

Multi-Material Stewardship Western

Greenhouse Gas Reporting Webinar

Depot, Curbside, Multi-family Collection & Post-Collection Reporting

November 28, 2022

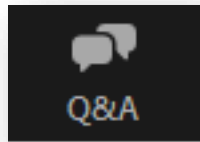


Agenda

- Webcast - Zoom
- Introduction: What, Why, When, Where
- What's new for 2022
- GHG reporting for depot programs
- GHG reporting for curbside & multi-family programs
- GHG reporting for post-collection
- Q&A
- Resources and Contacts

Webcast Information

- ① Main screen displays slides
- ② Speaker will be on video
- ③ Submit your questions using the Q&A button in toggle bar

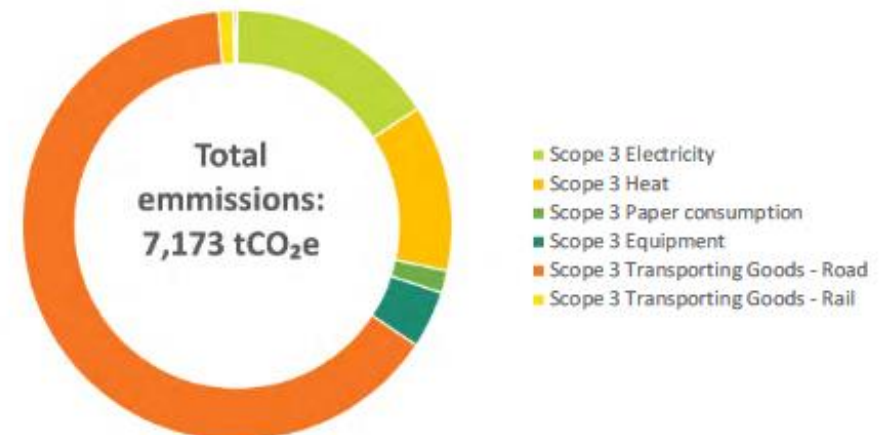
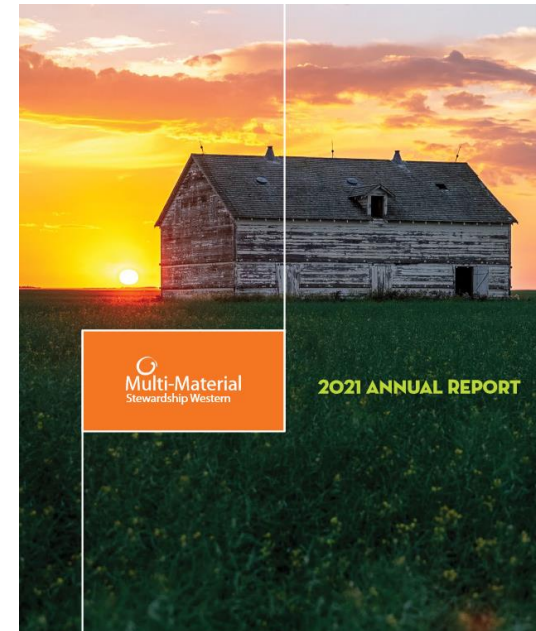


A screenshot of a webinar slide. The slide has a white background with a green and yellow header bar. The text on the slide reads: "Multi-Material Stewardship Western" (with a circled 1 above it), "Greenhouse Gas Reporting Webinar", "Depot, Curbside, Multi-family COLLECTION", and "November 23, 2021". At the bottom right, there is an image of various household items including a stack of papers, cans, and cleaning supplies. A grey rectangular box (with a circled 2 to its right) is positioned in the top right corner of the slide. At the bottom of the slide, there is a black bar with a "Q&A" button (with a circled 3 above it) and a "Leave" button on the right.

Technical issues? Send a note using the Q&A button

Introduction

- Thank you!
 - Another successful year of GHG reporting
 - See 2021 annual report for summary
- 2022 Reporting
 - Review some updates/improvements
 - **Submit data to WeRecycle Portal by January 31, 2023**
- Post-Collection webinar included
 - Materials on website GHG page



What is GHG?

- Compound gases that trap heat in the atmosphere
- GHG emissions are generated from the burning of fossil fuels across a variety of activities associated with the operation of your residential recycling program
- Also includes the emissions associated with the manufacturing of paper products (flyers, brochures, utility bill inserts, etc.) which may be used in the promotion and education portion of your residential recycling program

Why GHG Reporting?

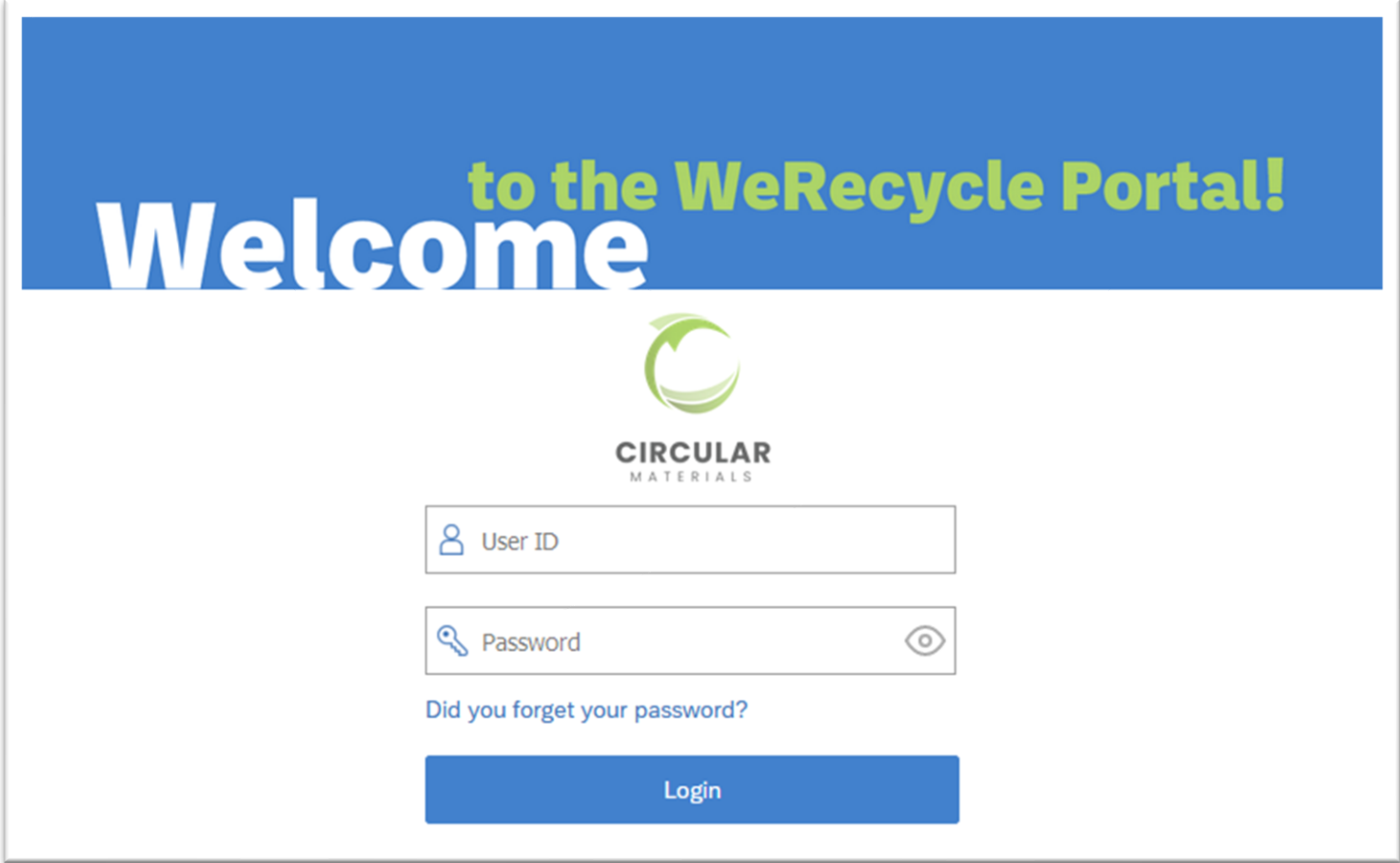
- Ministry of Environment's Waste Packaging and Paper Stewardship **Regulation**
- Data enables calculation of GHG emissions associated with the collection and processing of residential waste packaging and paper (WPP) in Saskatchewan, as outlined in the **Waste Packaging and Paper Stewardship Plan** (See section 4.6.2)
- GHG is a reporting obligation for collectors under the **Services Agreement** Section 7.2(b)

When are reports required?

- Annual schedule unchanged
 - Data can be submitted at frequency of your choosing
 - Minimum once yearly
- GHG report is due by **January 31, 2023** and will include GHG emissions data from **January 1, 2022 to December 31, 2022**









Where Do You Report GHG?



*Please refer to our GHG Portal User Guide for more information on submitting your GHG report via the WeRecycle Portal.

