

# **Waste Reduction and Recycling Support (WRARS) Program Guide**

December 2017

Version: 3.1

WRARS Program  
Sustainable and Green Initiatives  
Manitoba Sustainable Development  
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## WASTE REDUCTION AND RECYCLING SUPPORT (WRARS) PROGRAM

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## 1. INTRODUCTION

This program guide provides information on the Waste Reduction and Recycling Support (WRARS) Program. The guide was developed to assist landfill owners in remitting the WRARS Levy and municipal recycling program operators in reporting recycling to receive the WRARS Recycling Rebate.

## 2. WHAT'S NEW

Manitoba Sustainable Development is currently reviewing the online reporting system. For the July – December 2017 reporting period please use the paper-based forms. Stay tuned for updates on the online reporting system.

The province has launched a website called WasteWise at [www.gov.mb.ca/sd/wastewise](http://www.gov.mb.ca/sd/wastewise) to serve as the provincial hub for information on waste management and recycling. It includes interactive maps showing Manitobans their nearest recycling depots and the landfills and waste transfer stations registered with the WRARS Program.

## 3. BACKGROUND

The WRARS Program was established in 2009 to help discourage waste generation and encourage recycling and waste diversion activities.

The WRARS Fund was established in 2009 through amendments to [The Waste Reduction and Prevention \(WRAP\) Act](#). On July 1, 2009, a \$10 per tonne WRARS Levy was implemented on waste disposed at Manitoba landfills. The WRARS Fund, established under the WRAP Act, is managed by Manitoba Sustainable Development.

All Class 1, Class 2 and Class 3 landfills in Manitoba are required to pay the \$10 per tonne WRARS Levy on waste disposed.

Class 2 and 3 landfills that do not have a weigh scale are able to determine the amount of waste disposed by measuring the volume of waste disposed or using population data. See Section 6 and Appendix C: Guide to Waste Estimation at Landfills without Weigh Scales for more details.

Eighty percent (80%) of the WRARS Fund revenue is rebated to eligible municipalities (see Section 13) based on the same recycling tonnages reported to Multi-Material Stewardship Manitoba (MMSM).

Twenty percent (20%) of the WRARS Fund revenue is used to support the management and administration of waste diversion projects and programs administered by Manitoba Sustainable Development.

#### **4. LANDFILL REGISTRATION REQUIREMENTS (WRARS LEVY REMITTANCE)**

Landfill owners must register new and operating landfills with Manitoba Sustainable Development using the Landfill/Waste Transfer Station Registration Form.

#### **5. LANDFILL CLOSURE/CONVERSION TO WASTE TRANSFER STATION REQUIREMENTS**

If a landfill is no longer accepting waste and is closed or converted to a waste transfer station, the owner/operator of the landfill or authorized contact person must inform Manitoba Sustainable Development by submitting the Landfill Closure Confirmation and Waste Transfer Station Registration Form.

#### **6. LANDFILL REPORTING REQUIREMENTS**

Landfill owners must remit the \$10.00 per tonne WRARS Levy to Manitoba Sustainable Development for each six-month period per year:

- a) January 1 to June 30, to be paid no later than July 31 of that year; and
- b) July 1 to December 31, to be paid no later than January 31 of the following calendar year.

The WRARS Levy is applicable to all municipal solid waste: residential waste; industrial, commercial and institutional waste (ICI); construction, renovation and demolition waste (CR&D); and all other waste (see Appendix A for definitions). Burning waste is considered disposal and, therefore, subject to levy payment.

##### **6.1. Exemptions from WRARS Levy**

The following exemptions apply to the payment of the WRARS Levy:

- Single-use private/industrial landfills that do not accept waste from other generators or from municipal sources are exempt.
- First Nation waste disposal grounds that do not accept waste from other generators are exempt.
- Community Council landfills are exempt from paying the levy on waste disposed by First Nations.

First Nations may voluntarily participate in the WRARS Program to receive the WRARS Recycling Rebate based on the same recycling tonnages reported to Multi-Material Stewardship Manitoba.

## 6.2. Waste Transfer Stations

Waste transfer station owners must register operating waste transfer stations with Manitoba Sustainable Development using the Landfill/Waste Transfer Station Registration Form. Waste delivered to a waste transfer station for transport to a landfill is exempt from the WRARS Levy. If burning of waste occurs at the waste transfer station under the authority of a burning permit, the owner must report the weight of waste disposed through burning and remit the \$10 per tonne WRARS Levy.

## 6.3. Eligible Diversion Activities

Recycling, composting and wood waste processing/chipping are all considered diversion activities that reduce waste and are exempt from the WRARS Levy.

## 7. MEASURING WASTE WITHOUT SCALES

Class 2 and 3 landfills that do not have a weigh scale have two options for determining the amount of waste disposed that the \$10 per tonne WRARS Levy shall apply to: a) Volume to Weight Factor or b) Per Capita Waste Factor. Additional guidance on measuring waste without scales and methods for volume-based measurement and reporting is provided in Appendix C: Waste Estimation at Landfills without Weigh Scales.

- a) Volume to Weight Factor – The WRARS Levy can be calculated by converting the volume (in cubic metres or yards) of waste disposed into weight. The volume to weight conversion factor for uncompacted waste is one cubic metre (m<sup>3</sup>) = 190 kilograms or one cubic yard (yd<sup>3</sup>) = 320 pounds.

Example: 1,000 m<sup>3</sup> of waste = 190,000 kg or 190 tonnes of waste

$$\text{WRARS Levy} = 190 \times \$10/\text{tonne} = \$1,900.00$$

- b) Per Capita Waste Factor – The WRARS Levy can be calculated using an annual per capita waste factor of 660 kilograms (0.66 tonnes). This rate is based on the measured average annual per capita waste disposed at landfills outside of the Capital Region and Brandon. Reporting entities are required to use the most recent population census applicable to the reporting period under consideration.

