

**WYOMING INTEGRATED SOLID WASTE MANAGEMENT HANDBOOK**  
**FULL COST ACCOUNTING WORKSHEET**  
**Program Cost Summary**

Form A

Service Provider:	Fiscal Year:
Date Prepared:	Prepared By:

	A		B		C		D		E		F	
	MSW Budget		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	Sub-Total											
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>											

Note: (a) For those programs that have contracted to dispose of their solid waste at a private landfill or at a landfill operated by a private waste management company.



**WYOMING INTEGRATED SOLID WASTE MANAGEMENT HANDBOOK  
FULL COST ACCOUNTING WORKSHEET**

**Form B**

**Rate Calculation Summary**

Service Provider:
Date Prepared:

Fiscal Year:
Prepared By:

A                      B                      C                      D                      E                      F

Program Category

Program Rates	Collection	Disposal	Recycling	Yard Waste	Other	Total
	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)						

Customer Class Rates (b)	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.



WYOMING INTEGRATED SOLID WASTE MANAGEMENT HANDBOOK Form C  
**FULL COST ACCOUNTING WORKSHEET**  
 Customer Class Cost Summary (a)

Service Provider:
Date Prepared:
Fiscal Year:

Program Name:
Prepared By:

	A	B	C	D
Program Cost (From Form A)	Customer Classes			
	Residential	Commercial	Other	

<i>Direct Costs (b):</i>					
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	Sub-Total				
11	General O&M				
12	Other Costs				
13	Total Direct Costs				
<i>Indirect Costs (b):</i>					
14	Total Indirect Costs (Form 10 or 11)				
<i>Other Revenue (b):</i>					
15	Interest Income				
16	Sale of Recyclables				
17	Miscellaneous Revenues				
18	Equipment Salvage Value				
19	Other				
20					
21	Total Other Revenue				
22	Total Full Cost (Lines 13+14+21)				
(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) Calculating 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.



## Form 1 - Salaries, Wages & Benefits

The purpose of this form is to capture the salaries, wages and benefits of only those employees who work exclusively within the city's, county's or district's solid waste department. The form is not to be used to capture the salaries, wages and benefits associated with personnel such as the city manager, director of finance, etc. These salaries, or portions thereof, will be captured in the indirect cost allocation forms as calculated using either Form 10 or 11.

A Salaries, Wages and Benefits Form for each of the city's/county's solid waste programs will need to be completed. For example, if the solid waste entity has three separate programs (collection, disposal and recycling) then a form should be completed for each of the three programs. If the city, county or district's annual budget already provides salaries, wages and benefits by program, the city/county does not need to use Form 1. Instead, the city/county should simply enter the salaries, wages and benefits by program, directly from the city/county budget on to the Program Cost Summary Form (Form A, line 1).

Employees who perform duties for more than one program should designate such information when filling out their detailed timesheets. Distinctions should be made between different solid waste programs, as well as between residential and commercial customer classes, if applicable.

### Data to be entered into Form 1:

**Service Provider:** Name of city, county, disposal district, government agency or private operator completing the worksheet.

**Date Prepared:** Date the form is completed.

**Fiscal Year:** Record the fiscal year which applies.

**Prepared By:** The name of the person(s) completing the form.

**Program:** Record the name of the solid waste program. The city/county should fill out one Salaries, Wages & Benefits Form for each separate solid waste program ( e.g. Collection).

**Employee:** Enter the name or other identification of each employee who works on this program.

**Total Wages:** Record each employee's annual wages including overtime, bonuses and other monetary compensation. (Some of these items may need to be estimated).

**Benefits:** Include FICA, vacation/sick leave, worker's compensation, unemployment insurance, retirement contribution and other pertinent benefits. These costs can be developed on an individual employee basis or using a composite factor depending on the type of records kept by the municipality.

**Total Wages & Benefits:** Combined Wages and Benefits for the employee.

**Proportion of Time on this Program:** Record percentage of time that employee spends working on this program. After completing the Salaries, Wages & Benefit forms for each program, make sure for any individuals whose time was allocated between different programs that the percentages total to 100%.

**Wages and Benefits this Program:** This entry is calculated by multiplying the "Total Wages and Benefits" column by the "Proportion of Time on this Program".

The salaries, wages and benefits for each program are then totalled at the bottom of Form 1 and entered on the Salaries, Wages & Benefits line of the Program Cost Summary for each respective program (Form A, line 1).