What's new for 2022

- **Headings More User Friendly**
 - Intuitive process to allocate own share of GHG's from data provided

| Service Type | Emission Type | % attributed to MMSW | Unit of Measure | Qty. attributed to MMSW | Unit of Measure | Originating Site | |
|--------------|-----------------------------------|----------------------|-----------------|-------------------------|-----------------|----------------------|---|
| GHG | Vehicle (Passenger) - Propane | 100 | Percentage | 550 | Litres | Test City SK S4P 3C8 |   |
| GHG | Vehicle (Passenger) - Natural Gas | <input type="text"/> | Percentage | <input type="text"/> | Litres | |   |
| GHG | Vehicle (Passenger) - Gasoline | <input type="text"/> | Percentage | <input type="text"/> | Litres | |   |

Cancel

What's new for 2022

- Emissions Categories Grouped
 - List of GHG emissions data categories are grouped by most commonly used/reported

The screenshot shows the 'Material Quantities' section of a reporting interface. It includes a header with 'Key in Your Report', 'Test Environment', and 'Multi-Material Stewardship Western'. Below the header, there are navigation buttons: 'Select a report', 'Material Quantities', and 'Report Submission'. The 'Material Quantities' section is highlighted with a red box and contains the following information:

Material Quantities
Test City SK - GREENHOUSE GAS - CURBSIDE (4700002582)
Document No: 2021GHG (1)

Buttons: Add Another Document, New Originating Site, Save for Later, Submit Report

*Document No: 2021GHG
*Reporting Period Start (D...): January 1, 2020
*Reporting Period End (D...): December 31, 2020
Reference: Optional
Comments: Optional

*Originating Site: Test City SK | 1234567 main ave , Regina , SK , S4P 3C8

| Service Type | Emission Type | % attributed to MMSW | Unit of Measure | Qty. attributed to MMSW | Unit of Measure | Originating Site | |
|--------------|-----------------------------------|----------------------|-----------------|-------------------------|-----------------|----------------------|--|
| GHG | Vehicle (Passenger) - Propane | 100 | Percentage | 550 | Litres | Test City SK S4P 3C8 | |
| GHG | Vehicle (Passenger) - Natural Gas | | Percentage | | Litres | | |
| GHG | Vehicle (Passenger) - Gasoline | | Percentage | | Litres | | |

Buttons: Cancel

What's new for 2022

- Reporting Reminders Quick Reference
 - Make sure you have correct login/password

greenhousegas@multimaterialsw.ca

- Make sure to calculate allocation from sub-contractor supplied data
- Review last year's reports



GHG Reporting – 2022 Reminders

MMSW is providing guidance on **three common issues** to support Haulers and Collectors providing accurate 2022 GHG information by January 31, 2023. Each topic includes links to the online Knowledge Base for more detailed information. Contact us for further assistance: greenhousegas@multimaterialsw.ca

Portal Login Credentials

Welcome to the WeRecycle Portal!

Has your GHG contact changed? Do you know your username to log into the [WeRecycle Portal](#)? You can reset your password on the Portal main page using the 'Forgot Password' link. Find more information about contact management [here](#)

Allocation %

Please confirm with your subcontractor(s) whether their supplied GHG data has had the allocation percentage applied to the quantity field. Information about the GHG Material Quantities table is available [here](#). When reporting on an emission type, the % allocated should be reflected in the quantity field.

Example: 1000L of Propane was used and 75% of that propane is attributed to your WPP program. 750L would be entered in the 'Qty. attributed to MMSW' field.

| Service Type | Emission Type | % attributed to MMSW | Unit of Measure | Qty. attributed to MMSW | Unit of Measure | Originating Site |
|--------------|-------------------------------|----------------------|-----------------|-------------------------|-----------------|------------------|
| GHG | Vehicle (Passenger) - Propane | 75 | Percentage | 750 | Litres | |

GHG Data Reporting - Collection

Depot, Curbside & Multi-family



GHG Data for Collection Report

- Generally, GHG data will come from three activities:
 - **Fleet** (collection vehicles),
 - **Facilities** (buildings, equipment, electricity, heating), and
 - **Supplies** (paper for recycling guides, etc.)

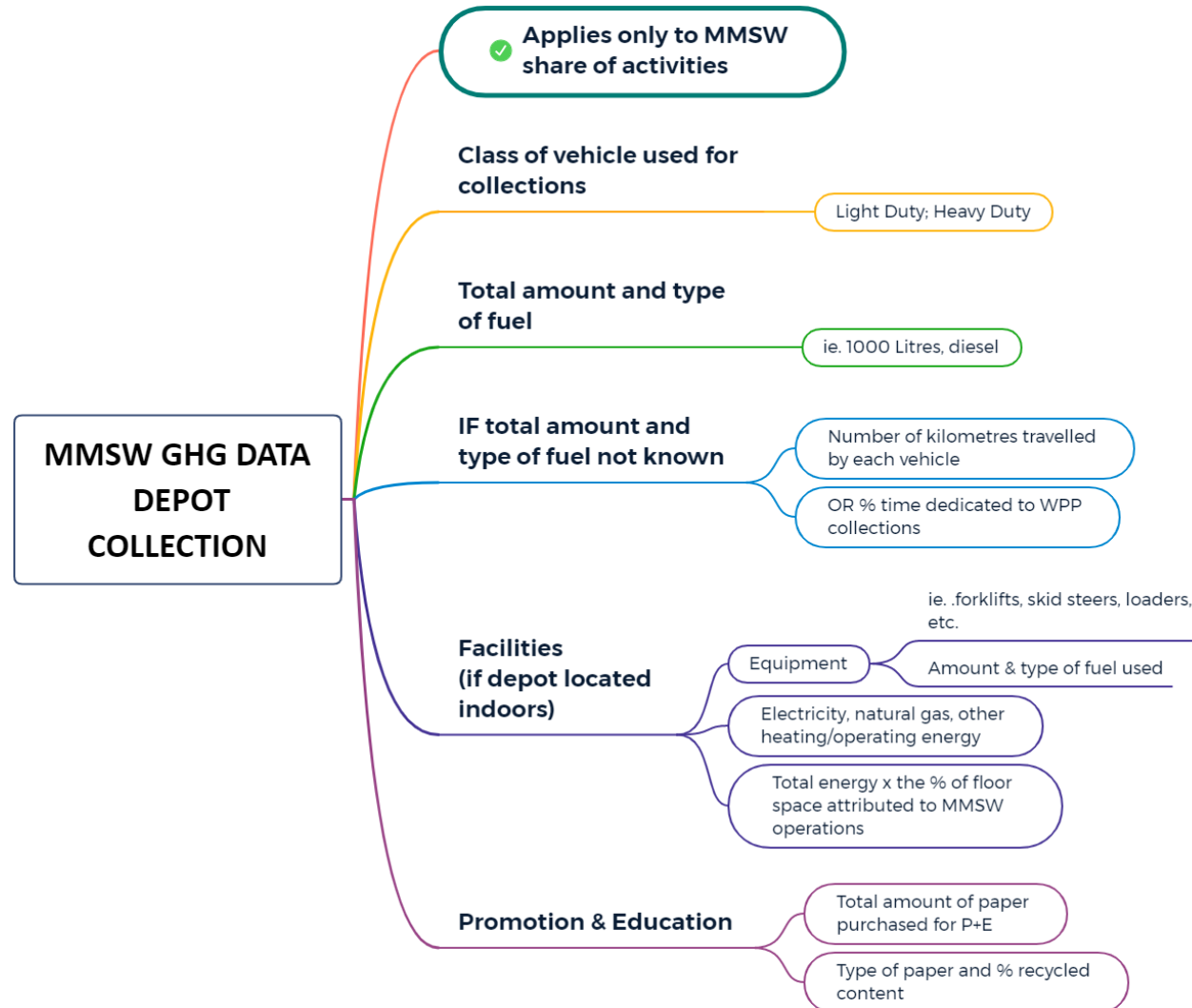
Working With Your Sub-Contractor

- As a municipality, regional waste authority or Indigenous community providing residential WPP recycling service, do you directly:
 - Collect WPP from residents via depot service?
 - Collect WPP from residents via curbside service?
- If the answer to any of the above is 'no', then you will need to work with your sub-contractor to obtain the required GHG data from those activities

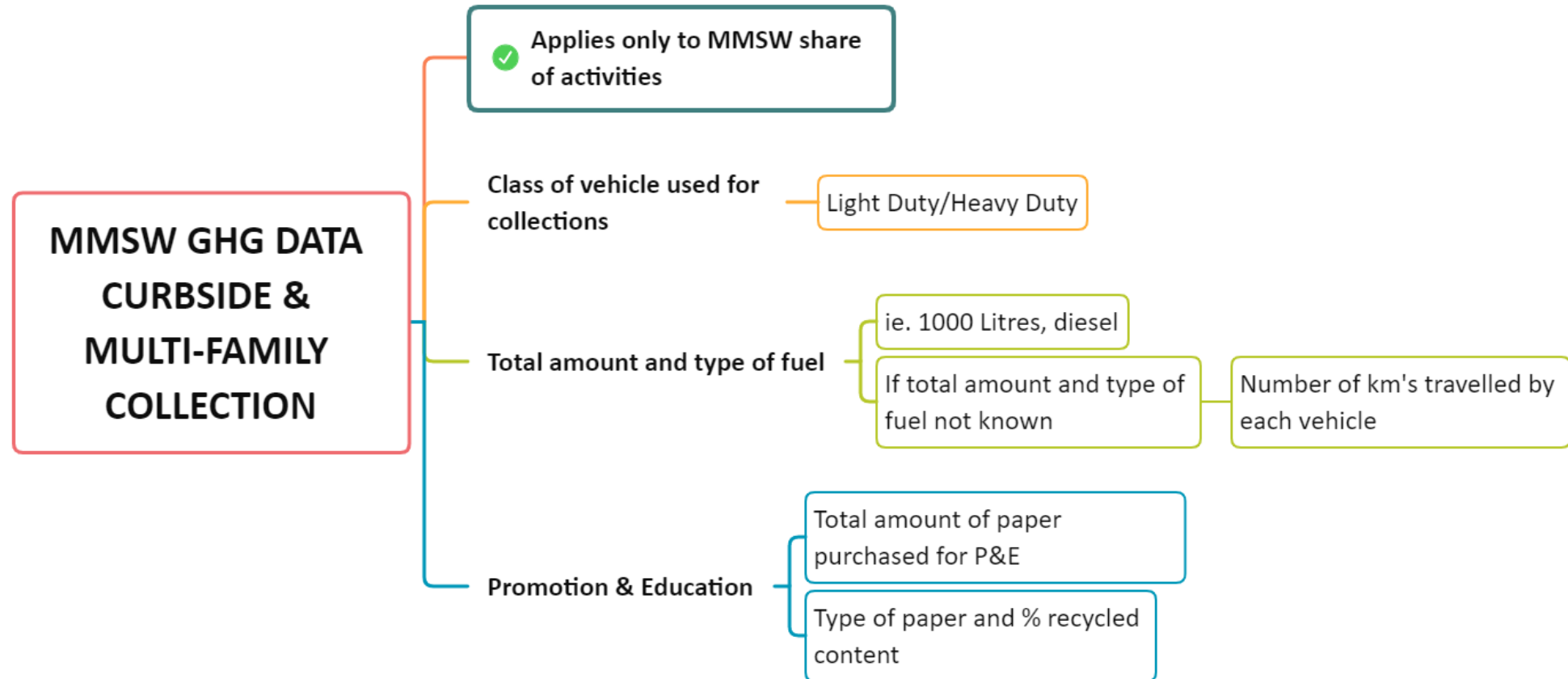
Regional Waste Authorities

- If you are a Regional Waste Authority, GHG data can be reported for your entire membership in aggregate.
- You do not need to report GHG data on a per-member basis.

