

Industry Workshop

October 14, 2011

**Regulatory Mechanisms  
to Increase Recycling  
in Metro Vancouver**

Feedback Form

**Mandatory Space  
for Recycling in  
Multi-family and  
Commercial (MFC)  
Buildings**



**metro**vancouver



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

Organization: \_\_\_\_\_

- Organization Type:  Private solid waste and recyclable material management facility operator  
 Public facility operator  
 Developer  
 Building manager  
 Business and resident association  
 Hauler  
 Contractor  
 Regulator  
 Municipal staff  
 Stewardship agency  
 Non-governmental organization  
 Other: \_\_\_\_\_

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

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

**Please complete this form by November 30, 2011 and submit to:**

**Metro Vancouver  
Public Involvement Division  
4330 Kingsway  
Burnaby, B.C. V5H 4G8**

**Online at [www.metrovancouver.org](http://www.metrovancouver.org)**

**Website paths:**

*Planning > Solid Waste and Recycling Planning > MFC Industry Feedback Form – Questions*

*Planning > Solid Waste and Recycling Planning > DLC Industry Feedback Form – Questions*

*Boards > Bylaws > Bylaws Under Review > Solid Waste Regulatory Bylaw Review > SWRBR Industry Feedback Form – Questions*

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*(subject line: RMIR – Regulatory Mechanisms to Increase Recycling)*

Note: Personal information and input contained in this feedback form will be compiled with other public responses and included in a submission to the Ministry of Environment. In addition, input contained in this feedback form may be used in a summary report to the Metro Vancouver Board of Directors. Both documents will be available to the public. In addition, personal information may be used for Metro Vancouver follow-up mailings.

## Overview

Metro Vancouver's new Integrated Solid Waste and Resource Management Plan targets a 70% waste diversion rate by 2015. One strategy for working towards this goal is to improve diversion rates in the multi-family residential sector and industrial, commercial and institutional (ICI) sectors by improving recycling facilities.

However, there are challenges that may be affecting recycling in existing multi-family and ICI buildings:

- the lack of sufficient space for storage of recyclables
- problematic access to recycling storage space for building occupants and for service vehicles
- limited participation in voluntary recycling
- the difficulty of enforcing material disposal bans at the source.

In the past two years Metro Vancouver has developed a regulatory approach for mandatory space for recycling amenities in multi-family and commercial buildings that would address these challenges. This approach would have municipalities customize and adopt a sample bylaw amendment to mandate design specifications for recycling amenities through development permits.

To develop the approach, Metro Vancouver worked with member municipalities, haulers, property managers, the Urban Development Institute, and business and residential associations. Regulatory approaches used in other jurisdictions were also reviewed. The proposed approach includes design specifications and a sample bylaw amendment that municipalities may use as a starting point for implementation.

The proposed approach would require new multi-family residential or commercial projects and major renovation projects to meet specifications including:

- minimum size, location, and design of building recycling storage space
- collection vehicle access route
- loading area
- occupant access
- suggested minimum standards for in-suite recycling storage space.

This approach also clarifies the target sectors (who this applies to), trigger points (circumstances under which the requirements apply) and how alternate proposals or variances will be handled.

Metro Vancouver is in the final stage of consultation, which involves requesting input and hosting workshops for government staff and industry regarding the proposed approach. Following consultation, an updated recommended approach will be presented to the Waste Management Committee and the Board of Directors for review. Each municipality could then tailor the sample municipal bylaw to its needs prior to implementation.

## MFC TOPIC 1: Eligible, Excused and Exempt Projects

The proposed municipal bylaw amendment identifies mandatory recycling space allocations for new construction and building alterations for the following sectors:

- multi-family residential
- commercial: hospitality lodging, offices, restaurants, venues, and retail
- mixed residential/commercial.

Recycling space and access requirements are triggered for applicable commercial developments and multi-family residential developments that are not eligible to receive municipal curbside recycling collection services for individual units off public roads. These developments may include rental apartments, condominiums, and townhouse complexes. Buildings that qualify for curbside collection from individual units off internal roads must meet the vehicle access requirements.

Developments that combine multi-family residential and commercial uses should provide separate recycling amenities for commercial and residential occupants. Commercial amenities should meet the same standard as comparable commercial-only developments; and multi-family amenities should meet the same standard as comparable multi-family-only developments.