Example: 1,000 population x 0.66 = 660 tonnes of waste

$$\text{Annual WRARS Levy} = 660 \text{ tonnes} \times \$10/\text{tonne} = \$6,600.00$$

All landfill operators are encouraged to measure their waste using a scale. All quantities of waste received at a landfill should be recorded in both volume and weight, unless scales are available and used to weigh a specific load.

Manitoba Sustainable Development is currently reviewing the volume to weight and per capita waste factors to develop a reliable and accurate tool for measuring waste quantities without a scale.

## **8. SMALL RESIDENTIAL/COMMERCIAL WASTE LOADS**

The WRARS Levy is to be collected on all waste that is landfilled. It is the responsibility of the landfill owner to establish an appropriate system to measure the weight of all waste loads and, if desired, the separation of the weight of recyclable materials from mixed waste loads. An aggregate of the weight of eligible materials recovered for recycling may be deducted from the weight of landfilled waste if mixed loads are weighed in.

## **9. MAINTENANCE OF RECORDS AND AUDIT PROVISIONS**

Program participants are required to maintain records that identify the type and quantity of waste disposed and diverted for a period of at least five (5) years in support of all data submitted to the WRARS Program. Data reports are subject to audit by Manitoba Sustainable Development on a periodic basis.

## **10. WEIGH SCALES**

Weigh scales are required at all Class 1 landfills. Landfill owners needing financial assistance for weigh scale purchases and installations are encouraged to contact Manitoba Sustainable Development for assistance in applying for and obtaining financial support.

## **11. LEVY REMITTANCE**

Waste disposed must be reported to Manitoba Sustainable Development through the Levy Remittance Form.

WRARS Levy payments are made payable to: Minister of Finance

Remit payments to:

WRARS Program  
Manitoba Sustainable Development  
Box 38, 200 Saulteaux Crescent  
Winnipeg, MB R3J 3W3

## **12. CONVERSIONS**

- 1 litre (L) = 0.0013 cubic yards (yd<sup>3</sup>)
- 1 cubic foot = 0.037 cubic yards (yd<sup>3</sup>)
- One cubic yard (yd<sup>3</sup>) = 0.765 cubic metres (m<sup>3</sup>)
- 1 kilogram (kg) = 2.2 pounds (lbs)

- 1 Tonne (T) = 1,000 kgs = 2,200 lbs
- 1 Tonne = 1.1 tons
- 1 ton = 2000 lbs

### **13. WRARS RECYCLING REBATE**

The WRARS Recycling Rebate is available to municipalities that operate a WRARS Registered Landfill and/or have a contract with a WRARS Registered Landfill for disposal of municipal solid waste. Only recyclable materials accepted by Multi-Material Stewardship Manitoba ([www.stewardshipmanitoba.org](http://www.stewardshipmanitoba.org)) are eligible for the WRARS Recycling Rebate. These include:

- Newsprint and flyers
- Boxboard
- Aseptic containers
- Gabletop containers
- Corrugated cardboard
- Steel food and beverage containers
- Aluminum food and beverage containers
- PET plastic bottles (#1)
- HDPE Coloured Bottles (#2)
- HDPE Natural Bottles (#2)
- Mixed HDPE (#2) – Natural and Coloured
- Household plastics (#3, #4, #5, #7)
- Residential plastic film and carry out bags
- Glass

Recycling rates reported to Manitoba Sustainable Development must be consistent with the eligible material recycling tonnages reported to Multi-Material Stewardship Manitoba.

Municipalities participating in the WRARS recycling rebate program must pay their WRARS Levy and submit their Recycling Rebate Report to Manitoba Sustainable Development to be eligible for the rebate. The WRARS Recycling Rebate will be paid to the eligible pool of municipal recycling programs for a given six (6) month period.

The WRARS Recycling Rebate will be issued to eligible municipalities within 60 days following the WRARS Levy remittance date unless there is not 100% compliance with remitting the levy, in which case there will be delays in rebate payment.

#### **13.1. Municipal Recycling Program Registration Requirements**

Municipalities must be registered with Manitoba Sustainable Development to receive the WRARS Recycling Rebate and must deliver waste to a WRARS registered landfill.

Municipalities must register with Manitoba Sustainable Development using the Recycling Program Registration Form.

### **13.2. Recycling Reporting Requirements**

The WRARS Recycling Rebate is based on recycling tonnages that are also reported to Multi-Material Stewardship Manitoba.

Municipalities shall submit a Recycling Rebate Report to Manitoba Sustainable Development for each of the following six-month periods per year to be eligible for the Recycling Rebate:

- a) January 1 to June 30, to be submitted no later than July 31 of that year; and
- b) July 1 to December 31, to be submitted no later than January 31 of the following calendar year.

Recycling must be reported to Manitoba Sustainable Development using the Recycling Program Rebate Report.

### **13.3. Recycling Rebate Calculations**

The rebate amount for individual municipalities is calculated as follows:

$$\text{Rebate (\$)} = \frac{\text{Total Municipal Fund to be Rebated (\$)}}{\text{Total Recycling Reported (Tonnes)}} \left. \vphantom{\frac{\text{Total Municipal Fund to be Rebated (\$)}}{\text{Total Recycling Reported (Tonnes)}}} \right\} \times \text{Recycling Reported by a Municipality (Tonnes)}$$

Eligible municipalities will receive rebate summary reports outlining the amount they are to receive prior to the rebates being disbursed.