GHG Reporting for Depot Programs



GHG Reporting for Curbside & Multi-family



Sort & Filter

Sort & Filter Functionality:

Select the upside-down pyramid to display filter options:

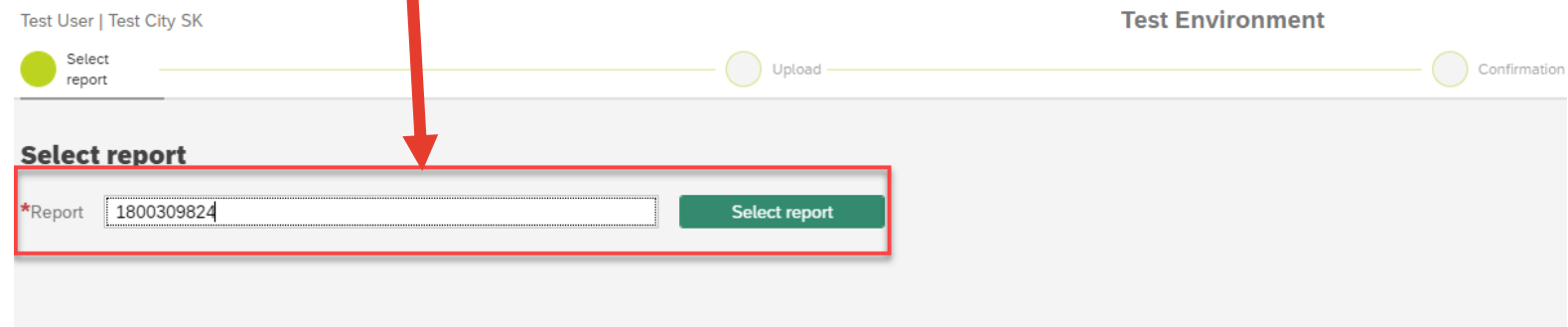
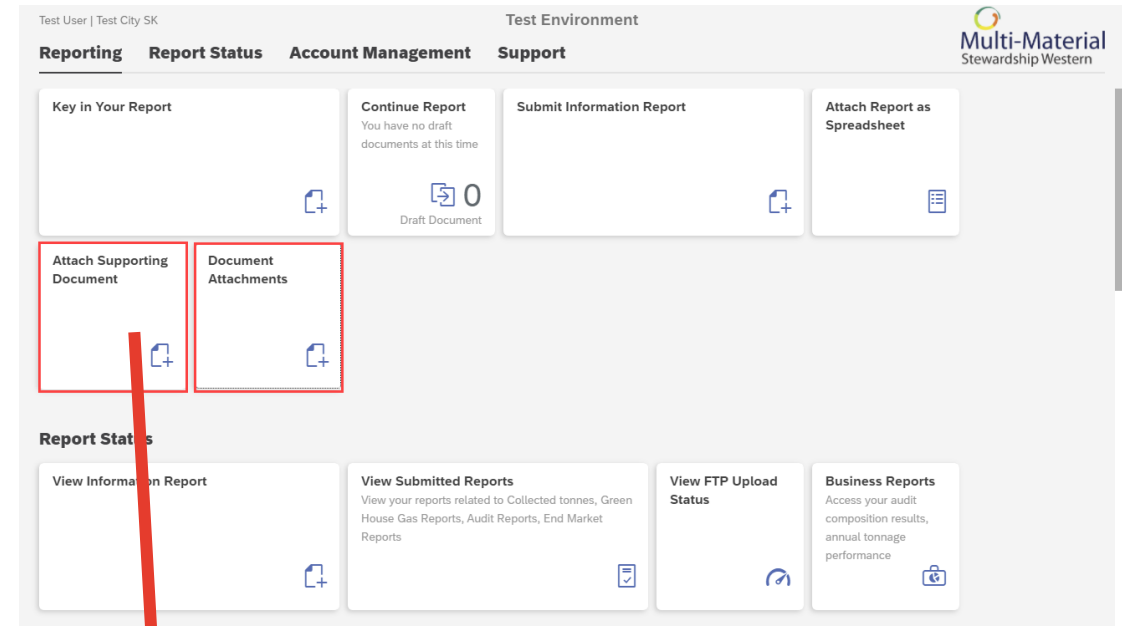
- Sort by ascending or descending emission type name
- Using the filter field: Type in your key word and hit 'enter'. To remove the filter criteria, select the icon again, delete the text and hit 'enter'.

The screenshot displays the 'Material Quantities' section of the Multi-Material Stewardship Western web application. The interface includes a navigation bar at the top with a search icon and a dropdown menu labeled 'Key in Your Report'. Below the navigation bar, there is a breadcrumb trail: 'Test User | Test City SK' and 'Test Environment'. The main content area shows the 'Material Quantities' section with a 'More Information' link and document details: 'Test City SK - GREENHOUSE GAS - CURBSIDE (4700002582)' and 'Document No: 2021GHG (2)'. There are four buttons: 'Add Another Document', 'New Originating Site', 'Save for Later', and 'Submit Report'. Below these are input fields for 'Document No:', 'Reporting Period Start (D...)', 'Reporting Period End (D...', 'Reference:', and 'Comments:'. The 'Originating Site' field contains 'Test City SK | 1234567 main ave , Regina , SK , S4P 3C8'. The table below has columns: 'Service Type', 'Emission Type', '% attributed to MMSW', 'Unit of Measure', 'Qty. attributed to M...', 'Unit of Measure', and 'Originating Site'. The table is filtered to show GHG emissions. Red boxes and numbers 1-4 highlight the sort and filter controls in the table header.

| Service Type | Emission Type | % attributed to MMSW | Unit of Measure | Qty. attributed to M... | Unit of Measure | Originating Site |
|--------------|--------------------------------|----------------------|-----------------|-------------------------|-----------------|----------------------|
| GHG | Sort Ascending | 100 | Percentage | 550 | Litres | Test City SK S4P 3C8 |
| GHG | Sort Descending | | Percentage | | Litres | |
| GHG | Filter | | Percentage | | Litres | |
| GHG | Vehicle (Passenger) - Electric | | Percentage | | Kilowatt hour | |

Methodology

- The *Attach Supporting Document* tile found on the home page is where documentation can be submitted in order to support and substantiate GHG claims.
- Please have your Report Number ready (1800****). This can be found in the View Submitted Reports section of the portal.



Year Over Year Comparison







1. Search by report number, contract description, submission date or status. Click 'Search' to populate the list of reports that matches the criteria entered.
2. The table will display the details for each report.
3. 'Show Details' will display an overview of the submitted report details. 'View PDF' will open a more thorough PDF version of the submitted report, which can then be downloaded.
4. 'Download List as PDF' will display a PDF version of the submitted report list.

The screenshot displays the 'View Submitted Reports' section of the Multi-Material Stewardship Western web application. The interface includes a search bar with filters for Report Number, Reference, Contract Number, Contract Description, and Submission/Sample Date. A 'Search' button is highlighted with a red arrow. Below the search bar is a table of submitted reports with columns for Report Number, Reference, Contract Number, Contract Description, Submission / Sample Date, Vendor Name, and Status. The first row is highlighted with a red box, and a red arrow points to the 'Show Details' and 'View PDF' buttons. A 'Download List as PDF' button is also visible in the top right corner of the table area.

| Report Num... | Reference | Contract Number | Contract Description | Submission / Sample Date | Vendor Name | Status | |
|---------------|-----------|-----------------|----------------------|--------------------------|--------------|------------------|-----------------------|
| 1800309851 | 663322 | 4700001406 | COLLECTION | Oct 28, 2021 | Test City SK | Not yet approved | Show Details View PDF |
| 1800309851 | Q12020 | 4700001406 | COLLECTION | Oct 28, 2021 | Test City SK | Not yet approved | Show Details View PDF |
| 1800309850 | 99886633 | 4700001406 | COLLECTION | Oct 27, 2021 | Test City SK | Not yet approved | Show Details View PDF |
| 1800309824 | 336655 | 4700002582 | GHG_CURBSIDE | Oct 25, 2021 | Test City SK | Not yet approved | Show Details View PDF |
| 1800309821 | 2021GHG | 4700002582 | GHG_CURBSIDE | Oct 22, 2021 | Test City SK | Not yet approved | Show Details View PDF |
| 1800309821 | WP3456 | 4700002582 | GHG_CURBSIDE | Oct 22, 2021 | Test City SK | Not yet approved | Show Details View PDF |

Fleet

- Class of Vehicle (s) used
 - Light Duty Truck
 - Heavy Duty
- Total amount and type of fuel consumed by each vehicle class (e.g. Heavy Duty vehicle; 1,000 liters of diesel)?

| Service Type | Emission Type | % attributed to MMSW | Unit of Measure | Qty. attributed to MMSW | Unit of Measure | Originating Site | |
|--------------|-----------------------------------|----------------------|-----------------|-------------------------|-----------------|----------------------|---|
| GHG | Vehicle (Passenger) - Propane | 100 | Percentage | 550 | Litres | Test City SK S4P 3C6 |   |
| GHG | Vehicle (Passenger) - Natural Gas | | Percentage | | Litres | |   |
| GHG | Vehicle (Passenger) - Gasoline | | Percentage | | Litres | |   |

