

## 2026 Worksheet for Calculating Closure and Post-closure Cost Estimates

All site data necessary to calculate estimates of closure and post-closure costs can be gathered by completing Table E.1. Data from Table E.1 should be inserted into Tables E.2 and F.1 to complete calculations.

**Table E.1: Site Data**

**Facility Name:**

**Permit Number:**

Description	Quantity	Units
Total Permitted Area		acres
Active Portion		
Composite Lined		acres
Soil Lined		acres
Area of Largest Cell/Phase Requiring Final Cap		
Composite Lined		acres
Soil Lined		acres
Perimeter Fencing		linear feet
Groundwater Monitoring Wells		VLF
Methane Gas Probes	N/A	VLF
Terraces		linear feet
Letdown channels		linear feet
Perimeter drainage ditches		linear feet
Average Daily Flow		tons/day

VLF = Vertical linear feet. The sum of the depths of all monitoring wells.

**Table E.2: Closure Cost Estimate**

**Facility Name:**

**Permit Number:**

	Task/Service	Quantity	Units	Multiplier <sup>a</sup>	Unit Cost <sup>b</sup>	Subtotal
<b>1</b>	<b>Preliminary Site Work</b>					
1.1	Conduct Site Evaluation	1	Lump sum	1	\$4,608.37	\$4,608.37
1.2	Dispose Final Wastes					
	Average Daily Flow <sup>c</sup>	c	tons/day			
	Disposal Cost <sup>d, e</sup>	d	tons/day	5 days waste		
1.3	Remove Temporary Building(s)	1	lump sum	1	\$4,225.90	\$4,225.90
1.4	Remove Equipment	1	lump sum	1	\$3,449.57	\$3,449.57
1.5	Repair/Replace Perimeter Fencing		linear feet	0.25 (25% of fencing)	\$4.51	

1.6	Clean Leachate Line(s)	1	lump sum	1	\$2,087.26	\$2,087.26
<b>2</b>	<b>Monitoring Equipment</b>					
2.1	Rework/Replace Monitoring Well(s)		VLF	0.25 (25% of wells)	\$96.90	
2.2	Plug Abandoned Monitoring Well(s)		VLF	0.25 (25% of wells)	\$38.79	
2.3	Rework/Replace Methane Probe(s)		VLF	0.25 (25% of probes)	\$83.69	N/A
2.4	Plug Abandoned Methane Probe(s)		VLF	0.25 (25% of probes)	\$30.58	N/A
2.5	Rework/Replace Remediation and/or Gas Control Equipment <sup>f</sup>	1	lump sum	0.05 (5% of equipment capital cost)		
<b>3</b>	<b>Construction</b>					
3.1	Complete Site Grading to include on- and off-site borrow areas		acres	1	\$1,827.10	
3.2	Construct Final Cap					
	Compacted On-site Clay Cap or		cubic yards	1	\$6.56	
	Compacted Off-site Clay Cap or		cubic yards	1	\$10.66	
	Install Geosynthetic Clay Liner Cap		square feet	1	\$0.69	
3.3	Construct Landfill Gas Venting Layer					
	Place Sand or		acres	1	\$48,854.84	N/A
	Install Net and Geotextile		square feet	1	\$0.48	N/A
3.4	Install Passive Landfill Gas Vents		acres	1	\$1,170.38	N/A
3.5	Install Flexible Membrane Liner		square feet	1	\$0.53	N/A
3.6	Drainage Layer					
	Place Sand or		acres	1	\$48,854.84	
	Install Net and Geonet		square feet	1	\$0.48	
3.7	Place On-site Topsoil		cubic yards	1	\$2.82	
	Place Off-site Topsoil		cubic yards	1	\$22.58	
3.8	Establish Vegetative Cover, including on- and off-site borrow areas		acres	1	\$1,302.13	
<b>4</b>	<b>Drainage/Erosion Control</b>					
4.1	Construct Terraces		linear feet	1	\$11.83	

4.2	Construct Letdown Channels		linear feet	1	\$129.34	
4.3	Clean Perimeter Drainage Ditches		linear feet	0.5 (50% of ditches)	\$9.02	
<b>5</b>	<b>Tasks Not Identified</b>					
<b>6</b>	<b>Subtotal</b>					
7	<b>Administrative Services</b> <sup>g</sup>	1	lump sum	0.1 (10%)	g	
8	<b>Technical and Professional Services</b> <sup>g</sup>	1	lump sum	0.12 (12%)	g	
9	<b>Closure Contingency</b> <sup>g</sup>	1	lump sum	0.1 (10%)	g	
<b>10</b>	<b>Total Final Closure</b> <sup>h</sup>					<b>h</b>

- a Multipliers are determined from the *Solid Waste Financial Assurance Program Report*, December 22, 2000.
- b Unit costs include a 2.83% inflationary adjustment for 2026.
- c New facilities: Insert the value for “W” in OAC 252:517-17-8(2). Existing facilities: Insert reported annual tonnage for the previous year, divided by 312 operating days per year (52 weeks per year x 6 operating days per week).
- d Insert number of tons/day from above.
- e Insert landfill disposal cost per ton of waste (\$/ton).
- f Input capital cost for remediation and/or gas control equipment, if installed at the site.
- g Input subtotal from line 6.
- h Add rows 6 through 9.