## **14. NOTICE OF CHANGE OF AUTHORIZED CONTACT**

Any changes in the authorized contact information for landfills, waste transfer stations and municipal recycling programs shall be sent in writing to the WRARS Program using the Authorized Contact Update Form.

## **15. WRARS FUND ANNUAL REPORTING REQUIREMENTS**

For each fiscal year, an annual report of the accounts and transactions of the WRARS Fund will be prepared and made publicly available. The report provides a financial summary of the total WRARS revenue collected (levy revenue), administration fees, recycling rebate fees paid to eligible municipalities, Manitoba Sustainable Development program funding allocations and programs administrative recovery.



## 16. NOTICE WITH RESPECT TO REPORTING

Information collected is required for the administration of the WRARS Program. Manitoba Sustainable Development may publish the information collected for the program. If you have any questions about the use of the collected information, please contact Jennifer Lusk in Winnipeg by phone at 204-945-2041 or by email at [Jennifer.Lusk@gov.mb.ca](mailto:Jennifer.Lusk@gov.mb.ca).

Collection and use of personal information is protected by the privacy provisions of The Freedom of Information and Protection of Privacy Act (FIPPA). If you have any questions about the collection and use of personal information under FIPPA, please contact the Access and Privacy Officer in Winnipeg by phone at 204-945-4170 or by email at [cws-fippa@gov.mb.ca](mailto:cws-fippa@gov.mb.ca).

## 17. PROGRAM CONTACT INFORMATION

All correspondence, questions and comments may be submitted to:

Jennifer Lusk, Senior Program Analyst  
WRARS Program  
Manitoba Sustainable Development  
Box 38, 200 Saulteaux Crescent  
Winnipeg, MB R3J 3W3  
Phone: 204-945-2041  
Fax: 204-945-4552  
Email: [Jennifer.Lusk@gov.mb.ca](mailto:Jennifer.Lusk@gov.mb.ca)  
Website: [www.gov.mb.ca/sd/wastewise](http://www.gov.mb.ca/sd/wastewise)

## APPENDIX A: WASTE REDUCTION AND RECYCLING SUPPORT PROGRAM DEFINITIONS

### DEFINITIONS <sup>1</sup>

#### **Composting**

Composting is an aerobic biological treatment process used for management of biodegradable residential waste, such as leaf and yard waste or food wastes, and for industrial, commercial and institutional (ICI) and agricultural wastes including manures, food processing wastes and biodegradable industrial process byproducts.

#### **Construction, Renovation and Demolition Waste (CR&D)**

Construction, renovation and demolition (CR&D) waste is generated by residential and ICI construction, renovation and demolition activities. It includes materials such as wood, drywall, certain metals, cardboard, doors, windows, wiring, etc. It excludes materials from land clearing on areas not previously developed, as well as materials that include asphalt, concrete, bricks and clean sand or gravel.

#### **Waste Disposal Ground**

A facility at which waste is landfilled for final disposal and is a Class 1, Class 2 or Class 3 waste disposal ground (landfill) as determined by regulation under *The Environment Act*.

#### **Diversion**

Diversion represents the quantity of materials diverted from disposal facilities and represents the sum of all materials processed for recycling at a recycling or composting facility.

#### **Hazardous waste**

Hazardous waste includes all materials designated as hazardous, due to their nature or quantity, and requiring special handling techniques as specified by legislation or regulation.

#### **Incentive**

Payment received as a reward for undertaking waste diversion activities of various waste streams that would have otherwise been disposed at a landfill site.

#### **Incineration**

Incineration, in the context of waste, refers to the burning of waste.

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<sup>1</sup> Definitions (except for “Incentive”) are based on Statistics Canada definitions found in the Waste Management Industry Survey: Business and Government Sectors, 2006 (June 2008).

### **Industrial, Commercial and Institutional Waste (ICI)**

Industrial, commercial and institutional waste (ICI) is the waste generated by all non-residential sources in a municipality, and is excluded from the residential waste stream. This includes:

- industrial waste, which is generated by manufacturing, and primary and secondary industries, and is managed off-site from the manufacturing operation, and is generally picked up under contract by the private sector;
- commercial waste is generated by commercial operations such as shopping centres, restaurants, offices, etc. Some commercial waste (from small street-front stores, etc.) may be picked up by the municipal collection system along with the residential waste; and
- institutional waste is generated by institutional facilities such as schools, hospitals, government facilities, seniors homes, universities, etc. This waste is generally picked up under contract with the private sector.

### **Non-residential Waste**

This includes municipal solid non-hazardous waste generated by ICI sources as well as waste generated by construction and demolition activities.

### **Recyclable material**

Any material that has reached the end of its useful life in the form or purpose for which it was initially made and that can be recycled into a material that has value as a feedstock in another production process.

### **Recycling**

Recycling is the process whereby a material (for example: glass, metal, plastic or paper) is diverted from the waste stream and remanufactured into a new product or is used as a raw material substitute.

### **Residential Waste**

Residential waste is solid waste from residential sources, which includes all households. This includes waste that is picked up by the municipality (either using its own staff or through contracting firms) and waste from residential sources that is taken by the generator to depots, transfer stations and disposal facilities.

### **Transfer Station**

A facility at which waste transported by vehicles involved in collection is transferred to other vehicles that will transport the waste to a disposal or recycling facility.

### **Waste**

Waste is a material that is unwanted by its producer. The unwanted materials may be by-products of a production process or products that have been consumed from the perspective of the current holder or have lost their original inherent value from the consumer's perspective.

**Waste for Disposal**

All materials not wanted by their generator and which are discarded for disposal at a waste disposal ground (excludes materials destined for recycling and composting).