Developments that combine different commercial sectors within a complex must provide recycling amenities that meet the targeted material and space allocation requirements for each sector included.

Development proponents should be aware that these requirements must be met in order to obtain a development permit, or a building permit in certain cases where a development permit is not

- Are the requirements appropriate for building alterations and for high-density areas?

YES  NO

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- Which projects should be allowed to submit alternative approaches?

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- Do you have any other comments regarding eligible, excused and exempt projects?

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required for new construction or building alterations. Unless the project receives a variance, development permits or building permits, where applicable, will not be granted until the building design includes the appropriate recycling space and access provisions.

### Alternative Approach for Building Alterations

It is recognized that some developments planning to undertake building alterations may face unique challenges when trying to adhere to the requirements included in this approach. Although all developments involving applicable building alterations are required to provide space for recycling, a permit applicant may propose an alternative approach to the specific requirements - as long as the proposal meets the intent of the recycling amenity requirements for building alterations. Municipal staff will work with the developer to determine an appropriate alternative approach to meet the intent of the bylaw.

### Opportunities for Variances

Projects may seek a variance from the requirements of the bylaw through the established process. A municipality reserves the right to request additional information from the developer in support of a variance application process.

Projects that will qualify for and use municipally provided curbside collection of some or all recyclable materials after occupancy should be granted a variance for only those materials under this process. The requirements are still in effect for those materials not covered by municipal curbside pickup. Developers will be required to document that the development, once complete, will receive this service.

Whether or not a variance is granted, municipalities may impose some or all of the recommended requirements, in order to establish suitable provisions for storage space and vehicle access to support the municipally provided curbside collection service.

## MFC TOPIC 2: Recycling Storage Space Requirements

The intent of size allocations is to create sufficient space to store all recycling between collection days and to permit easy movement of recycling storage containers into and out of the space.

### Multi-Family Residential Building and Hospitality Lodging Developments

The recycling space for all multi-family residential buildings and hospitality lodgings, including hotels and motels, must meet the following requirement:

*Be the greater of 5 m<sup>2</sup> or 0.19 m<sup>2</sup>/unit*

In the case of hospitality lodgings, up to a maximum of 50 m<sup>2</sup> is required, after which point the frequency of collection can be increased to ensure adequate recycling storage capacity.

In addition to the space requirements for recycling bins or containers, "Flex Space" must be provided for storage of other reusable or recyclable materials for new multi-family buildings. The required size of this space is 50% of the space allocation for recyclable materials.

### Retail Building Developments

The recycling space allocations for retail (including wholesale) building developments must meet the following requirement:

*Be the greater of 4 m<sup>2</sup> or 0.015 m<sup>2</sup> per m<sup>2</sup> of floor area for all retail space, to a maximum requirement of 20 m<sup>2</sup>, after which the frequency of collection can be increased to ensure adequate recycling storage capacity.*

### Office Building Developments

The recycling space allocations for office building developments must meet the following requirement:

*Be the greater of 4 m<sup>2</sup> or 0.005 m<sup>2</sup> per m<sup>2</sup> of floor area for all office space, to a maximum requirement of 50 m<sup>2</sup>, after which the frequency of collection can be increased to ensure adequate recycling storage capacity.*

- How do the recycling storage space allocation requirements compare to what is currently being built?

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- Would excluding the recycling storage space allocated on the ground floor from Floor Space Ratio requirements be a worthwhile incentive?

YES  NO

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- Should allocation of in-suite recycling storage space be required?

YES  NO

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- Do you have any other comments regarding recycling storage space requirements?

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### Venue Building Developments

Large venue building developments are those facilities that expect to receive more than 2,000 visitors per day for special events or exhibits, such as certain convention centres, tourist attractions, sports arenas, and theatres. The recycling space allocations for large venue building developments must meet the following requirement:

*Be the greater of 4 m<sup>2</sup> or 0.011 m<sup>2</sup> per m<sup>2</sup> of floor area for all venue space, to a maximum requirement of 30 m<sup>2</sup>, after which the frequency of collection can be increased to ensure adequate recycling storage capacity.*

### Restaurant Developments

The recycling space allocations for restaurant building developments incorporate the provision of space for storage of the minimum target recyclable materials as well as food scraps.

Because of the potential for public health concerns associated with the storage of food scraps on restaurant premises, the space allocations for this recyclable have been calculated assuming twice weekly pickup.