Cancel

Fleet Mileage

- If the total amount of fuel consumed per vehicle class is not available, then we will need to know the number of kilometers travelled by each vehicle type (i.e. total mileage).
- Reporting by km's is on a case by case basis

Test User | Test City SK Test Environment

Select a report Material Quantities Report Submission

Material Quantities

[More Information](#)
 Test City SK - GREENHOUSE GAS - CURBSIDE (47000000000)
 Document No: [New Document](#) (1)

[Add Another Document](#)
[New Originating Site](#)
[Save for Later](#)
[Submit Report](#)

*Document No: *Reporting Period Start (DDMMYYYY): *Reporting Period End (DDMMYYYY): Reference: Comments:

*Originating Site:

[More Information](#)

| Service Type | Emission Type | % attributed to MMSW | Unit of Measure | Quantity | Unit of Measure | Originating Site |
|--------------|--------------------------------------|----------------------|-----------------|----------------------|-----------------|---|
| GHG | Vehicle (Heavy Duty) - Biodiesel | <input type="text"/> | Percentage | <input type="text"/> | Litres | <input type="button" value="↺"/> <input type="button" value="🗑"/> |
| GHG | Vehicle (Heavy Duty) - CNG | <input type="text"/> | Percentage | <input type="text"/> | Cubic meter | <input type="button" value="↺"/> <input type="button" value="🗑"/> |
| GHG | Vehicle (Heavy Duty) - Diesel | <input type="text"/> | Percentage | <input type="text"/> | Litres | <input type="button" value="↺"/> <input type="button" value="🗑"/> |
| GHG | Vehicle (Heavy Duty) - Electric | <input type="text"/> | Percentage | <input type="text"/> | Kilowatt hours | <input type="button" value="↺"/> <input type="button" value="🗑"/> |
| GHG | Vehicle (Heavy Duty) - Gasoline | <input type="text"/> | Percentage | <input type="text"/> | Litres | <input type="button" value="↺"/> <input type="button" value="🗑"/> |
| GHG | Vehicle (Heavy Duty) - Natural Gas | <input type="text"/> | Percentage | <input type="text"/> | Litres | <input type="button" value="↺"/> <input type="button" value="🗑"/> |
| GHG | Vehicle (Heavy Duty) - Propane | <input type="text"/> | Percentage | <input type="text"/> | Litres | <input type="button" value="↺"/> <input type="button" value="🗑"/> |
| GHG | Vehicle (Heavy) - Biodiesel Distance | <input type="text"/> | Percentage | <input type="text"/> | Kilometer | <input type="button" value="↺"/> <input type="button" value="🗑"/> |
| GHG | Vehicle (Heavy) - Biodiesel Weight | <input type="text"/> | Percentage | <input type="text"/> | Kg | <input type="button" value="↺"/> <input type="button" value="🗑"/> |
| GHG | Vehicle (Heavy) - CNG Distance | <input type="text"/> | Percentage | <input type="text"/> | Kilometer | <input type="button" value="↺"/> <input type="button" value="🗑"/> |
| GHG | Vehicle (Heavy) - CNG Weight | <input type="text"/> | Percentage | <input type="text"/> | Kg | <input type="button" value="↺"/> <input type="button" value="🗑"/> |
| GHG | Vehicle (Heavy) - Diesel Distance | 100 | Percentage | 800 | Kilometer | <input type="button" value="↺"/> <input type="button" value="🗑"/> |
| GHG | Vehicle (Heavy) - Diesel Weight | <input type="text"/> | Percentage | <input type="text"/> | Kg | <input type="button" value="↺"/> <input type="button" value="🗑"/> |
| GHG | Vehicle (Heavy) - Electric Distance | <input type="text"/> | Percentage | <input type="text"/> | Kilometer | <input type="button" value="↺"/> <input type="button" value="🗑"/> |

Fleet: Maintenance & Staff Activity







- Include fuel usage associated with maintenance or staff activity like site inspections or cart repair/drop-off, etc.

Allocating Your Share of GHG



Allocating for Share of GHG

- MMSW recognizes that your/sub-contractor's collection activities may not be entirely related to your MMSW-based materials, and therefore requires that you report only data as it relates to MMSW's allocation of the overall activities.

| Service Type | Emission Type | % attributed to MMSW | Unit of Measure | Qty. attributed to MMSW | Unit of Measure | Originating Site | |
|--------------|-----------------------------------|----------------------|-----------------|-------------------------|-----------------|----------------------|---|
| GHG | Vehicle (Passenger) - Propane | 100 | Percentage | 550 | Litres | Test City SK S4P 3C8 |   |
| GHG | Vehicle (Passenger) - Natural Gas | | Percentage | | Litres | |   |
| GHG | Vehicle (Passenger) - Gasoline | | Percentage | | Litres | |   |

Cancel

Curbside & Multifamily Collections



Allocation Scenario 1 -- Collection Vehicle Activity

- If the collection vehicle used for your residential WPP recycling program also collects other non-WPP materials (ie. organics, garbage, commercial material, etc.) during the year, you must allocate the share of fuel or kilometres driven to only the activities involved with collection of WPP for your residential recycling program

Allocation Scenario 1 -- Example

| | |
|---|-------|
| Collection truck A used for WPP and garbage on different days... | |
| Total annual fuel used for collection | 550 L |
| Annual fuel used for collection of residential WPP | 550 L |
| Annual fuel used for collection of garbage | 0 L |
| Please report 100% & 550 L fuel usage to MMSW | |

Key in Your Report

Test User | Test City SK

Test Environment

Multi-Material Stewardship Western

Select a report | Material Quantities | Report Submission

Material Quantities

[More Information](#)

Test City SK - GREENHOUSE GAS - CURBSIDE (4700002582)
Document No: 2021GHG (1)

[Add Another Document](#) [New Originating Site](#) [Save for Later](#) [Submit Report](#)

*Document No: 2021GHG *Reporting Period Start (D...): January 1, 2020 *Reporting Period End (D...): December 31, 2020 Reference: Optional Comments: Optional

*Originating Site: Test City SK | 1234567 main ave, Regina, SK, S4P 3C8

[More Information](#)

| Service Type | Emission Type | % attributed to MMSW | Unit of Measure | Qty. attributed to MMSW | Unit of Measure | Originating Site |
|--------------|-----------------------------------|----------------------|-----------------|-------------------------|-----------------|----------------------|
| GHG | Vehicle (Passenger) - Propane | 100 | Percentage | 550 | Litres | Test City SK S4P 3C8 |
| GHG | Vehicle (Passenger) - Natural Gas | | Percentage | | Litres | |
| GHG | Vehicle (Passenger) - Gasoline | | Percentage | | Litres | |

Cancel

Allocation Scenario 2 – Shared Route

- If applicable, check with your sub-contractor to determine if your collected WPP is on a shared route with other collectors. If it is, the amount of GHGs generated by collections activities will need to be allocated based on your annual share of households on a full truck.
- If share of households is unknown, you may alternatively allocate based on percent share of total weight of WPP.

Allocation Scenario 2 -- Example

| | |
|---------------------------------------|----------------------------|
| Total Fuel Usage = 750 L | |
| Community A Households | 80 |
| Community B Households | 20 |
| Total Households On Full Truck | 100 |
| Community A Share GHG | 80% x 750 L = 600 L |
| Community B Share GHG | 20% x 750 L = 150 L |

Test Environment

GREENHOUSE GAS - END MARKET TRANSPORTATION (4700002584)

Material Quantities

Document No: New Document (1)

*Document No: *Reporting Period Start (DDMMYY...): *Reporting Period End (DDMMYY...): Reference: Comments:

*Originating Site: Community A

| Service Type | Emission Type | % attributed to MMSW | Unit of Measure | Quantity | Unit of Measure | Originating Site |
|--------------|------------------------------------|----------------------|-----------------|----------|-----------------|------------------|
| GHG | Vehicle (Light Duty) - Diesel | | Percentage | | Litres | |
| GHG | Vehicle (Light Duty) - Natural Gas | | Percentage | | Litres | |
| GHG | Vehicle (Light Duty) - Electric | | Percentage | | Kilowatt hours | |
| GHG | Vehicle (Heavy Duty) - Biodiesel | | Percentage | | Litres | |
| GHG | Vehicle (Heavy Duty) - Diesel | 80 | Percentage | 600 | Litres | |
| GHG | Vehicle (Heavy Duty) - Natural Gas | | Percentage | | Litres | |
| GHG | Vehicle (Heavy Duty) - Electric | | Percentage | | Kilowatt hours | |

Test Environment

GREENHOUSE GAS - END MARKET TRANSPORTATION (4700002584)

Material Quantities

Document No: New Document (1)

*Document No: *Reporting Period Start (DDMMYY...): *Reporting Period End (DDMMYY...): Reference: Comments:

*Originating Site: Community B

| Service Type | Emission Type | % attributed to MMSW | Unit of Measure | Quantity | Unit of Measure | Originating Site |
|--------------|------------------------------------|----------------------|-----------------|----------|-----------------|------------------|
| GHG | Vehicle (Light Duty) - Diesel | | Percentage | | Litres | |
| GHG | Vehicle (Light Duty) - Natural Gas | | Percentage | | Litres | |
| GHG | Vehicle (Light Duty) - Electric | | Percentage | | Kilowatt hours | |
| GHG | Vehicle (Heavy Duty) - Biodiesel | | Percentage | | Litres | |
| GHG | Vehicle (Heavy Duty) - Diesel | 20 | Percentage | 150 | Litres | |
| GHG | Vehicle (Heavy Duty) - Natural Gas | | Percentage | | Litres | |

Additional Reporting Measures

DEPOT collection programs only



Facilities

- GHG from facilities applies only if your/sub-contractor's depot is located inside a building or is outdoors and uses energy for lighting.