## Forms 2 & 3 - Monthly Vehicle Expense Report by Program and Annual Vehicle Expense Report by Program

The purpose of the vehicle expense forms is to assist the city/county in budgeting its annual costs associated with operating and maintaining equipment for each of the city's/county's solid waste programs. If the city/county has a current vehicle cost reporting system that allows them to budget vehicle expenses and identify which solid waste program(s) uses the vehicle, the city/county will not need to use Forms 2 and 3. For those cities and counties that do not have a system in place to track and record vehicle costs by solid waste program, Forms 2 and 3 will help identify these costs.

### Data to be entered in Forms 2 & 3:

**Service Provider:** Name of city, county, disposal district, government agency or private operator completing the worksheet.

**Date Prepared:** Date the form is completed.

**Prepared By:** The name of the person(s) completing the form.

**Month:** The month for which this report applies.

**Program:** The program for which the form is being completed.

**Vehicle ID:** Number or other identification for the specific vehicle.

**Fuel:** Total fuel costs.

**Repair Labor:** Costs of all labor charges for repair.

**Parts/Supplies:** Cost of all parts and fluids used for repair and maintenance.

**Outside Costs:** Any external repair services required.

**Lease Cost:** If city/county vehicles are purchased through and internal services fund and the financing costs are not recorded on the Capital Costs Form (Form 4), the city/county should record the monthly "lease costs" in this column.

**Total Monthly Costs of Vehicle:** This column provides a total of the monthly costs incurred for each vehicle.

**Percent of Use in Program:** The proportion of time that the vehicle is used by each of the city's/county's solid waste programs. For most

vehicles "100%" will be entered. However, if a vehicle is used 50% by collection and 50% by recycling, then 50% should be entered for this vehicle on the Form 2 which is completed for the collection program, as well as Form 2 which is completed for the recycling program.

**Total Monthly Program Costs of Vehicle:** The result of multiplying "Total Monthly Costs of Vehicle" by the "Percent of Use in Program". This dollar amount represents the proportion of the vehicle costs which are associated with this particular solid waste program.

**Total Monthly Vehicle Expense by Program:** The total monthly vehicle expense by program is totalled at the bottom of Form 2. The monthly totals are then entered on Form 3 to arrive at the annual vehicle costs of each program.





WYOMING  
INTEGRATED SOLID WASTE MANAGEMENT HANDBOOK  
FULL COST ACCOUNTING WORKSHEET

Annual Vehicle Expense Report by Program

Service Provider:
Date Prepared:
Prepared By:

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	
Annual Vehicle Expense by Program	



## Form 4 - Capital Costs

Form 4, Capital Costs, is a form that can help a city or county determine the annual capital costs needed for each solid waste program by considering the annual cash outlays and debt service associated with each program. The city/county will need to complete a Capital Costs Form for each solid waste program (e.g. Collection, disposal, composting, etc.) This will allow the city/county to clearly identify the capital costs associated with each solid waste program.

### Data to be entered in Form 4:

**Service Provider:** Name of city, county, disposal district, government agency or private operator completing the worksheet.

**Date Prepared:** Date the form is completed.

**Fiscal Year:** Record the fiscal year that applies.

**Prepared By:** The name of the person(s) completing the form.

**Program:** The program for which the form is being completed.

### Long Term Debt Payment:

**Debt Issue** - The date and size of the bond issue.

**Total Principal and Interest (P&I) Annual Amount** - The total annual payment (principal and interest) for the specified bond. Depending on the payback schedule this number can change from year to year or remain constant. In addition, applicable coverage and revenue requirements should be included for revenue bonds.

**Percentage to Program** - The proportion of assets related to this program as a percentage of the entire debt issue. A description of the funded assets should be specified in the bond issue. If the level of detail is insufficient to develop a percentage, estimates should be made with original purchase prices.

**Program P&I Annual Amount** - Calculated by multiplying the "Total P&I Annual Amount" by the "Percentage to Program".

**Year Debt Expires** - This is the final year of debt service associated with the bond issue. This column is not used in the capital cost analysis but is identified to facilitate subsequent reporting. Early

debt payoffs and/or refinancing will need to be considered in future report development.

#### **Short -Term Debt Payment:**

**Debt Issue** - Description of warrant or short-term lending instrument.

**Total P&I Annual Amount** - Annual payment for debt issue.

**Percentage to Program** - Percentage of principal which was identified for assets used by this program. These short-term debt issues are normally passed by city ordinances or county resolutions. The original ordinance or resolution should have a description of the assets it was to be used for. Make estimates as necessary to develop percentage.

**Program P&I Annual Amount** - Calculated by multiplying the "Total P&I Annual Amount" by the "Percentage to Program".

**Year Debt Expires** - This is the final year of debt service associated with the bond issue.

#### **Cash Capital Outlays:**

**Description** - Cash Capital Outlays are generally described in the city's/county's budget. If insufficient detail is available at the budget level, estimates must be made and/or supporting analysis used.

