



## Utah Division of Waste Management and Radiation Control Municipal Solid Waste - Full Cost Accounting Workbook

**Form A**

### Program Cost Summary

<b>Service Provider:</b>
<b>Date Prepared:</b>
<b>Fiscal Year:</b>

		A	B	C	D	E	F
		MSW Budget	Program Category				
			Collection	Disposal	Recycling	Yard Waste	Other
<i>Direct Costs:</i>							
1	Salaries, Wages & Benefits (Form 1)						
2	Vehicle Expense (Forms 2 and 3)						
3	Other						
4	Long Term Debt Payment (Form 4)						
5	Short Term Debt Payment (Form 4)						
6	Cash Capital Outlays (Form 4)						
7	Extraordinary Cash Outlays (Form 4)						
8	Other Landfill Costs (Forms 5, 6 and 7)						
9	Contractual Disposal Service (a)						
10	<b>Sub-Total</b>						
11	General O&M (Form 8)						
12	Other Costs (Form 9)						
13	<b>Total Direct Costs</b>						
<i>Indirect Costs:</i>							
14	<b>Total Indirect Costs (Form 10 or 11)</b>						
<i>Other Revenue:</i>							
15	Interest Income						
16	Sale of Recyclables						
17	Miscellaneous Revenue						
18	Equipment Salvage Value						
19	Other						
20							
21	<b>Total Other Revenue</b>						
22	<b>Total Full Cost (Lines 13 + 14 - 21)</b>						

(to Form B, Line 1)

Note:

- (a) For those cities that have contracted to dispose of their solid waste at a private landfill or at a landfill operated by a private waste management company, the annual amount paid should be entered here.



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**Form B**

### Rate Calculation Summary

<b>Service Provider:</b>
<b>Date Prepared:</b>
<b>Fiscal Year:</b>

	A	B	C	D	E	F
<b>Program Rates</b>	<b>Program Category</b>					
	<b>Collection</b>	<b>Disposal</b>	<b>Recycling</b>	<b>Yard Waste</b>	<b>Other</b>	<b>Total</b>
1 <b>Total Full Cost</b> (From Form A, Line 22 )						
2 <b>Billing Units (a)</b>						
3 <b>Cost Per Billing Unit</b> ( Line 1 / Line 2 )						

	Program:	Residential	Commercial	Other
4 <b>Total Full Cost</b> (From Form C, Line 22)				
5 <b>Billing Units (a)</b>				
6 <b>Cost Per Billing Unit</b> (Line 4 / Line 5)				

Notes:

- (a) Number of households served, commercial containers x frequency, tons, etc.
- (b) This section should be completed for each solid waste program that has more than one customer class.



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**Form C**

**Customer Class Cost Summary (a)**

<b>Service Provider:</b>
<b>Date Prepared:</b>
<b>Fiscal Year:</b>

MSW PROGRAM: _____			
Program Cost (From Form A)	Customer Classes		
	Residential	Commercial	Other

*Direct Costs (b):*

1	Salaries, Wages & Benefits				
2	Vehicle Expense				
3	Other				
4	Long Term Debt Payment				
5	Short Term Debt Payment				
6	Cash Capital Outlays				
7	Extraordinary Cash Outlays				
8	Other Landfill Costs				
9	Contractual Disposal Service (c)				
10	<b>Sub-Total</b>				
11	General O&M				
12	Other Costs				
13	<b>Total Direct Costs</b>				

*Indirect Costs (b):*

14	<b>Total Indirect Costs</b>				
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*Other Revenue (b):*

15	Interest Income				
16	Sale of Recyclables				
17	Miscellaneous Revenues				
18	Equipment Salvage Value				
19	Other				
20					
21	<b>Total Other Revenue</b>				

22	<b>Total Full Cost (Lines 13+14-21)</b>				
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(to Form B, Line 4)

Notes:

- (a) This form should be completed for each solid waste program that has more than one class of customers.
- (b) Calculated using Form 14.
- (c) For those cities that have contracted to dispose of their solid waste at a private landfill or at a landfill operated by a private waste management company, the annual amount paid should be entered here.