This does not include any material used as landfill cover or contaminated soils processed for later reuse or landfill cover.

**APPENDIX B: WASTE REDUCTION AND RECYCLING SUPPORT PROGRAM  
FORMS**

**WASTE REDUCTION AND RECYCLING SUPPORT (WRARS) PROGRAM  
 AUTHORIZED CONTACT UPDATE FORM**

**CONTACT INFORMATION**

Organization Name:	
Authorized Contact Name:	Title:
Address:	
Town/City:	Postal Code:
Phone:	Fax:
Email Address:	

- Landfill(s): \_\_\_\_\_
- Waste Transfer Station(s): \_\_\_\_\_
- Recycling Program

Information collected using this form is required for the administration of the WRARS Program. Manitoba Sustainable Development may publish the information collected. If you have any questions about the use of the collected information, please contact Jennifer Lusk in Winnipeg by phone at 204-945-2041 or by email at Jennifer.Lusk@gov.mb.ca.

Collection and use of personal information is protected by the privacy provisions of The Freedom of Information and Protection of Privacy Act (FIPPA). If you have any questions about the collection and use of personal information under FIPPA, please contact the Access and Privacy Officer in Winnipeg by phone at 204-945-4170 or by email at cws-fippa@gov.mb.ca.

The authorized contact understands the requirements for the WRARS Program and agrees to cooperate with all WRARS policies and procedures.

\_\_\_\_\_

Authorized Contact Signature Date

**Send Completed Form to:**  
 WRARS Program  
 Manitoba Sustainable Development  
 Box 38, 200 Saulteaux Crescent  
 Winnipeg, MB R3J 3W3  
 Fax: 204-945-4552  
 Email: Jennifer.Lusk@gov.mb.ca

<b><i>For Manitoba Sustainable Development Use Only</i></b>	
Date Processed:	Approved By:

**WASTE REDUCTION AND RECYCLING SUPPORT (WRARS) PROGRAM  
 LANDFILL AND/OR WASTE TRANSFER STATION REGISTRATION FORM**

CONTACT INFORMATION	
Landfill/Waste Transfer Station Owner:	
Authorized Contact:	Title:
Address:	
Town/City:	Postal Code:
Phone:	Fax:
Email Address:	

Please complete one form for each disposal facility or transfer station that you operate in the Province of Manitoba and provide the following information:

Facility Type	Facility Class	Facility Name	Operating Permit / Env. Licence #	Weigh Scale Present?	Waste Disposed 2016 (Tonnes)
<input type="checkbox"/> Landfill	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/>			<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Measured <input type="checkbox"/> Estimated
<input type="checkbox"/> Transfer Station				<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Measured <input type="checkbox"/> Estimated
<b>Waste Disposal Ground Used:</b>					

Information collected using this form is required for the administration of the WRARS Program. Manitoba Sustainable Development may publish the information collected. If you have any questions about the use of the collected information, please contact Jennifer Lusk in Winnipeg by phone at 204-945-2041 or by email at Jennifer.Lusk@gov.mb.ca.

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The authorized contact understands the requirements for the WRARS Program and agrees to cooperate with all WRARS policies and procedures.

---

Authorized Signature \_\_\_\_\_ Date \_\_\_\_\_

**Send Completed Form to:**  
WRARS Program  
Manitoba Sustainable Development  
Box 38, 200 Saulteaux Crescent  
Winnipeg, MB R3J 3W3  
Fax: 204-945-4552  
Email: Jennifer.Lusk@gov.mb.ca

<b><i>For Manitoba Sustainable Development Use Only</i></b>	
Date Processed:	Approved By:



**WASTE REDUCTION AND RECYCLING SUPPORT (WRARS) PROGRAM  
 LANDFILL CLOSURE CONFIRMATION AND WASTE TRANSFER STATION REGISTRATION FORM**

**CONTACT INFORMATION**

Landfill/Waste Transfer Station Owner:	
Authorized Contact:	Title:
Address:	
Town/City:	Postal Code:
Phone Number:	Fax Number:
Email Address:	

Landfill Name: \_\_\_\_\_ WRARS Registration #: \_\_\_\_\_

<input type="checkbox"/> Closed	Effective Date:
---------------------------------	-----------------

I hereby confirm that the landfill identified above has been closed and is no longer receiving solid waste for disposal or permitted waste for burning that may be subject to the WRARS Levy.

\_\_\_\_\_  
 Authorized Contact Signature Date

<input type="checkbox"/> Converted to a Waste Transfer Station	Effective Date:
Waste Transfer Station Name: _____	
Landfill Where Waste is Disposed: _____	

I hereby confirm that the landfill identified above has been converted to a Waste Transfer Station and is no longer receiving solid waste for disposal that may be subject to the WRARS Levy.

\_\_\_\_\_  
 Authorized Contact Signature Date

Information collected using this form is required for the administration of the Waste Reduction and Recycling Support Program. Manitoba Sustainable Development may publish the information collected. If you have any questions about the use of the collected information, please contact Jennifer Lusk, 200 Saulteaux Cres, Winnipeg, MB, 204-945-2041, Jennifer.Lusk@gov.mb.ca.

Personal information is protected by the Protection of Privacy provisions of The Freedom of Information and Protection of Privacy Act (FIPPA). If you have any questions about the collection of personal information, please contact the Access and Privacy Officer, 200 Saulteaux Cres., Winnipeg, MB, 204-945-4170, cws-fippa@gov.mb.ca.