**Purchase Amount** - Dollars identified for each group of capital expenditures.

**Percentage to Program** - Percentage of each capital expenditure which is to be used by this solid waste program. Again, detail must be located or estimated to develop this percentage.

**Program Annual Amount** - Calculated by multiplying "Purchase Amount" by the "Percentage to Program".

If a large group of program assets is budgeted to be purchased from cash capital outlays, which is considered outside the course of normal operations, an amortization of this expenditure may be used to avoid "rate spikes". The following entries are used in this situation:

#### **Extraordinary Cash Outlays**

**Description** - Large capital assets budgeted to be purchased with cash.

**Purchase Amount** - Estimated or actual purchase price.

**Expected Life** - Number or years the equipment is projected to remain in service.

**Amortized Annual Amount** - Purchase price divided by expected life. Any salvage value realized at the end of the asset's life will be included in Other Revenues (Form A, Program Cost Summary).

**Retirement Year** - Date the piece of equipment is forecasted to be taken out of service. This column is included to facilitate subsequent reportings.



WYOMING INTEGRATED SOLID WASTE MANAGEMENT HANDBOOK  
 FULL COST ACCOUNTING WORKSHEET

Capital Costs - Annual

Service Provider:
Date Prepared:
Prepared By:

Fiscal Year:
Program:

Long Term Debt Payment

Debt Issue	Total P & I Annual Amount	Percentage to Program	Program P & I Annual Amount	Year Debt Expires
Total				(1)

Short Term Debt Payment

Debt Issue	Total P & I Annual Amount	Percentage to Program	Program P & I Annual Amount	Year Debt Expires
Total				(1)

Cash Capital Outlays

Debt Issue	Total P & I Annual Amount	Percentage to Program	Program P & I Annual Amount
Total			(1)

Extraordinary Cash Outlays

Description	Purchase Amount	Expected Life (Years)	Amortized Annual Amount	Retirement Year
Total				

(1) To Form A, Lines 4-7



### Forms 5, 6 & 7 - Other Direct Landfill Costs

Form 5, Other Landfill Costs, may be used to record the annual costs incurred in operating a landfill. Daily cover and leachate collection are examples of some of the costs which may be recorded on Form 5. In addition, Predevelopment and Construction Costs and Closure and Post-Closure Care Costs, may be calculated using Forms 6 and 7, respectively. The totals on Forms 6 and 7 are then brought forward and recorded on Form 5, lines 10 and 11. Once Form 5, Other Landfill Costs, has been completed, the total cost on line 15 is recorded on the Program Cost Summary Form (Form A, line 8, column C).

Note: If predevelopment and construction costs are already included on the Capital Costs Form (Form 4), these costs should not be included on Form 5. If these costs are recorded on both forms, this will result in an overstatement of disposal costs.

#### Data to be entered into Form 5:

**Service Provider:** Name of city, county, disposal district, government agency or private operator completing the worksheet.

**Date Prepared:** Date the form is completed.

**Prepared By:** The name of the person(s) completing this form.

**Fiscal Year:** Record the fiscal year which applies.

**Site:** Physical location of the landfill or name of facility.

**Operating Costs:** The annual costs of operating the landfill should be recorded on lines 1 through 8. These costs should not include salaries, wages and benefits; vehicle expenses, general O & M, or any other costs which are already recorded elsewhere using the forms provided in the workbook. To do so would result in an overstatement of the city's disposal costs.

**Annualized Predevelopment and Construction Costs:** These costs are calculated on Form 6 and should be brought forward and entered on this line. This line may be \$0 if these costs are fully captured in the Capital Costs Form (Form 4).

**Closure and Post-Closure Care Costs:** These costs are calculated on Form 7 and should be brought forward and entered on this line.

**Total:** Sum lines 9 and 14. This is the city's annual Other Landfill Costs and should be recorded on Form A, line 8, column C.

**Data to be entered into Form 6:**

**Service Provider:** Name of city, county, disposal district, government agency or private operator completing the worksheet.

**Date Prepared:** Date the form is completed.

**Prepared By:** The name of the person(s) completing this form.

**Fiscal Year:** Record the fiscal year which applies.

**Site:** Physical location of the landfill or name of facility.

**Predevelopment Costs:** The construction costs associated with the construction of the city's/county's landfill should be recorded on lines 1 through 6. If these costs are already included in capital costs (Form 4) leave this section blank.

**Construction Costs:** The construction costs associated with the construction of the city's/county's landfill should be recorded on lines 8 through 16. If these costs are already included in capital costs (Form 4), leave this section blank.