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**Form 3**

**Annual Vehicle Expense Report by Program**

Service Provider:
Date Prepared:

Fiscal Year:
Program:

<u>Month</u>	<u>Total Monthly Vehicle Expense by Program</u>
January	
February	
March	
April	
May	
June	
July	
August	
September	
October	
November	
December	
<b>Annual Vehicle Expense by Program</b>	



**Utah Division of Waste Management and Radiation Control  
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**Capital Costs - Annual**

<b>Service Provider:</b>
<b>Date Prepared:</b>
<b>Fiscal Year:</b>
<b>Program:</b>

**Long Term Debt Payment**

Debt Issue	Total P & I Annual Amount	Percentage To Program	Program P & I Annual Amount	Year Debt Expires
<b>Total</b>				(1)

**Short Term Debt Payment**

Debt Issue	Total P & I Annual Amount	Percentage To Program	Program P & I Annual Amount	Year Debt Expires
<b>Total</b>				(1)

**Cash Capital Outlays**

Description	Purchase Amount	Percentage To Program	Program Annual Amount
<b>Total</b>			(1)

**Extraordinary Cash Outlays**

Description	Purchase Amount	Expected Life (Years)	Amortized Annual Amount	Retirement Year
<b>Total</b>				(1)

(1) To Form A, Lines 4-7



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**Form 5**

**Other Landfill Costs - Annual**

<b>Service Provider:</b>
<b>Date Prepared:</b>
<b>Fiscal Year:</b>
<b>Site:</b>

**Operating Costs:**

- 1 Cover Material
- 2 Laboratory Testing
- 3 Permits
- 4 Gas Collection
- 5 Leachate Collection & Disposal
- 6 Engineering
- 7 Legal
- 8 Regulatory Fees (i.e. TNRCC Fees)
- 9 Other


10 **Sub-Total**

--

11 Annualized Predevelopment and Construction Costs  
(From Form 6, Line 20)

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12 Closure and Post-Closure Care Costs  
(From Form 7, Line 19)

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13 Other

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14 Other

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15 **Sub-Total**

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16 **Total**

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(to Form A, Line 8)





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**Form 6**

**Predevelopment and Construction Costs - Annual**

<b>Service Provider:</b>
<b>Date Prepared:</b>
<b>Fiscal Year:</b>
<b>Site:</b>

**Predevelopment Costs:**

- 1 Engineering and Design
- 2 Permitting
- 3 Legal
- 4 Land Purchase
- 5 Administrative
- 6 Other


7 **Total Predevelopment Costs**

--

**Construction Costs:**

- 8 Earthwork
- 9 Liner System
- 10 Leachate System
- 11 Gas Venting
- 12 Scale System
- 13 Landscaping
- 14 Construction Engineering
- 15 Other
- 16 Other


17 **Total Construction Costs**

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18 **Total Predevelopment and Construction Costs**

--

19 **Expected Landfill Life (years)**

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20 **Annual Cost (Line 18 Divided by Line 19)**

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(to Form 5, Line 11)



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**Form 7**

**Closure & Post-Closure Care Costs - Annual**

<b>Service Provider:</b>
<b>Date Prepared:</b>
<b>Fiscal Year:</b>

<b>Site:</b>
<b>Date of Cost Estimate:</b>

**Closure Costs (1):**

1	<b>Phase 1 Closure Cost</b>	\$	
2	Less amount already reserved for closure	\$	
3	Net remaining closure costs (Line 1 - Line 2)	\$	
4	Expected number of years until funds are required		years
5	Annual cost for phase 1 closure (Line 3/ Line 4)	\$	per year
6	<b>Phase 2 Closure Cost</b>	\$	
7	Less amount already reserved for closure	\$	
8	Net remaining closure costs (Line 6 - Line 7)	\$	
9	Expected number of years until funds are required		years
10	Annual cost for phase 2 closure (Line 8/ Line 9)	\$	per year

**Total Annual Closure Costs:**

11	<b>Phase 1</b> (Line 5)	\$	per year
12	<b>Phase 2</b> (Line 10)	\$	per year
13	<b>Total</b> (Line 11 + Line 12)	\$	per year

**Post-Closure Care Costs:**

14	Post-Closure Care Costs	\$	
15	Less amount already reserved for post-closure	\$	
16	Net remaining post-closure costs (Line 14 - Line 15)	\$	
17	Expected number of years until funds are required		years
18	Annual Post-Closure Care Costs (Line 16 / Line 17)	\$	per year
19	<b>Total Annual Closure and Post-Closure Care Costs:</b> (Line 13 + Line 18)	\$	per year (to Form 5, Line 12)

**Note:**

(1) Recognizing that closure may be carried out in a series of phases at the landfill. For an example of how fees may be established to recover closure and post-closure care costs please refer to the example on p. 20 of this workbook.