**Send Completed Form to:**  
WRARS Program  
Manitoba Sustainable Development  
Box 38, 200 Saulteaux Crescent  
Winnipeg, MB R3J 3W3  
Fax: 204-945-4552  
Email: Jennifer.Lusk@gov.mb.ca

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**WASTE REDUCTION AND RECYCLING SUPPORT (WRARS) PROGRAM  
 LANDFILL LEVY REMITTANCE FORM**

**FORM A: LANDFILLS WITH WEIGH SCALES (Measured Waste)**

**WRARS Registration Number:** \_\_\_\_\_

CONTACT INFORMATION	
Landfill(s) Owner:	
Authorized Contact:	Title:
Address:	
Town/City:	Postal Code:
Phone:	Fax:
Email Address:	

REPORTING PERIOD: Year _____ <input type="checkbox"/> January 1 to June 30 <input type="checkbox"/> July 1 to December 31					
For each disposal facility owned, please identify the facility class and the source and amount of waste disposed in the landfill for the appropriate reporting period. If applicable, disposal amounts <i>must</i> include the amount of waste burned on site and at waste transfer stations.					
Landfill Name	Facility Class	Approximate Percentage (%) of Waste Disposed by Source			Total Waste Disposed (Tonnes)
		Residential	Industrial, Commercial & Institutional	Construction, Renovation & Demolition	Waste Quantity Weighed
	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3				
	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3				
<b>TOTAL WASTE DISPOSED (TONNES)</b>					
<b>TOTAL WRARS LEVY REMITTED (Total Tonnes of Waste Disposed x \$10)</b>					<b>\$</b>
<i>Please make cheques payable to: <b>Minister of Finance</b>            Please send the cheque together with the completed form.</i>					

**Municipalities Using the Landfill(s) and Population Served**

1.	2.
3.	4.
5.	6.
7.	8.
9.	10.

**Other Landfills These Municipalities Use and Population Served**

1.	2.
----	----

**DECLARATION**

The WRARS Levy is equal to \$10 times the total tonnes of waste disposed at a Class 1, Class 2 or Class 3 landfill site and must be paid to Manitoba Sustainable Development for each six (6) month period, as set out in the WRARS Program Guide. The conditions of this agreement include:

1. Records must be maintained on file for a five (5) year period.
2. Records will be provided to an agent of Manitoba Sustainable Development upon request.
3. All reported landfill data may be subject to an independent audit on a periodic basis.

Information collected using this form is required for the administration of the WRARS Program. Manitoba Sustainable Development may publish the information collected for each disposal facility. If you have any questions about the use of the collected information, please contact Jennifer Lusk in Winnipeg by phone at 204-945-2041 or by email at [Jennifer.Lusk@gov.mb.ca](mailto:Jennifer.Lusk@gov.mb.ca).

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The landfill owner understands the requirements for the WRARS Program and agrees to cooperate with all WRARS policies and procedures.

---

Authorized Contact Signature

Date

**Send Completed Form to:**  
 WRARS Program  
 Manitoba Sustainable Development  
 Box 38, 200 Saulteaux Crescent  
 Winnipeg, MB R3J 3W3  
 Fax: 204-945-4552  
 Email: [Jennifer.Lusk@gov.mb.ca](mailto:Jennifer.Lusk@gov.mb.ca)

***For Manitoba Sustainable Development Use Only***

Date Processed:

Approved By:

**WASTE REDUCTION AND RECYCLING SUPPORT (WRARS) PROGRAM  
 LANDFILL LEVY REMITTANCE FORM**

**FORM B: LANDFILLS USING THE VOLUME TO WEIGHT CONVERSION FACTOR (Estimated Waste)**

WRARS Registration Number: \_\_\_\_\_

CONTACT INFORMATION	
Landfill(s) Owner:	
Authorized Contact:	Title:
Address:	
Town/City:	Postal Code:
Phone:	Fax:
Email Address:	

REPORTING PERIOD: Year _____ <input type="checkbox"/> January 1 to June 30 <input type="checkbox"/> July 1 to December 31						
For each disposal facility owned, please identify the facility class and the source and amount of waste disposed in the landfill for the appropriate reporting period. If applicable, disposal amounts <i>must</i> include the amount of waste burned on site and at waste transfer stations.						
Landfill Name	Facility Class	Population Served (2016 Census)	Total Volume (m <sup>3</sup> )	Conversion Factor (190 kg / m <sup>3</sup> or other approved conversion factor)	Total Weight (Tonnes)	WRARS Levy (Total Weight x \$10)
	<input type="checkbox"/> 2 <input type="checkbox"/> 3					\$
	<input type="checkbox"/> 2 <input type="checkbox"/> 3					\$
	<input type="checkbox"/> 2 <input type="checkbox"/> 3					\$
<b>TOTAL</b>		<b>Total Population</b>	<b>Total Volume</b>		<b>Total Weight</b>	<b>Total Levy Remitted</b>
					\$	
<i>Please make cheques payable to: <b>Minister of Finance</b>            Please send the cheque together with the completed form.</i>						

**Please describe the conversion factor used if it is not 190 kg / m<sup>3</sup>:**

\_\_\_\_\_

Approximate Percentage (%) of Waste Disposed by Source		
Residential	Industrial, Commercial & Institutional	Construction, Renovation & Demolition

**Municipalities Using the Landfill(s) and Population Served**

1.	2.
3.	4.

**Other Landfills These Municipalities Use and Population Served**

1.	2.
----	----

**DECLARATION**

The WRARS Levy is equal to \$10 times the total tonnes of waste disposed at a Class 1, Class 2 or Class 3 landfill site and must be paid to Manitoba Sustainable Development for each six (6) month period, as set out in the WRARS Program Guide. The conditions of this agreement include:

1. Records must be maintained on file for a five (5) year period.
2. Records will be provided to an agent of Manitoba Sustainable Development upon request.
3. All reported landfill data may be subject to an independent audit on a periodic basis.

