

# INSTRUCTIONS for completing the Annual MUNICIPAL SOLID WASTE MANAGEMENT AND RECYCLING REPORT

**This form has 3 sections:**

**Section 1 - Municipal Solid Waste Program Information:** This section includes checkboxes and some fill-in fields to describe the municipality's solid waste management and recycling systems and funding.

**Section 2 –Waste Generation Information:** Use this section to summarize the amounts of the municipal solid waste (MSW) disposed of, recycled, composted, and processed.

**Section 3 – Municipal Solid Waste Recycling Rate:** This section includes a formula for the municipality to calculate its MSW recycling rate. Maine has a goal of recycling 50% of MSW. Calculating your municipality's recycling rate will help you assess your progress in relation to this goal, and identify opportunities for improvement.

## **General instructions for completing the form**

Hi! qw'eqo r'igv'ij g'vcdigu'3'ij t'qwi j '6'igevt qplecmf . 'ij g'co qwpw'y kldg'gpvtgf 'cwqo cvlecmf 'lpvq. " c'pf 'ecrewn'v'kpu'eqo r'igv'ij 'lp'Ugevkpp'50'To use a computer to complete the form, save a copy of the form from the internet onto your computer. You will need Adobe Acrobat Reader to complete this form. If you don't already have it, you can download it from <http://get.adobe.com/reader>. Using the copy you saved on your computer, you can then place your cursor in, or tab to, the space after each item to activate the fill-in field. It is possible to save, close and re-open the form so you do not need to complete it at one sitting. If you have questions on how to download and complete this form electronically, please contact Sue Alderson at 207-287-2806 or [susan.a.alderson@maine.gov](mailto:susan.a.alderson@maine.gov).

**Please contact the solid waste service providers for your municipality to obtain accurate data to complete this report.** Each municipality in Maine has a unique set of trash haulers, recyclers, and solid waste transfer and disposal facilities fulfilling its solid waste management obligations. Please contact the people and facilities that manage trash in your municipality to obtain the data you need to complete this report. It is these professionals' business to track the amount of waste they handle and where they take the waste. If you are unable to obtain some of the data needed to complete this form, there are places on the form which you can use to explain why.

**All data should be for calendar year 2017 (January 1 - December 31).** Report all data in tons unless otherwise indicated. If weight data is not available to you, please use (or have your service providers use) the conversion factors included with these instructions to convert volumes to tons. If you cannot report in tons, tell us the volume or number and the unit of measure, e.g., cubic yards, pieces.

**Submit your report by April 30, 2018 to:**

Susan Alderson  
Maine Dept. of Environmental Protection  
17 State House Station  
Augusta, Maine 04333-0017

If you have questions on the municipal solid waste management and recycling reporting requirement in Maine law (38 MRSA §2133.7), please contact Carole Cifrino at 207-485-8160 or [carole.a.cifrino@maine.gov](mailto:carole.a.cifrino@maine.gov).

**Appendix A – Conversion factors for the  
ANNUAL SOLID WASTE MANAGEMENT REPORT  
for Municipalities and DEP-licensed Transfer Stations and Landfills**

**FACTORS FOR CONVERTING VOLUME TO WEIGHT OF VARIOUS MATERIALS, TO BE  
USED FOR ESTIMATING MUNICIPAL SOLID WASTE TONNAGES**

*Use these numbers to calculate and report the tonnage of recycled material  
if actual weight data is not available.*

**PAPER**

Uncompacted office paper  
1 cubic yard = 0.20 tons.  
Uncompacted mixed paper  
1 cubic yard = 0.15 tons

**CORRUGATED CARDBOARD (OCC)**

Uncompacted, flattened  
1 cubic yard = 0.10 tons Baled - 1  
cubic yard = 0.5 tons

**METALS and CANS**

Aluminum cans - whole:  
1 cubic yard = 0.035 tons  
Aluminum cans – manually flattened:  
1 cubic yard = 0.125 tons Ferrous  
cans - whole  
1 cubic yard = 0.075 tons  
Ferrous cans - Flattened  
1 cubic yard = 0.425 tons.  
Scrap metal  
1 cubic yard = 0.113 tons  
Propane tank – 15 lbs.