## Utah Division of Waste Management and Radiation Control Municipal Solid Waste - Full Cost Accounting Workbook

### General Operation & Maintenance - Annual

<b>Service Provider:</b>
<b>Fiscal Year:</b>

<b>Date Prepared:</b>
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**DIRECTLY ASSIGNABLE COSTS**

Account Number	Description	Total Cost	Program Category				
			Collection	Disposal	Recycling	Yard Waste	Other
1							
2							
3							
4							
5							
6							
7							
8							
9							
10	<b>Total Dollar Amount</b>						

**ALLOCATED COSTS**

Account Number	Description	Total Cost	Program Category				
			Collection	Disposal	Recycling	Yard Waste	Other
11	<b>Allocation Percentage (1)</b>	100%					
12							
13							
14							
15							
16							
17							
18	<b>Total Dollar Amount</b>						
19	<b>Total General O&amp;M Costs Per Program</b> (To Form A, Line 11)						

(1) This percentage is calculated based on a composite of the city's direct costs as sub-totaled on Form A, line 10. For instance, if 50% of the direct costs on Form A, line 10, are collection related, then 50% is entered on Form 8, line 11, for the collection program.



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### Other Costs - Annual

<b>Service Provider:</b>
<b>Fiscal Year:</b>

<b>Date Prepared:</b>
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**DIRECTLY ASSIGNABLE COSTS**

Account Number	Description	Total Cost	Program Category				
			Collection	Disposal	Recycling	Yard Waste	Other
1							
2							
3							
4							
5							
6							
7							
8							
9							
10	<b>Total Dollar Amount</b>						

**ALLOCATED COSTS**

Account Number	Description	Total Cost	Program Category				
			Collection	Disposal	Recycling	Yard Waste	Other
11	<b>Allocation Percentage (1)</b>	100%					
12							
13							
14							
15							
16							
17							
18	<b>Total Dollar Amount</b>						
19	<b>Total Other Costs Per Program</b> (To Form A, Line 12)						

(1) This percentage is calculated based on a composite of the city's direct costs as sub-totaled on Form A, line 10. For instance, if 50% of the direct costs on Form A, line 10, are collection related, then 50% is entered on Form 8, line 11, for the collection program.



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**Form 10**

**Indirect Cost Method I: Internal Assessment Allocation**

<b>Service Provider:</b>
<b>Date Prepared:</b>
<b>Fiscal Year:</b>

**Part 1**

	Department	Departmental Budget	% Attributable to Solid Waste Dept.	\$ Amount Attributable to Solid Waste Dept.
	(1)	(2)	(3)	(4)
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13	<b>TOTAL</b>			<input type="text"/>

(To Part 2, Column C)

**Part 2**

	Program	A Direct Costs (From Form A, Line 13)	B % of Total MSW Direct Costs	C Total from Part 1 (\$ Amount)	D Indirect Cost to Program (BxC)
14	Collection				
15	Disposal				
16	Recycling				
17	Yard Waste				
18	Other				
19					
20	Total MSW Direct Costs		100%		(To Form A, Line 14)



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**Form 11**

## Indirect Cost Method II: Employee Based Allocation

<b>Service Provider:</b>
<b>Date Prepared:</b>
<b>Fiscal Year:</b>

**Part 1**

Department

Departmental  
Budget

1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13	<b>TOTAL</b>	

**Part 2**

14 Solid Waste Employees

15 Total Municipal Employees

16 Ratio of MSW Employees to Total  (Line 14 divided by Line 15)

17 Amount Allocated to MSW  (Total from Part 1 multiplied by Line 16)

**Part 3**

	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>
Program	Solid Waste Employees by Program	% of Total MSW Employees	\$ Amount From Part 2, Line 17	Indirect Cost to Program (BxC)
18 Collection				
19 Disposal				
20 Recycling				
21 Yard Waste				
22 Other				
23				
24 Total MSW Employees		100%		(To Form A, Line 14)





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**Annual Materials**

<b>Service Provider:</b>
<b>Date Prepared:</b>
<b>Year:</b>

	Residential Solid Waste	Commercial Solid Waste	Recyclables	Yard Waste	Outside Source	Other
Units:						

**Month**

January						
February						
March						
April						
May						
June						
July						
August						
September						
October						
November						
December						

**Totals**

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WASTE MANAGEMENT & RADIATION CONTROL

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**Form 14**

(Page 1 of 5)

**Customer Class Costs - Detail**

<b>Service Provider:</b>
<b>Date Prepared:</b>
<b>Fiscal Year:</b>
<b>Program:</b>

**Part 1**

(Columns A and B are taken directly from Form 1)

A	B	C	D	E
Employee	Salaries, Wages & Benefits	Customer Classes		
		Residential	Commercial	Other
<b>Total (To Form C)</b>				

**Part 2**

Annual vehicle expense may be calculated by determining the annual costs of each vehicle associated with the solid waste program for which rates are being established. This information may be gathered from the city's internal services fund or by summing the "Total Monthly Program Costs of Vehicle" from Form 2 for 12 months and using this information to develop a budgeted amount in annual vehicle expense for each vehicle. This amount would then be assigned to the appropriate customer classes.