Information collected using this form is required for the administration of the WRARS Program. Manitoba Sustainable Development may publish the information collected for each disposal facility. If you have any questions about the use of the collected information, please contact Jennifer Lusk in Winnipeg by phone at 204-945-2041 or by email at Jennifer.Lusk@gov.mb.ca.

Collection and use of personal information is protected by the privacy provisions of The Freedom of Information and Protection of Privacy Act (FIPPA). If you have any questions about the collection and use of personal information under FIPPA, please contact the Access and Privacy Officer in Winnipeg by phone at 204-945-4170 or by email at cws-fippa@gov.mb.ca.

The landfill owner understands the requirements for the WRARS Program and agrees to cooperate with all WRARS policies and procedures.

\_\_\_\_\_  
Authorized Contact Signature

\_\_\_\_\_  
Date

**Send Completed Form to:**  
 WRARS Program  
 Manitoba Sustainable Development  
 Box 38, 200 Saulteaux Crescent  
 Winnipeg, MB R3J 3W3  
 Fax: 204-945-4552  
 Email: Jennifer.Lusk@gov.mb.ca

<i>For Manitoba Sustainable Development Use Only</i>	
Date Processed:	Approved By:

**WASTE REDUCTION AND RECYCLING SUPPORT (WRARS) PROGRAM  
 LANDFILL LEVY REMITTANCE FORM**

**FORM C: LANDFILLS USING THE PER CAPITA WASTE FACTOR (Per Capita Waste)**

**WRARS Registration Number:** \_\_\_\_\_

CONTACT INFORMATION	
Landfill(s) Owner:	
Authorized Contact:	Title:
Address:	
Town/City:	Postal Code:
Phone:	Fax:
Email Address:	

**REPORTING PERIOD:** Year \_\_\_\_\_  **January 1 to June 30**  **July 1 to December 31**

For each disposal facility owned, please identify the facility class and the source and amount of waste disposed in the landfill for the appropriate reporting period. If applicable, disposal amounts *must* include the amount of waste burned on site and at waste transfer stations.

Landfill Name	Facility Class	Population Served (2016 Census)	Total Weight (T) (Population Served x Per Capita Waste Factor of 0.33 Tonnes)	WRARS Levy (Total Weight x \$10)
	<input type="checkbox"/> 2 <input type="checkbox"/> 3			
	<input type="checkbox"/> 2 <input type="checkbox"/> 3			
	<input type="checkbox"/> 2 <input type="checkbox"/> 3			
<b>TOTAL</b>				\$
		<b>Total Population</b>	<b>Total Weight (T)</b>	<b>Total Levy Remitted</b>

*Please make cheques payable to: **Minister of Finance**  
 Please send the cheque together with the completed form.*

Approximate Percentage (%) of Waste Disposed by Source		
Residential	Industrial, Commercial & Institutional	Construction, Renovation & Demolition

**Municipalities/Northern Affairs Communities Using the Landfill(s) and Population Served**

1.	2.
3.	4.

**Other Landfills These Municipalities Use and Population Served**

1.	2.
----	----

**DECLARATION**

The WRARS Levy is equal to \$10 times the total tonnes of waste disposed at a Class 1, Class 2 or Class 3 landfill site and must be paid to Manitoba Sustainable Development for each six (6) month period, as set out in the WRARS Program Guide. The conditions of this agreement include:

1. Records must be maintained on file for a five (5) year period.
2. Records will be provided to an agent of Manitoba Sustainable Development upon request.
3. All reported landfill data may be subject to an independent audit on a periodic basis.

Information collected using this form is required for the administration of the WRARS Program. Manitoba Sustainable Development may publish the information collected for each disposal facility. If you have any questions about the use of the collected information, please contact Jennifer Lusk in Winnipeg by phone at 204-945-2041 or by email at [Jennifer.Lusk@gov.mb.ca](mailto:Jennifer.Lusk@gov.mb.ca).

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The landfill owner understands the requirements for the WRARS Program and agrees to cooperate with all WRARS policies and procedures.

\_\_\_\_\_

Authorized Contact Signature

Date

**Send Completed Form to:**  
WRARS Program  
Manitoba Sustainable Development  
Box 38, 200 Saulteaux Crescent  
Winnipeg, MB R3J 3W3  
Fax: 204-945-4552  
Email: [Jennifer.Lusk@gov.mb.ca](mailto:Jennifer.Lusk@gov.mb.ca)

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**WASTE REDUCTION AND RECYCLING SUPPORT (WRARS) PROGRAM  
 RECYCLING PROGRAM REGISTRATION FORM**

**CONTACT INFORMATION**

Municipality/Northern Affairs Community Name:	
Authorized Contact:	Title:
Address:	
Town/City:	Postal Code:
Phone:	Fax:
Email Address:	

**WASTE DISPOSAL**

Landfill(s) Used:	Landfill Owner(s):
-------------------	--------------------

**RECYCLING PROGRAM**

Recycling Program Operator:		
Curbside recycling system:	<input type="checkbox"/> Bag collection	<input type="checkbox"/> Box collection
Depot recycling system:	<input type="checkbox"/> Central depot	<input type="checkbox"/> Multiple depots

---

Authorized Contact Signature Date

**Send Completed Form to:**  
 WRARS Program  
 Manitoba Sustainable Development  
 Box 38, 200 Saulteaux Crescent  
 Winnipeg, MB R3J 3W3  
 Fax: 204-945-4552  
 Email: [Jennifer.Lusk@gov.mb.ca](mailto:Jennifer.Lusk@gov.mb.ca)

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<b>For Manitoba Sustainable Development Use Only</b>	
Date Processed:	Approved By:

**WASTE REDUCTION AND RECYCLING SUPPORT (WRARS) PROGRAM  
 RECYCLING PROGRAM REBATE REPORT**

**WRARS Registration Number:** \_\_\_\_\_

CONTACT INFORMATION	
Municipality/Northern Affairs Community Name:	
Authorized Contact:	Title:
Address:	
Town/City:	Postal Code:
Phone:	Fax:
Email Address:	

<b>REPORTING PERIOD:</b> Year _____	<input type="checkbox"/> January 1 to June 30	<input type="checkbox"/> July 1 to December 31
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Material	Curbside ( <input type="checkbox"/> Tonnes/ <input type="checkbox"/> Kgs)	Depots ( <input type="checkbox"/> Tonnes/ <input type="checkbox"/> Kgs)	TOTAL ( <input type="checkbox"/> Tonnes/ <input type="checkbox"/> Kgs)
Newsprint & Flyers (ONP)			
Magazines (OMG)			
Telephone Directories (OTD)			
Boxboard (OBB)			
Gable Top Cartons			
Aseptic Containers			
Steel Food and Beverage Containers			
Aluminum Beverage Containers			
PET #1 Plastic Bottles			
HDPE #2 Plastic Containers			
#4, 5 & 7 Plastic Containers			
Glass Containers			
Old Corrugated Cardboard (OCC)			
Other Eligible: _____			
Residue (Ineligible):			
<b>TOTAL:</b>			

**This Recycling Report includes the Municipalities/Northern Affairs Communities of:**

1.	2.
----	----

## WRARS Recycling Rebate Requirements & Agreement of Terms

The WRARS Recycling Rebate is set annually and calculated based on 80% of the WRARS Fund revenues. The Rebate is allocated to participating municipalities and Northern Affairs communities based on their percentage share of total eligible recycling tonnages reported in a six (6) month period. The rebate is only available to municipal and Northern Affairs community governments registered with the WRARS Program. Reported recycling rates must be consistent with the eligible material recycling tonnages reported to Multi-Material Stewardship Manitoba. The conditions of this agreement include:

Records must be maintained on file for a five (5) year period.

Records will be provided to an agent of Manitoba Sustainable Development upon request.

All reported recovery reports may be subject to an independent audit.

The municipal recycling program must be registered with Multi-Material Stewardship Manitoba.

Information collected using this form is required for the administration of the WRARS Program. Manitoba Sustainable Development may publish the information collected for each municipality. If you have any questions about the use of the collected information, please contact Jennifer Lusk in Winnipeg by phone at 204-945-2041 or by email at [Jennifer.Lusk@gov.mb.ca](mailto:Jennifer.Lusk@gov.mb.ca).

Collection and use of personal information is protected by the privacy provisions of The Freedom of Information and Protection of Privacy Act (FIPPA). If you have any questions about the collection and use of personal information under FIPPA, please contact the Access and Privacy Officer in Winnipeg by phone at 204-945-4170 or by email at [cws-fippa@gov.mb.ca](mailto:cws-fippa@gov.mb.ca).

The Municipality/Northern Affairs Community of \_\_\_\_\_ understands the requirements for the WRARS Program and agrees to cooperate with all WRARS policies and procedures.

\_\_\_\_\_  
Authorized Contact Signature

\_\_\_\_\_  
Date

**Send Completed Form to:**  
WRARS Program  
Manitoba Sustainable Development  
Box 38, 200 Saulteaux Crescent  
Winnipeg, MB R3J 3W3  
Fax: 204-945-4552  
Phone: 204-945-2041  
Email: [Jennifer.Lusk@gov.mb.ca](mailto:Jennifer.Lusk@gov.mb.ca)

***For Manitoba Sustainable Development Use Only***

Date Processed:

Approved By:

# APPENDIX C: GUIDE TO WASTE ESTIMATION AT LANDFILLS WITHOUT WEIGH SCALES

## WASTE REDUCTION AND RECYCLING SUPPORT (WRARS) PROGRAM

### 1. INTRODUCTION

This guide provides information for landfill operators on the use of volume-based methods to measure waste at landfills without weigh scales. The target audience for this guide is Class 2 and 3 landfill operators that need to measure waste in order to remit the Waste Reduction and Recycling Support (WRARS) Levy. The WRARS Levy is \$10 per tonne of waste landfilled.

All quantities of waste received at a landfill should be recorded in both volume and weight, unless scales are available and used to weigh a specific load. Landfill owners shall retain data reports showing the type of waste (e.g. residential; industrial, commercial and institutional [ICI]; and construction, renovation and demolition [CR&D]) and the quantity for five (5) years. These data reports are subject to audit by Manitoba Sustainable Development on a periodic basis.

### 2. VOLUME TO WEIGHT CONVERSION FACTOR

Landfill operators can use a volume to weight conversion factor to calculate the weight of waste landfilled as set out in Table A. The accepted conversion factor for uncompacted waste is one cubic meter (m<sup>3</sup>) weighs 190 kilograms or one cubic yard (yd<sup>3</sup>) weighs 320 pounds.

**Table A: Volume to Weight Conversion Factors**

Waste Type	Tons / Cubic yard (yd <sup>3</sup> )	Tonnes / Cubic Meter (m <sup>3</sup> )
Uncompacted Waste	0.160	0.190

*Note: These factors may change from time to time as new information is obtained.*

**Example of a truck volume to weight conversion:** A truck is estimated to contain 15 cubic yards of uncompacted waste. The estimated weight would be (15 cubic yards x 0.160 tons per cubic yard = 2.4 tons (2.4/1.1) = 2.18 tonnes.