**Total Predevelopment and Construction Costs:** Sum lines 7 and 17.

**Expected Landfill Life (years):** Number of years the landfill is expected to remain open.

**Annual Cost:** This cost should be calculated by dividing total predevelopment and construction costs by the expected life of the landfill. The Annual Cost is then recorded on Form 5, line 10.

**Data to be entered into Form 7:**

**Service Provider:** Name of city, county, disposal district, government agency or private operator completing the worksheet.

**Date Prepared:** Date the form is completed.

**Prepared By:** The name of the person(s) completing this form.

**Fiscal Year:** Record the fiscal year which applies.

**Site:** Physical location of the landfill or name of facility.

**Date of Cost Estimate:** Date Closure and Post-Closure Costs were last estimated.

**Phase 1 Closure Costs:** The city's/county's estimated cost of closure for Phase 1 of the landfill. (This same cost estimating methodology is used for Phase 2, Phase 3, etc. Or however many phases the landfill will ultimately close under).

**Less Amount Already Reserved For Closure:** Amount of money already reserved by the city to pay for closure costs.

**Net Remaining Closure Costs:** "Phase 1 Closure Cost" less "Amount Already Reserved for Closure" (line 1-line 2).

**Expected Number of Years Until Funds are Required:** Number of years until the phase is closed.

**Annual Cost For Phase 1 Closure:** Calculated by dividing "Net Remaining Closure Costs" by "Expected Number of Years Until Funds Are Required". (Same calculation is done for Phase 2, or however many phases the landfill will ultimately close.)

**Total Annual Closure Costs:** The summation of the estimated annual closure costs for all phases of the landfill presently receiving waste.

**Post-Closure Care Costs:** The city or county's estimated post-closure care costs for the landfill.

**Less Amount Already Reserved for Post-Closure:** Amount of money already reserved by the city to pay for post-closure care costs.

**Net Remaining Post-Closure Costs:** "Post-Closure Care Costs" less "Amount Already Reserved for Post-Closure" (line 14 - line 15).

**Expected Number of Years Until Funds are Required:** The number of years until the city, county or district closes the landfill.

**Annual Post-Closure Care Costs:** "Net Remaining Post-Closure Costs" (line 16) divided by "Expected Number of Years Until Funds Are Required" (line 17).

**Total Annual Closure & Post-Closure Care Costs:** Line 13 plus line 18. This amount is then recorded on Form 5, line 11.



WYOMING INTEGRATED SOLID WASTE MANAGEMENT HANDBOOK  
 FULL COST ACCOUNTING WORKSHEET

Form 5

Other Landfill Costs - Annual

Service Provider:
Date Prepared:
Prepared By:
Fiscal Year:
Site:

Operating Costs:

1 Cover Material

2 Laboratory Testing

3 Permits

4 Gas Collection

5 Leachate Collection & Disposal

6 Engineering

7 Legal

8 Other

9 Sub-Total


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

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

12 Other

13 Other


14 Sub-Total

--

15 Total

--

(to Form A, Line 8)







**WYOMING INTEGRATED SOLID WASTE MANAGEMENT HANDBOOK  
FULL COST ACCOUNTING WORKSHEET**

Form 7

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

Service Provider:
Date Prepared:
Fiscal Year:

Site:
Date of Cost Estimate:
Prepared By:

**Closure Costs (1):**

1 Phase 1 Closure Cost	\$
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 Phase 2 Closure Cost	\$
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 Phase 1 (Line 5)	\$ per year
12 Phase 2 (Line 10)	\$ per year
13 Total (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 Total Annual Closure and Post-Closure Care Costs: (Line 13 + Line 18)	\$ per year
--	-------------

(To Form 5, Line 11)

Note:

(1) Recognizing that closure may be carried out in a series of phases at the landfill.



## Form 8 - General Operation and Maintenance Costs

Form 8 is used to determine the amount of General O&M Costs associated with each of the city's/county's solid waste programs. This is accomplished in a two step process: first by identifying all of the directly assignable costs and assigning them to the appropriate solid waste programs and second, by taking the remaining General O&M costs that are not directly assignable and allocating them to the solid waste programs based on a composite of the solid waste utility's direct costs (Form A, line 10). The entries on the worksheet are described below:

**Service Provider:** Name of city, county, disposal district, government agency or private operator completing the worksheet.

**Date Prepared:** Date the form is completed.

**Fiscal Year:** Record the fiscal year which applies.

**Prepared By:** The name of the person(s) completing the form.

**Directly Assignable Costs:** Those costs which can be directly assigned to a program or which can be allocated based on professional standards or educated estimates.