Electricity Consumption

| Month | Usage (kWh) |
|---------|-------------|
| January | 1,394 |

Test Environment

GREENHOUSE GAS - END MARKET TRANSPORTATION (4700002584)

Material Quantities

City of Regina - GREENHOUSE GAS - DEPOT (4700002584)
 Document No: [New Document](#) (1)

*Document No:
 *Reporting Period Start (DDMMYY...):
 *Reporting Period End (DDMMYY...):
 Reference:
 Comments:

*Originating Site:

| Service Type | Emission Type | % attributed to MMSW | Unit of Measure | Quantity | Unit of Measure |
|--------------|-------------------------|----------------------|-----------------|----------------------|-----------------|
| GHG | Indoor floor space | <input type="text"/> | Percentage | <input type="text"/> | Square foot |
| GHG | Outdoor floor space | <input type="text"/> | Percentage | <input type="text"/> | Square foot |
| GHG | Electricity Consumption | 100 | Percentage | 1394 | Kilowatt hours |
| GHG | Heating - Natural Gas | <input type="text"/> | Percentage | <input type="text"/> | Cubic meter |
| GHG | Heating - Natural Gas | <input type="text"/> | Percentage | <input type="text"/> | Gigajoule |
| GHG | Heating - Butane | <input type="text"/> | Percentage | <input type="text"/> | Litres |
| GHG | Heating - Diesel | <input type="text"/> | Percentage | <input type="text"/> | Litres |

Heating Consumption

- Record how much is being consumed at each facility

| Fuel Type | Unit |
|---|-------------------|
| Natural Gas | GJ/m ³ |
| Diesel, kerosene, light fuel oil, heavy fuel oil, propane, ethane, butane | L |

Equipment

- We would like to know what kind(s) of fossil fuel-based equipment you use at your/sub-contractor's depot.
- Remember, this is only equipment that is used for the collection of WPP, including staff activity like site inspections or maintenance
- forklifts,
- skid steers,
- loaders, etc.?
- gasoline,
- diesel,
- liquefied petroleum gas (propane),
- natural gas?

Equipment

- Amount of fuel purchased for your/sub-contractor's equipment.
 - record the total in litres
- If different pieces of equipment use different fuels, please record the equipment and fuel usage separately.
- Please also include the percent of the time this type of equipment is used for MMSW-related use.

Example – Equipment

| | | | |
|--|-----------------------------|--|-----------------------------|
| Type of Equipment | Forklift | Type of Equipment | Front-end loader |
| % of the time dedicated to MMSW materials | 25% | % of the time dedicated to MMSW materials | 10% |
| Type of Fuel Used | Diesel | Type of Fuel Used | Diesel |
| Month | Total Fuel Usage (L) | Month | Total Fuel Usage (L) |
| January | 398 | January | 612 |
| January (MMSW allocation) | 398 x .25 = 99.50 L | January (MMSW allocation) | 612 x .10 = 61 L |

Material Quantities

Document No: Test12345 (1)

*Document No: Test12345

*Reporting Period Start (DDMMYY...): January 1, 2020

*Reporting Period End (DDMMYY...): January 31, 2020

Reference:

Comments: Jan - GHG - Equipment data

| Service Type | Emission Type | % attributed to MMSW | Unit of Measure | Quantity | Unit of Measure |
|--------------|------------------------------|----------------------|-----------------|----------|-----------------|
| GHG | Forklift - Propane | | Percentage | | Litres |
| GHG | Forklift - CNG | | Percentage | | Cubic meter |
| GHG | Forklift - Biodiesel | | Percentage | | Litres |
| GHG | Forklift - Diesel | 25 | Percentage | 99.5 | Litres |
| GHG | Forklift - Natural Gas | | Percentage | | Litres |
| GHG | Forklift - Electricity | | Percentage | | Kilowatt hours |
| GHG | Front End Loader - CNG | | Percentage | | Cubic meter |
| GHG | Front End Loader - Biodiesel | | Percentage | | Litres |
| GHG | Front End Loader - Diesel | 10 | Percentage | 61 | Litres |

GHG Paper Use: Depot, Curbside & Multi-family



Paper Use

- How much paper by weight has been purchased for printed packaging and paper product recycling brochures, pamphlets, etc.
- The paper type must be known as well as the percent of recycled content
- Please divide your total volume of paper purchased by the number of pages allocated to recycling of paper and packaging only.

Example Paper Types

| | |
|---------------------------|--|
| Copy paper | Copy paper, inkjet/laser paper, letterhead, stationery, some higher-end notebook and lined writing paper, envelopes, fine book papers, text and cover grades (often beautiful designer papers), report covers, “post-it” notes, some brochures, invitations, some business cards, some menus |
| Catalog (High-End) | High-end catalogs, magazines, luxury advertising, and brochures |
| Newsprint | Newspaper, newsprint, directory papers (e.g., phone books), inexpensive paperback books, some lined writing papers |
| Catalog (Mass Mkt) | Mass-market catalogs and magazines, mass-market advertising on “slick” paper |
| Newspaper inserts | Newspaper inserts, grocery and drug store advertising papers, some bulk mailbox advertisements, some mass-market catalogs and magazines |

Post-Collection GHG Reporting



What GHG Data Do You Report for Post-collection?

- Generally, GHG data will come from three activities:
 - **Hauling** (transportation of WPP to sorting facilities);
 - **Facilities** (buildings and equipment for processing WPP); and
 - **Shipping to End Markets** (transportation of WPP to markets for reuse).

Regional Waste Authorities

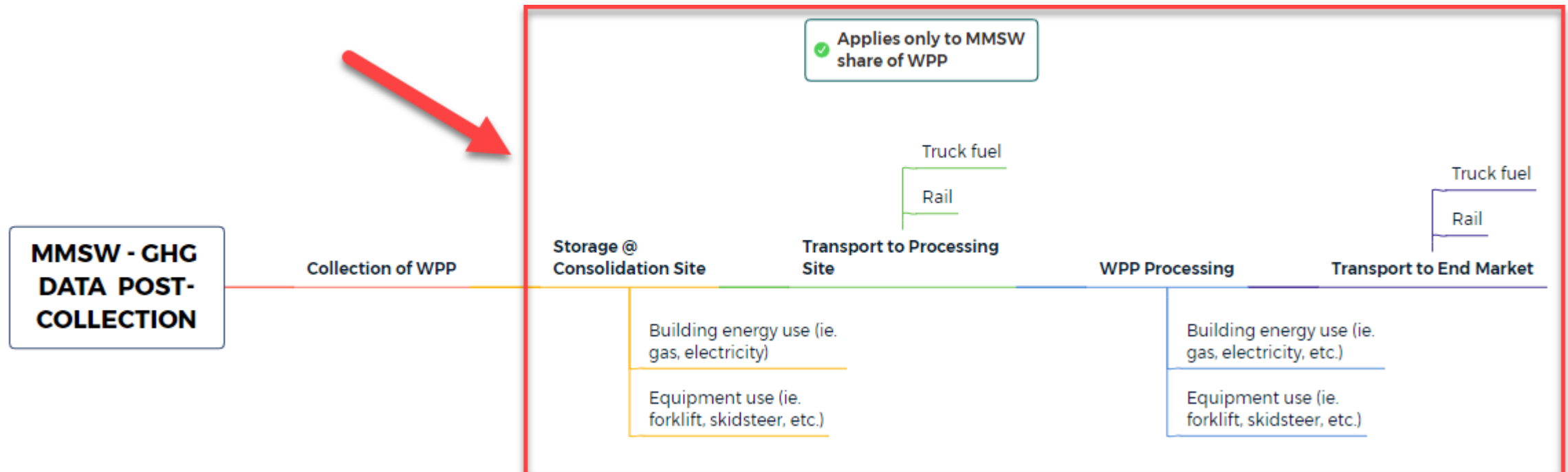
- If you are a Regional Waste Authority, GHG data can be reported for your entire membership in aggregate.
- You do not need to report GHG data on a per-member basis.

Working With Your Sub-Contractor

- As a municipality, regional waste authority or First Nations community, do you directly:
 - Transport collected WPP to a receiving facility such as a consolidation site or a material recovery facility (MRF)?
 - Operate/own a receiving facility such as a consolidation site or MRF?
 - Process or sort collected WPP into marketable categories?
 - Sell and ship collected WPP to markets for reuse?

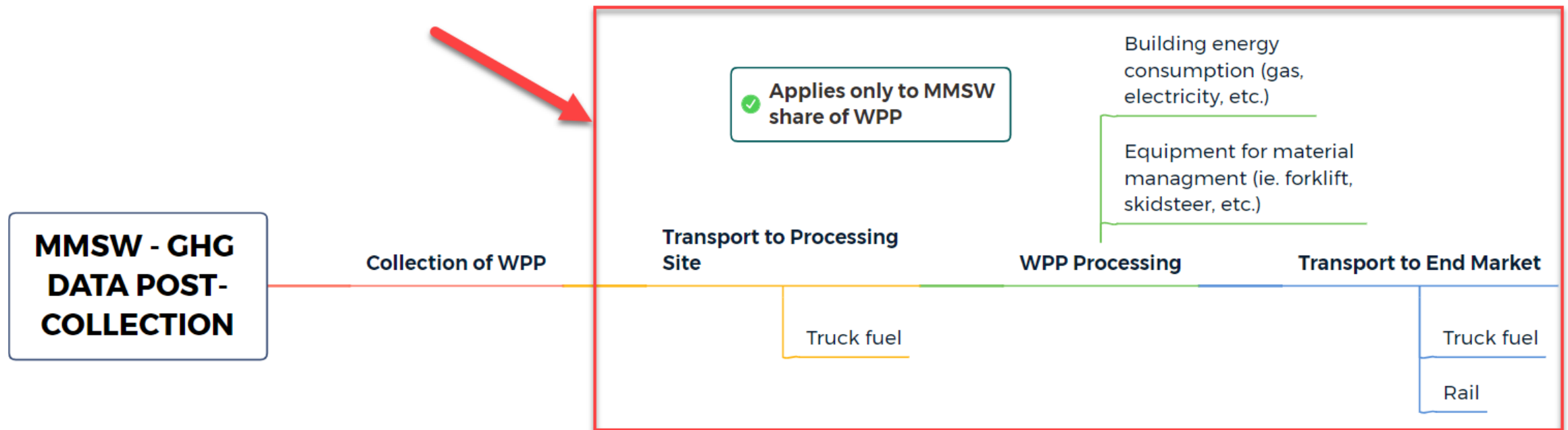
Post-Collection Boundaries Type 1

- Post-Collection refers to any material management activities that take place after initial collection of WPP.