**NEWSPAPER**

Loose (no strings or bags)  
1 cubic yard = 0.30 tons

**GLASS**

Loose (whole bottles)  
1 cubic yard = 0.30 tons  
55 gallon drum = 0.088 tons  
Semi-crushed (manually broken)  
1 cubic yard = 0.50 tons  
55 gallon drum = 0.15 tons  
Crushed, maximum size, 1 1/2" (mechanically broken)  
1 cubic yard = 0.90 tons  
55 gallon drum = 0.275 tons

**MAJOR APPLIANCES:**

1 unit = 0.075 tons (average weight)

**PLASTIC**

Mixed plastics - #3 - #7  
1 cubic yard = 0.025 tons

PETE/PET (#1) (whole, uncrushed)  
1 cubic yard = 0.02 tons.  
HDPE (#2) (whole, uncrushed)  
1 cubic yard = 0.015 tons LDPE  
(#4) – Plastic film  
Baled 30"x42"x48" = 0.55 tons

**ORGANIC MATERIALS**

Leaves (uncomposted & *uncompacted*)  
1 cubic yards = 0.075 tons  
Leaves (uncomposted & *compacted*)  
1 cubic yard = 0.225 tons  
Leaves (uncomposted & *vacuumed*)  
1 cubic yard = 0.175 tons  
Leaves (*composted*)  
1 cubic yard = 0.250 tons Wood Chips  
1 cubic yard = 0.313 tons  
Grass Clippings  
1 cubic yard = 0.20 tons  
Trees & Brush  
1 cubic yard = 0.15 tons  
Food Scraps (mixed)  
1 cubic yard = 0.535 tons

**OTHER MATERIALS**

Demolition Debris  
1 cubic yard = 0.625 tons  
Mattress  
1 mattress = 0.0275 tons  
Mixed Bulky Waste  
1 cubic yard = 0.20 tons  
Wood Pallets  
1 pallet = 0.020 tons  
Wood Waste  
1 cubic yard = 0.175 tons  
Mercury Lamps – Fluorescent  
.1875 lbs. per linear foot  
CFLs - .125 lbs. per unit  
U Lamp = 2 linear feet  
Circle Lamp = 2 linear feet  
Passenger Car Tires  
1 tire = about 20 lbs.  
110 tires = 1 ton  
Truck tires  
1 tire = 120 lbs.  
17 tires = 1 ton

**ANNUAL SOLID WASTE MANAGEMENT and RECYCLING REPORT  
for MUNICIPALITIES**

**REPORTING MUNICIPALITY:** \_\_\_\_\_

Report Year: \_\_\_\_\_

**MUNICIPAL CONTACT PERSON:** \_\_\_\_\_

Title: \_\_\_\_\_ Phone: \_\_\_\_\_

E-mail: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

City/Town: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Please list the web site address(es), if any, used by the municipality to provide recycling and solid waste management information to your residents:

**RECYCLING COORDINATOR** (      Check if not applicable )

Name: \_\_\_\_\_

E-mail: \_\_\_\_\_ Phone: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

City/Town: \_\_\_\_\_ Zip Code: \_\_\_\_\_

I have examined this report and to the best of my knowledge and believe, said report is true, correct and complete.

***Signature of person completing this form*** \_\_\_\_\_

***Printed name of person completing this form*** \_\_\_\_\_

\_\_\_\_\_

**Please return one (1) copy of your completed form by April 30, 2018 to:**

Susan Alderson  
Maine Dept. of Environmental Protection  
17 State House Station  
Augusta, Maine 04333-0017

**SECTION 1 MUNICIPAL SOLID WASTE PROGRAM INFORMATION****A. Municipal Solid Waste (MSW) Collection Practices**

1. Does your municipality provide trash collection services, either through public works or by contract with a private entity?      Yes      No
2. Do your residents/businesses have the option of directly hauling their trash to the transfer station/disposal facility?      Yes      No
  - a. If yes, what percentage haul their own trash? \_\_\_\_\_ % (estimate)
  - b. Do residents/businesses have the option to contract with a hauler?      Yes      No
    - i. If Yes, is that hauler required to be licensed by the municipality in order to provide the collection service?
    - ii. If Yes, is that hauler required to deliver the collected trash to a disposal site selected by the municipality?
    - iii. If No, how do residents/businesses dispose of their trash?
3. List the names and contact information for haulers that collect MSW in your town:
4. List the names and contact information for haulers that collect recyclables in your town:

**B. How are trash disposal costs paid?**

1. If residents pay for trash disposal through a "Pay as You Throw" program list the bag size(s) and price per bag below:

Bag size	Price per bag

2. If businesses pay for commercial trash disposal through a “Pay as You Throw” program list the bag size(s) and price per bag below:

Bag size	Price per bag

**C. Solid Waste and Recycling Ordinances/Requirements –**

1. If you have additional solid waste and recycling ordinances please provide a web address for the ordinances or a brief description if not available on line.

**D. Household Hazardous Waste Collection**

1. Municipality provides for Household Hazardous Waste collection

Facility or hosting organization \_\_\_\_\_

Frequency of collection \_\_\_\_\_

2. Municipality offers a collection location for mercury–add lamp (fluorescent light bulb) recycling as part of the manufacturer (NEMA) sponsored takeback program.