**Account Number** - Entered, if applicable.

**Description of the cost** (e.g. - engineering fees, consultant fees, educational materials, etc.)

**Total Cost** - Annual cost for the particular General O & M cost.

**Program Category** - Enter amount of costs directly assignable to solid waste programs (e.g. Collection, Disposal, Recycling, Yard Waste and Other). The total of these five columns should equal the number entered in the "Total Cost" column.

**Total Dollar Amount** - Summation of directly assignable costs, by program and in total.

**Allocated Costs:** Those General O & M costs which cannot be directly assigned and must instead be allocated based on percentages developed from the direct costs which are summarized on Form A, line 10.

**Allocation Percentage** - Calculated by summing the data on Form A, lines 1 through 9 and entering it on Form A, line 10. Using the data on line 10, calculate the percentage of direct costs

associated with each program as a percentage of the total direct costs. This percentage is then entered on Form 8, line 11.

**Account Number** - Entered, if applicable.

**Description** - Description of the cost (e.g. Copier service, etc.)

**Total Cost** - Annual cost for the particular General O&M cost.

**Program Category** - Assigned by multiplying "Allocation Percentage" (Form 8, line 11) by the "Total Cost" column for each separate cost item.

**Total Dollar Amount** - Summation of allocated costs, by program and in total.

**Total General O&M Costs Per Program:** Sum of totals in "Directly Assignable Costs" and "Allocated Costs" groups (lines 10 and 18). This amount is then entered on Form A, line 11.

**WYOMING INTEGRATED SOLID WASTE MANAGEMENT HANDBOOK**  
**Form 8**  
**FULL COST ACCOUNTING WORKSHEET**  
**General Operation & Maintenance - Annual**

Service Provider:	Fiscal Year:	Date Prepared:	Prepared By:
-------------------	--------------	----------------	--------------

**DIRECTLY ASSIGNABLE COSTS**

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

(1) This % is calculated based on a composite of the program's direct costs as sub-totaled on Form A, line 10. For example, 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.



### Form 9 - Other Costs

This form is used to compile any additional costs associated with the city's or county's solid waste department that do not readily fall into one of the prior cost categories. It may be of use if a unique category of costs is incurred. The directions for Form 9 are identical to the directions for the General Operation & Maintenance Costs (Form 8).

Once the Other Costs are calculated on Form 9, they are entered on Form A, line 12.



**WYOMING INTEGRATED SOLID WASTE MANAGEMENT HANDBOOK**  
**FULL COST ACCOUNTING WORKSHEET**  
**Other Costs - Annual**

Form 9

Service Provider:	Fiscal Year:	Date Prepared:	Prepared By:
-------------------	--------------	----------------	--------------

**DIRECTLY ASSIGNABLE COSTS**

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

**ALLOCATED COSTS**

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

(1) This % is calculated based on a composite of the program's direct costs as sub-totaled on Form A, line 10. For example, 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.



## Forms 10 & 11 - Indirect Costs

Indirect costs represent services which are provided to the city's or county's solid waste department by other departments within their organization. To determine the full cost of solid waste and to develop cost of service based rates, an accurate allocation methodology must be developed in order to assign a portion of these indirect costs to the city's or county's solid waste department.

There are several accepted and commonly used methods for allocating indirect costs. For purposes of the workbook, two methodologies are explained in detail. However, cities and counties may use other methods to allocate indirect costs as long as they reflect the cost incurred to provide the service(s) to the solid waste utility.

### Method 1: Internal Assessment Allocation (Form 10)

This methodology requires that each department providing support services to the solid waste utility determine the percentage of their total costs associated with providing service to the solid waste utility. For instance, the purchasing department might determine its level of support service provided to the solid waste utility based on the percentage of purchase orders processed for solid waste programs as a percentage of total purchase orders processed. In the finance department, costs could be allocated on a proportion of financial transactions. The engineering department could allocate costs based on the total number of hours spent on solid waste activities as a percentage of total hours in the department.

This methodology will also allow the allocation of department costs based on interviews with individuals in the department who may be able to better determine what percentage of their time is spent on solid waste activities. Form 10 provides a framework to support the internal assessment methodology.

### Data to be entered into Form 10:

**Service Provider:** Name of city, county, disposal district, government agency or private operator completing the worksheet.

**Date Prepared:** Date the form is completed.

**Fiscal Year:** Record the fiscal year which applies.

**Prepared By:** The name of the person(s) completing the form.

### Part 1 - Indirect Costs Allocated to the MSW Department

**Department:** List the departments that provide support services to the city/county solid waste department (e.g. Purchasing Department, Finance Department, Legal Services, etc.).