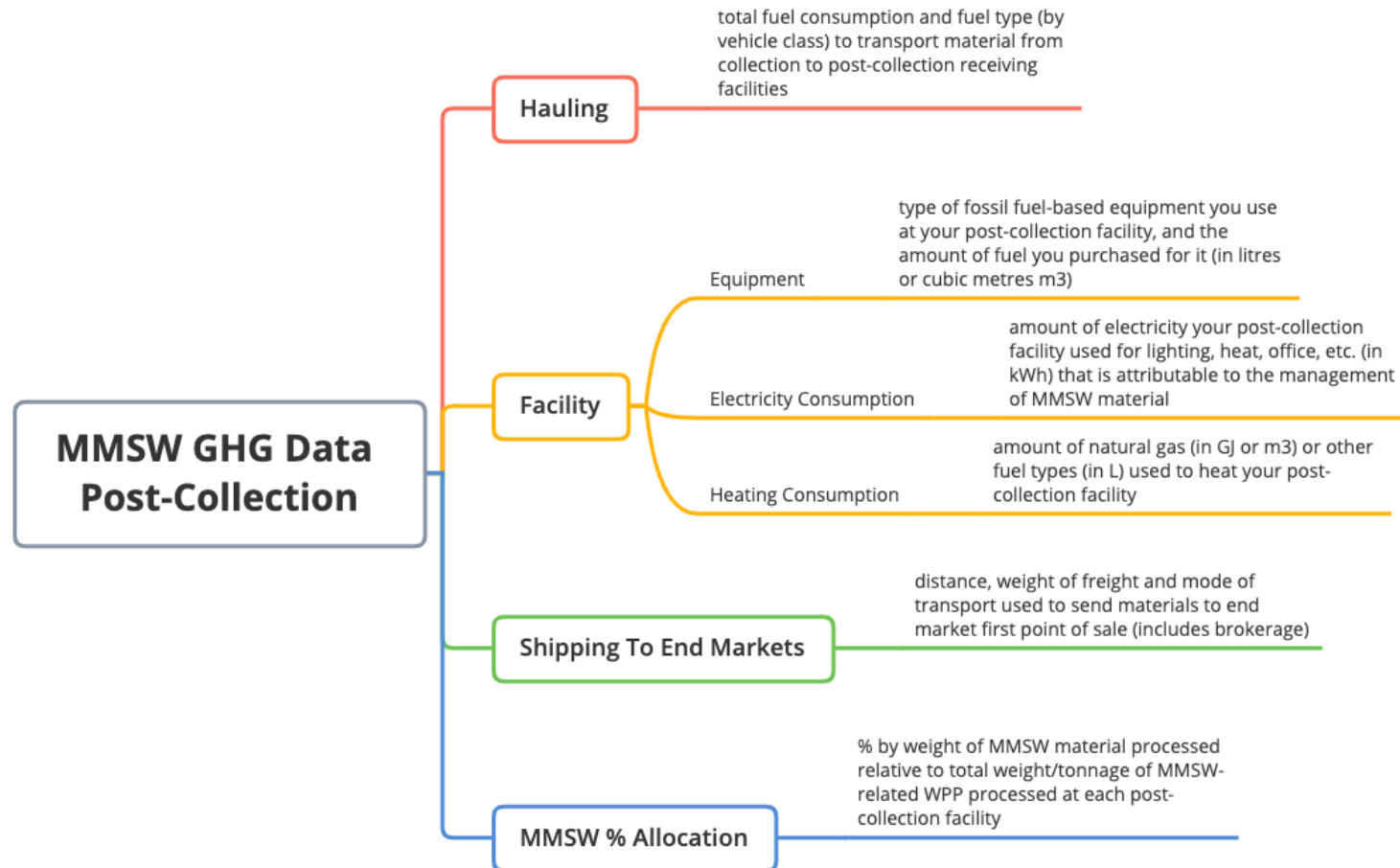


Post-Collection Boundaries Type 2

- Or, material may be hauled directly to a processing facility for sorting and sale to remanufacturing markets.



What GHG Data Do You Report for Post-collection?



Upload Spreadsheet

- Collectors have the option to use this spreadsheet to enter GHG data then upload all information at once

The screenshot displays the user interface of the Multi-Material Stewardship Western application. At the top, the user is identified as 'Test User | Test City SK' and the environment is 'Test Environment'. The navigation menu includes 'Reporting', 'Report Status', 'Account Management', and 'Support'. The main content area features five primary action cards: 'Key in Your Report', 'Continue Report' (showing 0 draft documents), 'Submit Information Report', 'Attach Report as Spreadsheet' (highlighted with a red border), and 'Attach Supporting Document'. A 'Document Attachments' section is also visible at the bottom left. The Multi-Material Stewardship Western logo is located in the top right corner.

Sort & Filter

Sort & Filter Functionality:

Select the upside-down pyramid to display filter options:

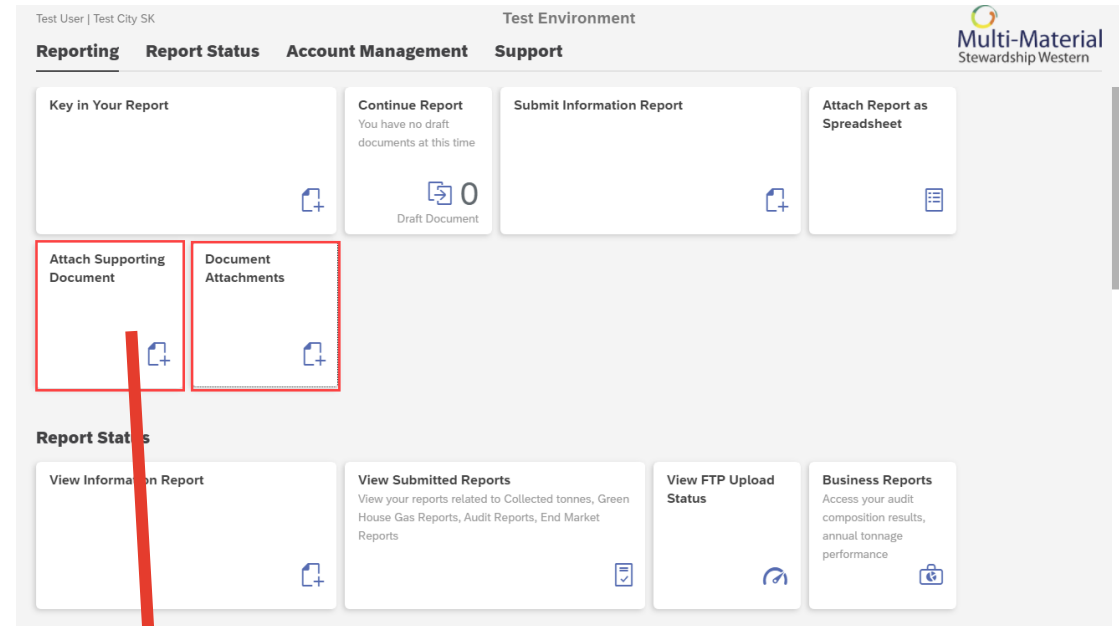
- Sort by ascending or descending emission type name
- Using the filter filed: Type in your key word and hit 'enter'. To remove the filter criteria, select the icon again, delete the text and hit 'enter'.

The screenshot displays the 'Material Quantities' section of the Multi-Material Stewardship Western web application. The interface includes a navigation bar with 'Key in Your Report' and a search icon. Below the navigation bar, there are three progress indicators: 'Select a document', 'Material Quantities', and 'Report Submission'. The 'Material Quantities' section is titled and includes a 'More Information' link. Below the title, there are several buttons: 'Add Another Document', 'New Originating Site', 'Save for Later', and 'Submit Report'. The main content area contains a form with fields for 'Document No.' (2021GHG), 'Reporting Period Start (D...)' (January 1, 2020), 'Reporting Period End (D...)' (December 31, 2020), 'Reference:' (Optional), and 'Comments:' (Optional). Below the form, there is a field for 'Originating Site:' with the text 'Test City SK | 1234567 main ave , Regina , SK , S4P 3C8'. The bottom part of the screenshot shows a table with columns: 'Service Type', 'Emission Type', '% attributed to MMSW', 'Unit of Measure', 'Qty. attributed to MMSW', 'Unit of Measure', and 'Originating Site'. The table has four rows of data. The first row is highlighted with a red box and contains the following values: GHG, Sort Ascending, 100, Percentage, 550, Litres, Test City SK S4P 3C8. The second row contains: GHG, Sort Descending, [empty], Percentage, [empty], Litres. The third row contains: GHG, Filter [empty], [empty], Percentage, [empty], Litres. The fourth row contains: GHG, Vehicle (Passenger), Electric, [empty], Percentage, [empty], Kilowatt hours. The table also includes icons for refresh and delete for each row. A 'Cancel' button is located at the bottom right of the table area.

| Service Type | Emission Type | % attributed to MMSW | Unit of Measure | Qty. attributed to MMSW | Unit of Measure | Originating Site |
|--------------|-------------------------------|----------------------|-----------------|-------------------------|-----------------|----------------------|
| GHG | Sort Ascending | 100 | Percentage | 550 | Litres | Test City SK S4P 3C8 |
| GHG | Sort Descending | | Percentage | | Litres | |
| GHG | Filter | | Percentage | | Litres | |
| GHG | Vehicle (Passenger), Electric | | Percentage | | Kilowatt hours | |

Methodology

- The *Attach Supporting Document* tile found on the home page is where documentation can be submitted in order to support and substantiate GHG claims.
- Please have your Report Number ready (1800****). This can be found in the View Submitted Reports section of the portal.