Landfill operators may establish a set of standard volumes for trucks, trailers and other containers. Examples of container volume measurements are provided in Table B.

**Table B: Examples of Standard Measurements**

Vehicle Type or Waste Container	Volume Cubic Yards(yd <sup>3</sup> )	Weight Tonnes (T)
Plastic trash bag (75 Litres)	0.098	0.016
Compact Pickup (4'x6' bed) to top of bed	1.33	0.193
Compact Pickup (4'x6' bed) to top of cab	2.66	0.387
Compact Pickup (4'x7' bed) to top of bed	1.56	0.227
Compact Pickup (4'x7' bed) to top of cab	3.11	0.452
Full Size Pickup (5'x7' bed) to top of bed	1.94	0.282
Full Size Pickup (5'x7' bed) to top of cab	3.89	0.566
Full Size Pickup (5'x8' bed) to top of bed	2.22	0.323
Full Size Pickup (5'x8' bed) to top of cab	4.44	0.646
Utility Trailer (4'x8'x2')	2.37	0.345
Utility Trailer (4'x8'x4')	4.74	0.689

The volume of any vehicle or container can be measured using the formula: length (l) x width (w) x height (h) = volume (ft<sup>3</sup>, yd<sup>3</sup> or m<sup>3</sup>). For vehicles, the maximum weight that the vehicle can hold can also be used for the weight estimate. However, this may over or underestimate the actual amount of waste depending on how waste is loaded into the vehicle.

### 3. WASTE VOLUME SURVEY METHODS

There are several methods of measuring the volume of waste landfilled. A landfill operator may conduct a survey to measure the volume and weight of waste landfilled.

Survey methods that can be used to estimate waste quantities include:

- Trench volume estimation
- Loader bucket and truck counting
- Random weighing and traffic counting
- Site survey and in-situ density test

All of these methods except for the site survey and in-situ density test require initial weighing of material to establish a baseline weight to volume ratio. Operators may consider using provincial highway weigh scales or scales at commercial operations (e.g. gravel pits, concrete plants) that are available to them.

#### 1.1 Trench Volume Estimation

This method requires measuring and monitoring of the waste receiving cell.

##### Steps involved:

- Excavate a trench for waste disposal.
- Measure the volume of the excavated trench (volume = length x width x height).

- Fill the trench with waste.
- Estimate the volume of waste in the trench by measuring its depth (h).
- Cover the waste as necessary and repeat measurement for each new lift (level).

### **1.2 Loader Bucket and Truck Counting**

This method may be used at landfills with residential waste drop-off facilities. This method requires the use of a loader to move waste from one section of the landfill (e.g. a drop off area) to another area.

#### **Steps involved:**

- Estimate the number of bucket loads required to move waste into the landfill each day during the survey period.
- Weigh a number of typical loads using a weigh scale to establish a baseline weight measure for each load type and volume of waste.
- Keep a daily record of each load type and its estimated volume.

### **1.3 Random Weighing and Truck Counting**

This method may provide a more accurate means of estimating the quantity of waste landfilled.

#### **Steps involved:**

- Obtain an average weight of waste for commercial loads received from the companies.
- Randomly weigh pickup trucks or trailers to obtain an average weight for each load type and its volume of waste.
- Keep a daily record of each load type and its estimated volume.

### **1.4 Site Survey and In-Situ Density Test**

If a topographic survey of the site and vicinity has been conducted, another site survey can be conducted to estimate the landfill volume added since the first survey.

#### **Steps involved:**

- Survey the site to determine the current landfill volume.
- Acquire information on the amount and density of cover materials used in the landfill.
- Conduct an in situ waste density test to convert the volume to waste density: weigh a known volume of waste (exclude cover materials) to determine the density (mass per unit volume) of waste.
- Compare the results with the previous study, accounting for the volume of cover material.

## **2. OTHER ACCEPTED MEASUREMENT OPTIONS**

For landfill operators that cannot measure the volume of waste received, a per capita waste factor may be used.

### **4.1 Per Capita Waste Factor**

Class 2 and 3 landfills that are unable to measure waste may pay the WRARS Levy based on a per capita waste factor of 660 kilograms (0.66 Tonnes). The basis of this rate is the measured waste disposal rate for communities outside of the Capital Region and Brandon (based on actual reporting for the six (6) month period from January 2010 – June 2010).

## **3. MUNICIPALITIES OPERATING MULTIPLE LANDFILLS**

Municipalities that own and operate two or more Class 2 or 3 landfills must register each landfill with the WRARS Program. However, a municipality may submit one payment for the total waste disposed at multiple landfills based on the waste measurement procedures adopted.

## **4. REPORTING AND WRARS LEVY REMITTANCE**

In order to accommodate the ability of landfill operators to measure and report the amount of waste landfilled, the WRARS Program has established a tiered reporting process that provides a set of options for landfill operators to comply with the WRARS Levy remittance requirement. Accepted reporting methods include:

- 1) Weigh waste with a scale; or
- 2) Estimate waste using the volume to metric conversion factor set by the program and a recognized methodology (Section 3); or
- 3) Estimate waste based on the WRARS per capita waste factor (Section 4.1).

## **7. CONVERSIONS**

- 1 litre (L) = 0.0013 cubic yards (yd<sup>3</sup>)
- 1 cubic foot = 0.037 cubic yards (yd<sup>3</sup>)
- 1 cubic yard (yd<sup>3</sup>) = 0.765 cubic metres (m<sup>3</sup>)
- 1 kilogram (kg) = 2.2 pounds (lbs)
- 1 Tonne (T) = 1,000 kgs = 2,200 lbs
- 1 Tonne = 1.1 tons
- 1 ton = 2000 lbs