**Table F.1: Post-Closure Cost Estimate**

**Facility Name:**

**Permit Number:**

	<b>Task/Service</b>	<b>Quantity</b>	<b>Units</b>	<b>Multiplier<sup>a</sup></b>	<b>Unit Cost<sup>b</sup></b>	<b>Subtotal</b>
<b>1</b>	<b>Site Maintenance</b>					
1.1	Site Inspections	4	per year	30 yrs	\$838.32	\$100,598.40
1.2	General Maintenance	1	per year	30 yrs	\$2,513.32	\$75,399.60
1.3	Remediation and/or Gas Control Equipment <sup>c, d</sup>	1	lump sum	0.3 <sup>c</sup>	d	
<b>2</b>	<b>Monitoring Equipment</b>					
2.1	Rework/Replace Monitoring Well(s)		VLF	0.25 (25% of wells)	\$96.90	
2.2	Plug Abandoned Monitoring Well(s)		VLF	0.25 (25% of wells)	\$38.79	
2.3	Final Plugging of Monitoring Wells		VLF	1	\$38.79	
2.4	Rework/Replace Methane Probe(s)		VLF	0.25 (25% of probes)	\$83.69	N/A
2.5	Plug Abandoned Methane Probe(s)		VLF	0.25 (25% of probes)	\$30.58	N/A
2.6	Final Plugging of Methane Probes		VLF	1	\$30.58	N/A
2.7	Final Plugging of Piezometer(s)		VLF	1	\$30.58	
<b>3</b>	<b>Sampling and Analysis</b>					
3.1	Groundwater Monitoring Wells <sup>e</sup>		wells	60 (2/yrX30yrs)	\$903.95	
3.2	Methane Gas Probes		probes	60 (2/yrX30yrs)	\$58.66	N/A
3.3	Surface Water Monitoring Points		points	60 (2/yrX30yrs)	\$108.93	
3.4	Leachate		samples	60 (2/yrX30yrs)	\$175.54	
<b>4</b>	<b>Final Cover Maintenance</b>					
4.1	Mow and Fertilize Vegetative Cover		acres	30 yrs	\$277.33	
4.2	Repair Erosion, Settlement, and Subsidence for On-site Soils		acres	60 (2CY/acX30yrs)	\$4.02	
	Repair Erosion, Settlement, and Subsidence for Off-site Soils		acres	30 yrs	\$24.05	
4.3	Reseed Vegetative Cover		acres	0.2 (20% reseeded over post-closure period)	\$1,302.13	

<b>5</b>	<b>Leachate Management</b>					
5.1	Clean Leachate Line(s)	1	per year	30 yrs	\$2,149.67	\$64,490.10
5.2	Maintain Leachate Collection System and Equipment	1	per year	30 yrs	\$3,339.60	\$100,188.00
5.3	Collect, Treat, Transport, and Dispose of Leachate		gal/yr	30 yrs	\$0.42	
<b>6</b>	<b>Tasks Not Identified</b>					
<b>7</b>	<b>Subtotal</b>					
<b>8</b>	<b>Administrative Services<sup>f</sup></b>	1	lump sum	0.06 (6%)	f	
<b>9</b>	<b>Technical and Professional Services<sup>f</sup></b>	1	lump sum	0.07 (7%)	f	
<b>10</b>	<b>Post-closure Contingency<sup>f</sup></b>	1	lump sum	0.1 (10%)	f	
<b>11</b>	<b>Total Post-closure<sup>g</sup></b>					<b>g</b>

- a Multipliers are determined from the *Solid Waste Financial Assurance Program Report*, December 22, 2000.
- b Unit costs include a 2.83% inflationary adjustment for 2026.
- c 5% of equipment capital cost, maintenance performed once per 5 yrs for 30 years ( $6 \times 0.05 = 0.30$ ).
- d Input capital cost for remediation and/or gas control equipment, if installed at the site.
- e If the approved groundwater monitoring plan requires monitoring for alternative constituents, unit costs shall be calculated in accordance with OAC 252:517-17-51(b) or (c).
- f Input subtotal from line 7.
- g Add lines 7 through 10.