Test User | Test City SK Test Environment

Select report Upload Confirmation

Select report

*Report

Year Over Year Comparison

1. Search by report number, contract description, submission date or status. Click 'Search' to populate the list of reports that matches the criteria entered.
2. The table will display the details for each report.
3. 'Show Details' will display an overview of the submitted report details. 'View PDF' will open a more thorough PDF version of the submitted report, which can then be downloaded.
4. 'Download List as PDF' will display a PDF version of the submitted report list.

The screenshot displays the Multi-Material Stewardship Western web application interface. The top navigation bar includes 'Reporting', 'Report Status', 'Account Management', and 'Support'. The main content area is divided into several sections: 'Key In Your Report', 'Continue Report', 'Submit Information Report', 'Attach Report as Spreadsheet', 'Attach Supporting Document', and 'Document Attachments'. Below this is the 'Report Status' section, which includes 'View Information Report', 'View Submitted Reports' (highlighted with a red box and an arrow), 'View FTP Upload Status', and 'Business Reports'. The 'Account Management' section is partially visible at the bottom.

The second part of the screenshot shows the 'View Submitted Reports' search interface. It features a search bar with the following fields: 'Report Number: From - To', 'Reference Reference', 'Contract Number Contract Number', 'Contract Description Contract Description', and 'Submission/Sample Date: October 01, 2021 - October 28, 2021'. There is also a 'Status' dropdown menu and a 'Maximum Hits' field set to 100. A 'Search' button is highlighted with a red arrow. A 'Download List as PDF' button is located at the bottom right of the search area.

Below the search interface is a table of submitted reports. The table has the following columns: 'Report Num...', 'Reference', 'Contract Number', 'Contract Description', 'Submission / Sample Date', 'Vendor Name', and 'Status'. The first row is highlighted with a red box and a red circle '2'. The 'Status' column for the first row contains a clock icon and the text 'Not yet approved'. To the right of the first row, there are two buttons: 'Show Details' and 'View PDF', which are also highlighted with a red box and a red circle '3'. A red circle '1' is placed near the search bar, and a red circle '4' is placed near the 'Download List as PDF' button.

| Report Num... | Reference | Contract Number | Contract Description | Submission / Sample Date | Vendor Name | Status |
|---------------|-----------|-----------------|----------------------|--------------------------|--------------|------------------|
| 1800309851 | 663322 | 4700001406 | COLLECTION | Oct 28, 2021 | Test City SK | Not yet approved |
| 1800309851 | Q12020 | 4700001406 | COLLECTION | Oct 28, 2021 | Test City SK | Not yet approved |
| 1800309850 | 99886633 | 4700001406 | COLLECTION | Oct 27, 2021 | Test City SK | Not yet approved |
| 1800309824 | 336655 | 4700002582 | GHG_CURBSIDE | Oct 25, 2021 | Test City SK | Not yet approved |
| 1800309821 | 2021GHG | 4700002582 | GHG_CURBSIDE | Oct 22, 2021 | Test City SK | Not yet approved |
| 1800309821 | WP3456 | 4700002582 | GHG_CURBSIDE | Oct 22, 2021 | Test City SK | Not yet approved |

Fleet

- Class of Vehicle (s) used
 - Light Duty Truck
 - Heavy Duty
- Total amount and type of fuel consumed by each vehicle class (e.g. Heavy Duty vehicle; 1,000 liters of diesel)?

Test User | Test City SK

Test Environment

Select a report | Material Quantities | Report Submission

Material Quantities

Test City SK - GREENHOUSE GAS - CURBSIDE (47) (2)
Document No: [New Document](#) (1)

[Add Another Document](#) [New Originating Site](#) [Save for Later](#) [Submit Report](#)

*Document No: *Reporting Period Start (DDMMYYYY): *Reporting Period End (DDMMYYYY): Reference: Comments:

*Originating Site:

Material Quantities Table:

| Service Type | Emission Type | % attributed to MMSW | Unit of Measure | Quantity | Unit of Measure | Originating Site |
|--------------|--------------------------------------|----------------------|-----------------|----------------------|-----------------|------------------|
| GHG | Vehicle (Heavy Duty) - Biodiesel | <input type="text"/> | Percentage | <input type="text"/> | Litres | |
| GHG | Vehicle (Heavy Duty) - CNG | <input type="text"/> | Percentage | <input type="text"/> | Cubic meter | |
| GHG | Vehicle (Heavy Duty) - Diesel | 100 | Percentage | 1000 | Litres | |
| GHG | Vehicle (Heavy Duty) - Electric | <input type="text"/> | Percentage | <input type="text"/> | Kilowatt hours | |
| GHG | Vehicle (Heavy Duty) - Gasoline | <input type="text"/> | Percentage | <input type="text"/> | Litres | |
| GHG | Vehicle (Heavy Duty) - Natural Gas | <input type="text"/> | Percentage | <input type="text"/> | Litres | |
| GHG | Vehicle (Heavy Duty) - Propane | <input type="text"/> | Percentage | <input type="text"/> | Litres | |
| GHG | Vehicle (Heavy) - Biodiesel Distance | <input type="text"/> | Percentage | <input type="text"/> | Kilometer | |
| GHG | Vehicle (Heavy) - Biodiesel Weight | <input type="text"/> | Percentage | <input type="text"/> | Kg | |
| GHG | Vehicle (Heavy) - CNG Distance | <input type="text"/> | Percentage | <input type="text"/> | Kilometer | |
| GHG | Vehicle (Heavy) - CNG Weight | <input type="text"/> | Percentage | <input type="text"/> | Kg | |
| GHG | Vehicle (Heavy) - Diesel Distance | <input type="text"/> | Percentage | <input type="text"/> | Kilometer | |
| GHG | Vehicle (Heavy) - Diesel Weight | <input type="text"/> | Percentage | <input type="text"/> | Kg | |
| GHG | Vehicle (Heavy) - Electric Distance | <input type="text"/> | Percentage | <input type="text"/> | Kilometer | |

Hauling Mileage

- If the total amount and type of fuel consumed per vehicle class is not available, then we will need to know the number of kilometers travelled by each vehicle type (i.e. total mileage) in order to calculate the estimated volume of fuel consumed.
- Reporters can upload their methodology summary for reporting in Kms from within the portal

Equipment

- We would like to know what kind(s) of fossil fuel-based equipment you use at your/sub-contractor's facility.



- forklifts
- skid steers
- loaders
- balers

- gasoline
- diesel
- liquefied petroleum gas (propane)
- natural gas

Equipment

- Amount of fuel purchased for your/sub-contractor/third party's equipment.
 - record the total in litres
- If different pieces of equipment use different fuels, please record the equipment and fuel usage separately.
- Please also include the percent of the time this type of equipment is used for MMSW-related use.

Example – Equipment

| | | | |
|--|-----------------------------|--|-----------------------------|
| Type of Equipment | Forklift | Type of Equipment | Front-end loader |
| % of the time dedicated to MMSW materials | 25% | % of the time dedicated to MMSW materials | 10% |
| Type of Fuel Used | Diesel | Type of Fuel Used | Diesel |
| Month | Total Fuel Usage (L) | Month | Total Fuel Usage (L) |
| January | 398 | January | 612 |
| January (MMSW allocation) | 398 x .25 = 99.50 L | January (MMSW allocation) | 612 x .10 = 61 L |

Material Quantities

Document No: Test12345 (1)

*Reporting Period Start (DDMMYY...): January 1, 2020

*Reporting Period End (DDMMYY...): January 31, 2020

Reference: Jan - GHG - Equipment data

| Service Type | Emission Type | % attributed to MMSW | Unit of Measure | Quantity | Unit of Measure |
|--------------|------------------------------|----------------------|-----------------|----------|-----------------|
| GHG | Forklift - Propane | | Percentage | | Litres |
| GHG | Forklift - CNG | | Percentage | | Cubic meter |
| GHG | Forklift - Biodiesel | | Percentage | | Litres |
| GHG | Forklift - Diesel | 25 | Percentage | 99.5 | Litres |
| GHG | Forklift - Natural Gas | | Percentage | | Litres |
| GHG | Forklift - Electricity | | Percentage | | Kilowatt hours |
| GHG | Front End Loader - CNG | | Percentage | | Cubic meter |
| GHG | Front End Loader - Biodiesel | | Percentage | | Litres |
| GHG | Front End Loader - Diesel | 10 | Percentage | 61 | Litres |

Electricity Consumption

| Month | Usage (kWh) |
|---------|-------------|
| January | 1,394 |

Test Environment

Select a report Material Quantities Report Submission

GREENHOUSE GAS - END MARKET TRANSPORTATION (4700002584)

Material Quantities

City of Regina - GREENHOUSE GAS - DEPOT (4700002584)
 Document No: [New Document](#) (1)

Add Another Document New Originating Site Save for Later Sub

*Document No: *Reporting Period Start (DDMMYY...): *Reporting Period End (DDMMYY...): Reference: Comments:

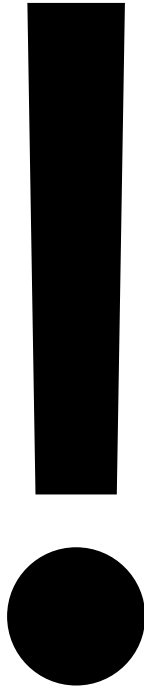
*Originating Site:

| Service Type | Emission Type | % attributed to MMSW | Unit of Measure | Quantity | Unit of Measure |
|--------------|-------------------------|----------------------|-----------------|----------------------|-----------------|
| GHG | Indoor floor space | <input type="text"/> | Percentage | <input type="text"/> | Square foot |
| GHG | Outdoor floor space | <input type="text"/> | Percentage | <input type="text"/> | Square foot |
| GHG | Electricity Consumption | 100 | Percentage | 1394 | Kilowatt hours |
| GHG | Heating - Natural Gas | <input type="text"/> | Percentage | <input type="text"/> | Cubic meter |
| GHG | Heating - Natural Gas | <input type="text"/> | Percentage | <input type="text"/> | Gigajoule |
| GHG | Heating - Butane | <input type="text"/> | Percentage | <input type="text"/> | Litres |
| GHG | Heating - Diesel | <input type="text"/> | Percentage | <input type="text"/> | Litres |

Facilities - Heating Consumption

- Record how much is being consumed at each post-collection facility.
 - natural gas
 - diesel, kerosene, light fuel oil, heavy fuel oil, propane, ethane, butane
- For natural gas, the amount should be in gigajoules or cubic metres (GJ or m³); other fuel types should be reported in litres (L).
- OR if the post-collection facility is your sub-contractor's, or a third-party organization, then **you can report the total area of the facility in square metres or square feet and the type of fuel used** for heating the building.