Collection location: \_\_\_\_\_

3. Municipality provides for E-waste collection

Facility or hosting organization \_\_\_\_\_

Frequency of collection \_\_\_\_\_

**SECTION 2 – WASTE GENERATION INFORMATION**

**A. Summary of waste disposed** – In this table enter the amount of waste materials sent from the municipality for **disposal** at a landfill or waste-to-energy incinerator. The municipality obtained this information from:

the haulers that operate in the town

- or -

the receiving facilities

**Table 1 – Waste Sent for Disposal**

<b>Waste Type</b>	<b>TONS collected and sent for disposal</b>	<b>Disposal facility name (Landfill or WTE incinerator)</b>
<b>MSW</b> (trash)		
Residue/trash from single stream		
<b>CDD</b> (may include building materials, furniture & carpet, asphalt, wallboard, pipes, metal conduit, etc.)		
<b>Clean CDD Wood</b>		
<b>Leaf &amp; yard waste</b>		
<b>Land clearing debris</b>		
<b>Other (list)</b>		

**Check here if the municipality is unable to obtain this information. Explain:**

**B. Summary of waste recycled.** In this table, enter information on materials sent for recycling. Use the waste type that best describes the material stream. Leave blank or enter "0" for any waste types you do not ship. **Do not include data twice**

\*\*\*\*\*cpf'tgegkxgu'c'dtgcnf qy p'tgr qtv'ttqo 'y g'tgegkxpi 'hceknx'.r'ncug'gpvt'qpn' 'y g'lpf kxf wcn'o cvgtken'dtgcnf qy p+  
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 \*\*\*\*\*eqo r quv'pi . 'dgpghlekn'wug'qt'f kur qucn0'

The municipality obtained this information from:

the haulers that operate in the town -and/or - the receiving facilities

**Table 2 – Materials Recycled**

Waste Type		TONS shipped	Destination(s) – May list broker
TRADITIONAL MSW RECYCLABLES	Single Stream /Zero-sort®/Single sort		
	Dual sort co-mingled containers		
	Dual sort co-mingled paper & OCC		
	Paper (office & mixed)		
	Corrugated cardboard (OCC)		
	Newspapers and magazines		
	Glass		
	Metals cans and aluminum foil		
	Plastics (Include #1 - #7, rigid plastics and plastic films)		
	Clothing/textiles		
<b>TOTAL MSW RECYCLABLES:</b>			
OTHER MSW RECYCLED	Appliances & other scrap metal (include propane tanks and vehicle batteries)		
	Electronics		
	Mercury-added lamps		
	Mercury thermostats		
	Other mercury devices		
	Rechargeable batteries and cell phones		
	Tires		
	<b>TOTAL OTHER MSW RECYCLED:</b>		
CDD RECYCLED	Asphalt shingles		
	Sheetrock / Wallboard		
	Mattresses & Furniture		
	Carpet		
	Processed CDD & Landclearing debris used as fuel		
	Other (describe):		
	<b>TOTAL CDD/LANDCLEARING DEBRIS</b>		
	Other (describe):		

Check here if the municipality is unable to obtain this information. Explain:

**C. Summary of waste composted.**

Check if not applicable

**NOTE: This section is for compost piles that do not have a separate license. If you have a separate composting license you must report using the appropriate form from this page: <http://www.maine.gov/dep/waste/solidwaste/agroutilres.html>**

Compost site location: \_\_\_\_\_ Amounts are **actual** - or - **estimated**

**Table 3 – Waste Composted**

Waste Type	Volume received (cubic yards)	Weight* of waste received (tons)	Broker/End-Users
Vegetative (leaf & yard)			
Food scraps			
Other organics(describe):			
<b>Total composted:</b>			

\*To calculate weight of vegetative waste, multiply volume by 0.225.

To calculate weight of food scraps, multiply volume by 0.85.

Contact Sue Alderson ([susan.a.alderson@maine.gov](mailto:susan.a.alderson@maine.gov), 207-287-2806) for conversion factors for other waste types.