**Departmental Budget:** Enter the annual budget for each department.

**Percentage Attributable to Solid Waste Department:** Based on the city's or county's own internal assessment, determine the percentage of the budget which would be attributable to the solid waste department.

**Dollar Amount Attributable to Solid Waste Department:** Column 2 multiplied by Column 3.

## Part 2 - Allocation of Indirect Costs to each MSW Program

**Program:** Enter the name of each solid waste program in this column.

**Direct Costs:** Enter the total direct costs for each program in column A (enter directly from Form A, line 13).

**Percentage of Total MSW Direct Costs:** Divide the Direct Costs for each program (Column A) by the "Total MSW Direct Costs" at the bottom of Column A, line 20.

**Total from Part 1 (\$ Amount):** Enter the total "Dollar Amount Attributable to Solid Waste Department" (Column 4, line 13) on each line in Column C.

**Indirect Cost to Program:** Multiply Column B by Column C to determine the indirect cost associated with each of the city's/county's solid waste programs. This amount is then entered on Form A, line 14, for each solid waste program.

## Method II. Employee Based Allocation (Form 11)

This allocation is based on a ratio of solid waste employees to total municipal employees. The subsequent allocation to individual programs is accomplished by identifying the number of solid waste employees associated with each solid waste program.

**Service Provider:** Name of city, county, disposal district, government agency or private operator completing the worksheet.

**Date Prepared:** Date the form is completed.

**Fiscal Year:** Record the fiscal year which applies.

**Prepared By:** The name of the person(s) completing the form.

**Part 1 - Budgets for Departments Providing Indirect Service to Solid Waste Department**

**Department:** List the departments which provide support services to the city/county's solid waste department (e.g. Purchasing department, Finance Department, etc.)

**Departmental Budget:** Enter the annual budget for each department.

**Part 2 - Indirect Costs Allocated to the MSW department**

**Solid Waste Employees:** Enter the total number of solid waste employees on line 14. Part-time employees should be added as a fraction (e.g. 1/2, 1/4, etc.)

**Total Municipal Employees:** Enter the total number of municipal employees on line 15. This number should include all municipal employees, both full-time and part-time employees.

**Ratio of MSW Employees to Total:** Divide line 14 by line 15.

**Amount Allocated to MSW:** Total from Part 1, line 13 multiplied by the percentage in Part 2, line 16.

**Part 3 - Allocation of Indirect Costs to each MSW Program**

**Program:** Enter the name of each solid waste program in this column.

**Solid Waste Employees by Program:** Enter the total number of solid waste employees associated with each specific solid waste program. Part-time employees should be added as a fraction (e.g. 1/2, 1/4, etc.).

**Percentage of Total MSW Employees:** Divide the number of MSW employees for each program (Column A) by the "Total MSW Employees" at the bottom of Column A, line 24. (Note:

"Total MSW Employees" should equal the number of solid waste employees from Part 2, line 14).

**\$ Amount from Part 2, Line 17:** Enter the total dollar amount from Part 2, Line 17 on each line in Column C.

**Indirect Cost to Program:** Multiply Column B by Column C to determine the indirect costs associated with each of the city's/county's solid waste programs. This amount is then entered on Form A, line 14, for each solid waste program.

WYOMING INTEGRATED SOLID WASTE MANAGEMENT HANDBOOK  
 FULL COST ACCOUNTING WORKSHEET

Form 10

Indirect Cost Method I: Internal Assessment Allocation

Service Provider:
Date Prepared:
Prepared By:
Fiscal Year:

**PART 1**

	Department (1)	Departmental Budget (2)	%Attributable to Solid Waste Department (3)	\$ Amount Attributable to Solid Waste Department (4)
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				

13 TOTAL   
(To Part 2, Column C)

**PART 2**

	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 (B x C)
14 Collection				
15 Disposal				
16 Recycling				
17 Yard Waste				
18 Other				
19				
20 Total MSW Direct Costs		100%		

(To Form A, line 14)



**WYOMING INTEGRATED SOLID WASTE MANAGEMENT HANDBOOK  
FULL COST ACCOUNTING WORKSHEET**

Form 11

**Indirect Cost Method II: Employee Based Allocation**

Service Provider:
Date Prepared:
Prepared By:
Fiscal Year:

*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 ÷ Line 15)

17  (Total from Part 1 multiplied by Line 16)

*Part 3*

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



## Forms 12 & 13 - Monthly Materials & Annual Materials

Weight and volume information is critical if a municipality wants to establish cost of service based rates for its customers. Additionally, weight and volume information will prove to be valuable when implementing new programs, projecting usage and evaluating capacity.

