monthly payment will be automatically calculated (the blue text above). These numbers are an example only as each facility’s calculations will vary based on their cost estimates and current funding.

Basis for this years payments	Current value	Present value*
2023 Closure cost estimate	\$537,875.00	\$486,931.22
2023 Postclosure care cost estimate	\$2,348,556.06	\$2,090,558.18
2023 Contingency action cost estimate	\$239,055.32	\$239,055.32
Total	\$3,125,486.37	\$2,816,544.72
<small>* Present value is only for Trust Funds and Dedicated Trust Funds</small>		
Account balance on December 31, 2021	\$750,000.00	
Value of guarantee on December 31, 2021	\$345,000.00	
Operating life in months (never greater than 120 months)	120	
Your trust fund or dedicated trust fund monthly payment if not discounting =	\$19,796	
Your trust fund or dedicated trust fund monthly payment if discounted =	\$17,221	

Current value cost estimates are calculated as follows:

$$CVC = PC \times (1 + i)$$

Where: CVC = Current value closure cost estimate
PC = previously approve closure cost estimate
i = the inflation factor

$$CVP = IP$$

Where: CVP = Current value postclosure care cost estimate
IP = total inflated postclosure care cost estimate (sum of the second column of table)

$$CVA = PA \times (1 + i)$$

Where: CVA = Current value contingency action cost estimate
PA = previously approve contingency action cost estimate
i = the inflation factor

Present value cost estimates are calculated as follows:

$$PVC = CVC / (1 + i)^y$$

Where: PVC = Present value closure cost estimate
CVC = Current value closure cost estimate
i = the inflation factor
y = number of years of operating life remaining of
= months of operating life remaining (not to exceed 120) divided by 12

PVP = IP

Where: PVP = Present value postclosure care cost estimate

IP = total inflated and discounted postclosure care cost estimate (sum of the far right column of table)

PVA = PA x (1 + i)

Where: PVA = Present value contingency action cost estimate

PA = previously approved contingency action cost estimate

i = the inflation factor

The annual postclosure care cost estimate for the upcoming year is automatically calculated.

2023 Annual postclosure care cost estimate		\$ 50,750.00	
Year	Inflated annual cost	Inflated and discounted annual cost	
2023	\$50,750		\$50,750
2024	\$51,511		\$51,001
2025	\$52,284		\$51,254
2026	\$53,068		\$51,507
2027	\$53,864		\$51,762
2028	\$54,672		\$52,019
2029	\$55,492		\$52,276
2030	\$56,325		\$52,535
2031	\$57,169		\$52,795
2032	\$58,027		\$53,056
2033	\$58,897		\$53,319
2034	\$59,781		\$53,583
2035	\$60,678		\$53,848
2036	\$61,588		\$54,115
2037	\$62,512		\$54,383
2038	\$63,449		\$54,652
2039	\$64,401		\$54,923
2040	\$65,367		\$55,194
2041	\$66,348		\$55,468
2042	\$67,343		\$55,742
Totals	\$1,173,526		\$1,064,183
	(Current value - not discounted)		(Current value - discounted)

This uses the previously approved cost estimates and the inflation factor:

$P = L \times (1 + i)$

Where: P = the present value

L = previously approved annual postclosure care cost estimate

i = the inflation factor

The next 20 years will also be automatically calculated.

$F = P \times (1 + i)^n / (1 + d)^n$

Where: F = the estimated cost of postclosure care and maintenance during the year in which cost will be incurred

P = the present value

i = the inflation factor

d = the discount rate

n = the time period in which the cost will be incurred, expressed as the number of years after the date on which the cost estimate is made.