**D. Summary of waste sent for processing, processed on site or beneficially used**

Check if not applicable

The municipality obtained this information from:

the haulers that operate in the town -and/or - the receiving facilities

**Table 4 – Materials Processed and/or Beneficially Used**

Waste Type	TONS Processed	TONS Beneficially used	Processing / Beneficial use facility	Final Use
CDD (unprocessed) (may include building materials, furniture, carpet, asphalt, wallboard, pipes, metal conduit, etc.)				
Wood from CDD				
Land clearing debris				
Food scraps (sent to anaerobic digester)				
Glass (crushed) used as fill				
Street sweepings used as fill				
Other:				



### SECTION 3 - Calculate Your Municipal Solid Waste Recycling Rates

Maine law sets a goal of recycling 50% of municipal solid waste generated each year. Municipalities are directed to demonstrate reasonable progress toward that goal. This section provides a model for calculating a municipal recycling rate in accordance with the provisions of 38 MRS § 2132 and §2133

**Enter all amounts in TONS** – See instructions for conversion factors

Use the tables below to calculate your municipality's (ties) recycling and "diversion from disposal" rates for:

- MSW (exclusive of CDD),
- CDD & land-clearing debris, and
- combined MSW/CDD/land-clearing debris recycling rate.

The left-hand column describes the type of waste and how it is managed. In the center column enter the corresponding amounts for your town/facility, and perform calculations as shown in the right hand column.

MSW disposal	Amount in tons	Factor / Calculation
MSW landfilled or disposed of at waste-to-energy facilities (from Table 1)		"A"
<b>MSW Recycled and Composted</b>		
Traditional MSW recyclables - Paper, cardboard, plastics, metals, glass and textiles recycled (from Table 2)		"B"
Other MSW recycled - electronics, white goods and other metals, tires, vehicle batteries, mercury-added products (from Table 2)		"C"
MSW composted - includes leaf & yard waste, food scraps (from Table 3)		"D"
<b>Total of MSW recycled or composted</b>		<b>=B+C+D</b>
Food scraps sent to an anaerobic digester (from Table 4)		"E"
<b>Total MSW (exclusive of CDD)</b>		<b>=A+B+C+D+E</b>

#### To calculate the MSW recycling rate (exclusive of CDD):

Step 1.  $X = ((B+C+D)/(A+B+C+D+E))$

Also add "E" into the numerator if MSW sent to Exeter Agri-Energy

Step 2.  $Y = X + .05$  (for 'bottle bill credit')

Step 3.  $Y \times 100 = \text{Municipal MSW Recycling Rate (i.e., percent MSW recycled)}$

<b>MSW Recycling Rate</b>	%
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If you send food scraps to an anaerobic digester other than Exeter Agri-Energy, calculate your MSW diversion from disposal by adding "E" into the numerator.

<b>MSW Diversion from Disposal Rate</b>	%
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Municipal CDD and Land Clearing Debris Recycling Rate Calculations		
<b>CDD and land-clearing debris disposal</b>	<b>Amount</b>	
Mixed CDD landfilled or disposed of at waste-to-energy facilities (from Table 1)		“F”
Land-clearing debris landfilled or disposed of at waste-to-energy facilities (from Table 1)		“G”
<b>Total CDD &amp; land-clearing debris disposed</b>		=F+G
<b>CDD Recycling</b>		
CDD & land-clearing debris recycled (from Table 2)		“H”
<b>Beneficial Use of CDD and land-clearing debris</b>		
Other beneficial use of processed CDD and land-clearing debris (from Table 4)		“I”
<b>Total CDD and land-clearing debris</b>		=F+G+H+I
<b>CDD &amp; land-clearing debris recycling rate</b>	%	$[(H)/(F+G+H)] \times 100 \%$
<b>CDD &amp; land-clearing debris ‘diversion from disposal’ rate</b>	%	$[(H+I)/(F+G+H+I)] \times 100 \%$
<b>Total MSW, CDD &amp; land-clearing debris</b>		=A+B+C+D+E+F+G+H+I
<b>Total MSW, CDD and land-clearing debris recycled (including wood waste used as fuel chips)</b>		=B+C+D+H
<b>Total MSW, CDD and land-clearing debris diverted from disposal</b>		=B+C+D+H+I

Combined MSW, CDD & Land Clearing Debris Recycling Rate Calculation		
<b>Combined MSW, CDD &amp; land-clearing debris recycling rate:</b> Step 1. $X = (B+C+D+H)/(A+B+C+D+E+F+G+H)$ Step 2. $Y = X + .05$ Step 3. $Y \times 100 =$ Overall <b>recycling rate</b> for MSW, CDD & land-clearing debris	<b>Recycling rate for MSW, CDD + LCD</b>	
		%
<b>Combined MSW, CDD &amp; land-clearing debris ‘diversion from disposal’ rate:</b> Step 1. $X = (B+C+D+H+I)/(A+B+C+D+E+F+G+H+I)$ Step 2. $Y = X + .05$ Step 3. $Y \times 100 =$ Overall <b>diversion from disposal</b> rate for MSW, CDD & land-clearing debris	<b>Diversion from disposal rate for MSW, CDD + LCD</b>	
		%