Some cities and counties may already have in place a reporting system that records and tracks the program's solid waste stream. However, for the city that does not have a reporting system in place, Forms 12 and 13 can be used by the city/county to track the amount of solid waste, recyclables, yard waste, etc. Generated by the city on an annual basis. Many different methods for gathering this information are possible and a city or county must determine what type of reporting system will best meet their needs. At a minimum, a detail accounting of the source, amount and type of waste handled at each facility should be recorded.

### Monthly Materials (Form 12)

This form provides a monthly summary to consolidate the amounts of waste handled at each of the city's or county's facilities. It is important that outside source waste (e.g. waste from another municipality or region) be designated separately so as not to include it in a municipality's waste stream where the waste was not generated. If a significant amount of outside waste is handled, separate detailed records should be maintained on the volume and type of outside waste handled. The city, county or district may wish to establish a separate customer class under the solid waste disposal program for this particular user(s). These schedules along with the daily schedules should be kept on file to provide historical records of the city or county's waste stream. Depending on the manner in which the city calculates its customer charges and tipping fees, the information gathered on Forms 12 and 13 may be used to calculate the city's or county's solid waste rates on Form B.

#### Data to be entered into Form 12:

**Service Provider:** Name of city, county, disposal district, government agency or private operator completing the worksheet.

**Date Prepared:** Date the form is completed.

**Prepared By:** The name of the person(s) completing the form.

**Month/Year:** Month and year for which the data is being collected.

**Units:** An entry for units is available if different units are used for various categories of waste (e.g. tons, cubic yards, etc.)

**Residential Solid Waste:** The amount of solid waste collected from the city's, county's or district's residential customers during that month.

**Commercial Solid Waste:** The amount of solid waste collected from commercial customers during that month.

**Recyclables:** The amount of recyclables collected from the city/county or district's solid waste customers during that month.

**Yard Waste:** The amount of yard waste collected from the city/county or district's solid waste customers during that month.

**Outside Sources:** The amount of solid waste collected from sources outside the city/county/district (designated service area) during that month. Depending on the number of haulers and type of waste collected, the city/county or district may want to consider recording this data in greater detail (e.g. by hauler, type of waste, etc.)

**Other:** For any other types of waste.

**Totals:** Once the columns are summed the city/county then has a detailed record which describes the types of waste generated on a monthly basis.

### **Annual Materials - Form 13**

This form is a summary of the Monthly Materials Forms (Form 12). This form will provide the city/county with an annual materials summary report that details the amount of waste generated, by customer class (e.g. residential, commercial and outside sources). The report will also summarize the amount of recyclables and yard waste collected on an annual basis. The city/county can then use this information to aid in calculating the city/county or districts cost of service based rates (on Form B). Finally, this information will allow the city or county to develop a database which will aid the city or county in identifying any trends with regard to decreased waste generation per capita, increases in recycling, participation in the yard waste collection program, etc.

WYOMING INTEGRATED SOLID WASTE MANAGEMENT HANDBOOK  
 FULL COST ACCOUNTING WORKSHEET  
 Monthly Materials

Form 12

Service Provider:
Date Prepared:
Prepared By:
Month/ Year:

	Residential Solid Waste	Commercial Solid Waste	Recyclables	Yard Waste	Outside Source	Other
Units:						
Day						
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
1						
5i						
6						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
Totals						



WYOMING  
 INTEGRATED SOLID WASTE MANAGEMENT  
 HANDBOOK  
 FULL COST ACCOUNTING WORKSHEET

FORM 13

Annual Materials

Service Provider:
Date Prepared:
Prepared By:
Year:

	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						



## Form 14 - Customer Class Costs

For this full cost accounting tool the residential customer class consists of single family home and multi-family units (typically four families or less). The non-residential customer class consists of commercial businesses, multi-family units (larger than four families), industrial users and governmental entities. The residential customer is assumed to use standard collection containers (30, 60, 90 gallon cans) while the non-residential customer class consists of commercial containers (typically 4 to 12 cubic yard containers).

It is important to note that if a city or county provides collection service to residential and commercial customers, but both classes use the traditional 30, 60 or 90 gallon containers, the city can usually treat all customers as one class. Distinct customer classes are created only when customers have different usage and volume characteristics, causing their cost of service to differ. In this case, since both residential and commercial customers use the same type of container, they will most likely have similar usage characteristics.

### How to Calculate Rates for Different Customer Classes

If a city has more than one customer class, the methodology described in Example #1 should be used. The only exception is if a city's or county's disposal program (e.g. Landfill) provides service to more than one customer class. In this case the methodology in Example #2 should be used.