Shipping To End Markets Reporting



- What is the total distance waste packaging and paper was shipped to end markets?
- Please report this data using any one of the following three formats:
 1. Total kms + average weight per shipment
 2. Average kms per shipment + total weight
 3. Total kms + total weight + number of shipments
- Also, please report what the mode of transport is for each material. Is it by ground transport, marine, or rail?

Allocating Share of GHG Data



How Do You Allocate for MMSW Share of GHG?

- MMSW recognizes that hauling, facility activities, and shipping to end markets may not be entirely attributed to your MMSW-related WPP, and therefore requires that you report only data as it relates to MMSW's allocation of the overall activities.

Hauling – Shared Routes

- Check with your sub-contractor to determine if your collected WPP is on a shared route with other collectors. If it is, the amount of GHGs generated by hauling activities will need to be allocated based on your annual share of WPP hauled to receiving facilities.

Example Allocation Shared Routes

| | |
|---------------------------------------|----------------------------|
| Total Fuel Usage = 750 L | |
| Community A Households | 80 |
| Community B Households | 20 |
| Total Households On Full Truck | 100 |
| Community A Share GHG | 80% x 750 L = 600 L |
| Community B Share GHG | 20% x 750 L = 150 L |

Test Environment

GREENHOUSE GAS – END MARKET TRANSPORTATION (4700002584)

Material Quantities

Document No: New Document (1)

*Document No: *Reporting Period Start (DDMMYY...): *Reporting Period End (DDMMYY...): Reference: Comments:

*Originating Site: Community A

| Service Type | Emission Type | % attributed to MMSW | Unit of Measure | Quantity | Unit of Measure | Originating Site |
|--------------|------------------------------------|----------------------|-----------------|----------|-----------------|------------------|
| GHG | Vehicle (Light Duty) - Diesel | | Percentage | | Litres | |
| GHG | Vehicle (Light Duty) - Natural Gas | | Percentage | | Litres | |
| GHG | Vehicle (Light Duty) - Electric | | Percentage | | Kilowatt hours | |
| GHG | Vehicle (Heavy Duty) - Biodiesel | | Percentage | | Litres | |
| GHG | Vehicle (Heavy Duty) - Diesel | 80 | Percentage | 600 | Litres | |
| GHG | Vehicle (Heavy Duty) - Natural Gas | | Percentage | | Litres | |
| GHG | Vehicle (Heavy Duty) - Electric | | Percentage | | Kilowatt hours | |

Test Environment

GREENHOUSE GAS – END MARKET TRANSPORTATION (4700002584)

Material Quantities

Document No: New Document (1)

*Document No: *Reporting Period Start (DDMMYY...): *Reporting Period End (DDMMYY...): Reference: Comments:

*Originating Site: Community B

| Service Type | Emission Type | % attributed to MMSW | Unit of Measure | Quantity | Unit of Measure | Originating Site |
|--------------|------------------------------------|----------------------|-----------------|----------|-----------------|------------------|
| GHG | Vehicle (Light Duty) - Diesel | | Percentage | | Litres | |
| GHG | Vehicle (Light Duty) - Natural Gas | | Percentage | | Litres | |
| GHG | Vehicle (Light Duty) - Electric | | Percentage | | Kilowatt hours | |
| GHG | Vehicle (Heavy Duty) - Biodiesel | | Percentage | | Litres | |
| GHG | Vehicle (Heavy Duty) - Diesel | 20 | Percentage | 150 | Litres | |
| GHG | Vehicle (Heavy Duty) - Natural Gas | | Percentage | | Litres | |

Facilities - Allocation

- The percent of annual MMSW weight of material processed by the facility relative to the total weight/tonnage of your WPP processed would be used as the percent allocation.
- This would then be applied to the total energy use for the facility to determine only the MMSW portion of GHG data to be reported.

Facilities – Allocation Example

- The following table provides an example of this allocation. For this example, the collector is the 'Town of Gotham' and is part of the MMSW program.

| | |
|---|------------------------------------|
| Annual tonnes WPP to MRF – all sources | 1000 |
| Town of Gotham annual tonnes WPP to MRF | 300 |
| Percent share applied to facility GHG data for Town of Gotham | $300/1000 = 30\%$ |
| Total electricity used by MRF | 700 kWh |
| Total electricity usage reported by Town of Gotham | $700 \times .30 = 210 \text{ kWh}$ |

Shipping To End Market - Allocation

- The percent of annual weight of MMSW WPP shipped to end markets would be used as the percentage allocation.
- This would then be applied to the total fuel use for shipping to end markets to determine your GHG data to be reported.

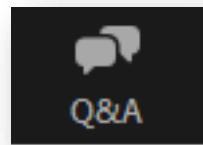
Shipping To End Market – Allocation Example

- The following table provides an example of this allocation. For this example, the collector is the 'Town of Gotham' and is part of the MMSW program.




| | |
|--|----------------------------------|
| Annual tonnes WPP shipped to market | 975 |
| Town of Gotham annual tonnes WPP shipped to markets | 278 |
| Percent share applied to GHG data for Town of Gotham | $278/975 = 29\%$ |
| Total fuel used for shipping to end market(s) | 890 L |
| Total fuel usage reported by Town of Gotham | $890 \times .29 = 258 \text{ L}$ |

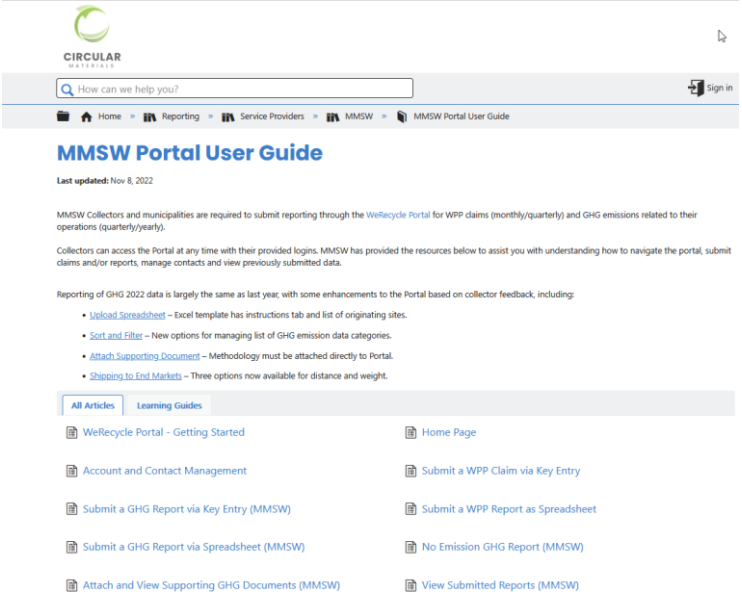
Q&A

Please submit via the webinar Q&A button:



Contact Information/Resources

-  greenhousegas@multimaterialsw.ca
-  1-855-886-4558 (option 4)
-  www.mmsk.ca/ghg
- https://knowledge.werecycle.ca/Reporting/Service_Providers/MMSW
- Please use the portal user guide – it will make it much easier 😊



The screenshot shows the 'MMSW Portal User Guide' page. At the top, there is a search bar with the text 'How can we help you?' and a 'Sign in' button. Below the search bar is a navigation menu with links for Home, Reporting, Service Providers, MMSW, and MMSW Portal User Guide. The main heading is 'MMSW Portal User Guide' with a sub-heading 'Last updated: Nov 8, 2022'. The text explains that MMSW Collectors and municipalities are required to submit reporting through the WeRecycle Portal for WPP claims (monthly/quarterly) and GHG emissions related to their operations (quarterly/yearly). It also states that collectors can access the Portal at any time with their provided logins. Below this, there are three bullet points: 'Upload Spreadsheet' (Excel template has instructions tab and list of originating sites), 'Sort and Filter' (New options for managing list of GHG emission data categories), and 'Attach Supporting Document' (Methodology must be attached directly to Portal). A fourth bullet point, 'Shipping to End Markets', is partially visible. At the bottom, there is a table of contents with two columns: 'All Articles' and 'Learning Guides'. The 'All Articles' column includes links for 'WeRecycle Portal - Getting Started', 'Account and Contact Management', 'Submit a GHG Report via Key Entry (MMSW)', 'Submit a GHG Report via Spreadsheet (MMSW)', and 'Attach and View Supporting GHG Documents (MMSW)'. The 'Learning Guides' column includes links for 'Home Page', 'Submit a WPP Claim via Key Entry', 'Submit a WPP Report as Spreadsheet', 'No Emission GHG Report (MMSW)', and 'View Submitted Reports (MMSW)'.

Thank You!