Vehicle Identification	Annual Vehicle Expense	Customer Classes		
		Residential	Commercial	Other
<b>Total (To Form C)</b>				



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**Customer Class Costs - Detail**

<b>Service Provider:</b>
<b>Date Prepared:</b>
<b>Fiscal Year:</b>
<b>Program:</b>

**Part 3** (Columns A and B are taken directly from Form 4)

A	B	C	D	E
<b>Long Term Debt Issue:</b>	<b>Program P&amp;I Annual Amount</b>	<b>Customer Classes</b>		
		<b>Residential</b>	<b>Commercial</b>	<b>Other</b>
<b>Total (To Form C)</b>				

<b>Short Term Debt Issue:</b>	<b>Program P&amp;I Annual Amount</b>	<b>Customer Classes</b>		
		<b>Residential</b>	<b>Commercial</b>	<b>Other</b>
<b>Total (To Form C)</b>				

<b>Cash Capital Outlays Description:</b>	<b>Program Annual Amount</b>	<b>Customer Classes</b>		
		<b>Residential</b>	<b>Commercial</b>	<b>Other</b>
<b>Total (To Form C)</b>				

<b>Extraordinary Cash Outlays:</b>	<b>Amortized Annual Amount</b>	<b>Customer Classes</b>		
		<b>Residential</b>	<b>Commercial</b>	<b>Other</b>
<b>Total (To Form C)</b>				



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**Customer Class Costs - Detail**

<b>Service Provider:</b>
<b>Date Prepared:</b>
<b>Fiscal Year:</b>
<b>Program:</b>

**Part 4** ( Other Direct Landfill Costs - Forms 5, 6, and 7)

Other Direct Landfill Costs are related solely to the city's disposal program. Because Form 14 is not needed to allocate disposal program costs between customer classes, these costs are not shown on this form. To allocate disposal program costs among customer classes refer to Example #2 on page 33 of this workbook.

**Part 5** (General O&M is taken directly from Form 8)

Description	Total Cost for the Program	Customer Classes		
		Residential	Commercial	Other
Allocation Percentage (1)	100%			
<b>Total (To Form C)</b>				

(1) This percentage is calculated based on a composite of the city's direct costs as sub-totaled on Form C, line 10. For instance, if 50% of the direct costs on Form C, line 10 are related to the residential customer class, then 50% is entered on this line under residential. 50% of the General O&M costs are then allocated to the residential customer class.



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**Customer Class Costs - Detail**

<b>Service Provider:</b>
<b>Date Prepared:</b>
<b>Fiscal Year:</b>
<b>Program:</b>

**Part 6** (Other Cost is taken directly from Form 9)

Description	Total Cost for the Program	Customer Classes		
		Residential	Commercial	Other
Allocation Percentage (2)	100%			
<b>Total (To Form C)</b>				

(2) Other costs are allocated among customer classes in the same manner as are General O&M costs (Form 14, Part 5).

**Part 7** (The indirect cost for the program is taken directly from Form C, Line 14, Column A)

**Total Indirect Costs**  
1 **For the Program**

Direct Costs (from Form C)			
Program	Residential	Commercial	Other

2 **Direct Costs**  
(From Form C, Line 13)

3 **% of Direct Costs by Customer Class**  
(calculated using data on Line 2)

4 **Indirect Cost for the Program Multiplied by the Customer Class Direct Cost %**  
(Line 1 multiplied by Line 3)

<input style="width: 90%; height: 30px;" type="text"/>	<input style="width: 90%; height: 30px;" type="text"/>	<input style="width: 90%; height: 30px;" type="text"/>
(to Form C)	(to Form C)	(to Form C)



**Utah Division of Waste Management and Radiation Control  
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**Customer Class Costs - Detail**

<b>Service Provider:</b>
<b>Date Prepared:</b>
<b>Fiscal Year:</b>
<b>Program:</b>

**Part 8** (Other Revenue for the Program is taken directly from Form C, Lines 15-20, Column A)

Description	Total Revenue for the Program	Customer Classes (3)		
		Residential	Commercial	Other
<b>Total (To Form C)</b>				

(3) These revenues should be directly assigned where possible. If they cannot be directly assigned, they should be allocated among customer classes based on a composite of the direct costs associated with each customer class (Form C, Line 13).