#### Example #1

A city or county calculating cost of service based rates for different customer classes will start with Form A. For instance, if the city/county provides collection service to both residential and commercial customers, the city/county will need to allocate the Collection Program Costs (Form A, column B) between these two customer classes. The same methodology that was used to allocate costs between solid waste programs will be used to allocate costs between customer classes.

Step 1. The collection program costs (Form A, Column B) will be entered on Form C, Column A.

Step 2. The next step will be to directly assign and/or allocate the program costs between the residential and commercial customer classes. To complete this direct assignment and/or allocation of costs, the city/county will use Form 14, Customer Class Costs - Detail. Those costs which can be directly assigned to the residential or commercial customer classes should be identified. The remaining costs will be allocated based on a composite of the directly assigned costs.

For instance, to identify the Salaries, Wages & Benefits for each customer class, the city/county will need to review Form 1 Salaries, Wages & Benefits, which was completed for the Collection Program. The city/county will need to determine which of the individuals worked on commercial routes versus residential routes. Most cities and counties will identify by route number the crews and equipment which are operating each week. This information will also identify if the crews and equipment are operating on a residential or commercial route. This information can then be used to allocate labor costs between the different customer classes.

This same methodology will be used to allocate the remaining costs between customer classes. Form 14 summarizes the costs which the city/county will need to directly assign and/or allocate between customer classes. While Form 14 will most likely not provide sufficient room for the city/county to complete its customer class allocations, the form does provide a layout of the costs that need to be distributed between the different customer classes and the methodology for determining the costs for each customer class.

Note: If the city or county did not use any or only used some of Forms 1-11 to complete the calculation of its program costs, the city/county will need to review its solid waste budget and financial records to determine whether they provide sufficient detail to assign and/or allocate program costs by customer class. If the city's/county's financial records do not provide sufficient detail, it may choose to use some or all of Forms 1-11, depending on the city's or county's records.

### Example #2

If the city has more than one customer class which utilizes the city or county landfill, the disposal rate is calculated in a different manner than in Example #1. To calculate rates for the city/county disposal program the city or county does not use Form 14. Instead, the rates are calculated as follows:

The total cost of the disposal program is divided by the tonnage received at the landfill, to establish a tipping fee per ton. To calculate the residential customer's annual cost for the disposal program, the number of tons generated by residential customers is multiplied by the tipping fee to determine the total annual disposal costs for residential customers. This dollar amount is then divided by the number of households to arrive at the annual disposal cost per household. Commercial customers would have their cost calculated in the same manner, except their cost would be "\$ per container". This same methodology would be used if the city, county or district recorded its waste in cubic yards.

**WYOMING INTEGRATED SOLID WASTE MANAGEMENT HANDBOOK  
FULL COST ACCOUNTING WORKSHEET**

**Customer Class Costs - Detail**

Service Provider:
Date Prepared:
Prepared By:
Fiscal Year:
Program:

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

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

*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 Residential	Classes Commercial	Other
Total (To Form C)				



**WYOMING INTEGRATED SOLID WASTE MANAGEMENT HANDBOOK  
FULL COST ACCOUNTING WORKSHEET**

**Customer Class Costs - Detail**

Service Provider:
Date Prepared:
Prepared By:
Fiscal Year:
Program:

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

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

Short Term Debt Issue:	Program P&I Annual Amount	Customer Residential	Classes Commercial	Other
Total (To Form C)				

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

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



WYOMING INTEGRATED SOLID WASTE MANAGEMENT HANDBOOK  
 FULL COST ACCOUNTING WORKSHEET

Customer Class Costs - Detail

Service Provider:
Date Prepared:
Prepared By:
Fiscal Year:
Program:

*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.

*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%			
Total (To Form C)				

(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.



**WYOMING INTEGRATED SOLID WASTE MANAGEMENT HANDBOOK  
FULL COST ACCOUNTING WORKSHEET**

**Customer Class Costs - Detail**

Service Provider:
Date Prepared:
Prepared By:
Fiscal Year:
Program:

*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%			
Total (To Form C)				

(2) Other costs are allocated among customer classes in the same manner as are General O&M costs (Form 15, Part 5).

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

1 Total Indirect Costs 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)

(To Form C)      (To Form C)      (To Form C)



WYOMING INTEGRATED SOLID WASTE MANAGEMENT HANDBOOK  
 FULL COST ACCOUNTING WORKSHEET

Customer Class Costs - Detail

Service Provider:
Date Prepared:
Prepared By:
Fiscal Year:
Program:

*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
Total (To Form C)				

(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).