The recycling space allocations for restaurant building developments are as follows:

*Be the greater of 4 m<sup>2</sup> or 0.022 m<sup>2</sup> per m<sup>2</sup> of floor area for all restaurant space, to a maximum requirement of 30 m<sup>2</sup>, after which the frequency of collection can be increased to ensure adequate recycling storage capacity.*

### Design

The design is intended to support the effective use of the space for recycling storage, for both the building users and those providing recycling collection services.

The design of the storage space must therefore incorporate the following elements:

- Floor of the storage space to be level and hard-surfaced
- Configuration must allow each recycling storage container to be individually accessible so as to be removed and replaced without having to take out other containers
- The storage space must have no horizontal dimension (width and depth) less than 2 m, to allow for the placement, access to, and rolling out of the containers
- The storage area entry point shall be no less than 1.5 m in width for multi-family buildings over 25 units and for all commercial developments
- Ensure adequate ventilation to the exterior of the building, in compliance with applicable building code requirements for the storage of garbage;
- Be sufficiently secure to minimize pest and wildlife access
- Be protected from unlawful entry through the use of strike-plates, locks, and astragals to close clearance gaps between doors and frames, if the storage area is located indoors;
- Be well lit, both as a security measure and for ease of access
- Have white or pale-coloured interior walls to enhance lighting, if the storage area is enclosed.

Secure access should also be considered by development proponents.

### Location

The criteria for selecting the location of the recycling storage space supports the ease of access for both building users and collection service vehicles, as well as the provisions of applicable building codes and safety requirements.

The storage space must be located:

- On the lot of the structure it serves
- In an area to minimize noise and odour impacts to building occupants and neighbouring buildings
- At ground level, or no more than one story below grade
- Adjacent to the designated garbage storage area for the development.

In recognition of the need to comply with applicable building codes, fire codes, safety requirements, or other components of municipality building requirements, the recycling storage area must not be located in any of the following locations:

- In alleys or other publicly owned rights-of-way where it may disrupt traffic circulation patterns
- Between a street-facing façade of the structure and the street if the area is located outdoors
- In any required driveways, parking aisles, or parking spaces for the structure
- In any location that may block or impede fire exits, public rights-of-way or pedestrian and vehicular access.

### In-suite Recycling Storage

In addition to providing a common area for waste storage, developers and builders of multi-family residential buildings are encouraged to include recycling space or systems within each individual residential suite. Space within the suite should be allocated for both current and future diversion programs, and may take the form of built-in systems under sinks, in the pantry, or in other convenient locations. At least three cubic feet (0.085 m<sup>3</sup>) of space per suite is recommended, as is the case in Ventura County, California.

At the development permit stage, there may not be sufficient detail available for municipalities to review the level of in-suite recyclables storage provided. Consideration should be given to assessing these provisions at the building permit stage, where additional detail about in-suite configurations is more likely to be available.

### MFC TOPIC 3: Vehicle Access and Loading Area

#### Loading Area

The loading area is the space provided for servicing of recycling collection containers. It may be located on site, or on an adjacent public alley or street. In the latter case, the anticipated increase in building occupant participation in recycling could result in a large number of totes occupying space in public alleys and streets on collection days.

To reduce the amount of time and effort required to bring totes to the loading area for collection, the loading area must be within 100 feet of either the recycling storage space or the temporary storage area.

To meet these requirements, the loading area must meet the following minimum design criteria:

- Not be located near the fresh air intakes for the building
- Connected to the recycling storage space or temporary storage area via a level grade or continuous slope of no more than 6%, to facilitate movement of wheeled containers from the storage area to the loading area for servicing.

If the loading area is to be located on the building site, it must also meet the following minimum design criteria:

- Directly accessible by a driving surface meeting the Vehicle Access Route requirements
- Appropriate slope as per applicable building code requirements to facilitate drainage to the designated storm water management system for the site, and to avoid accumulation of liquids within the loading area
- Driving surface to be constructed to accommodate a 28-tonne collection vehicle
- Minimum dimensions of 7.5 m high, 6.0 m wide, and 15.0 m long. All dimensions are to be unencumbered (i.e. unrestricted by fixtures such as sprinkler systems, meters, surveillance cameras, mirrors, landscaping).

- Would it be a worthwhile incentive to exclude space allocated within the property for collection vehicle access and loading from Floor Space Ratio requirements, if it exceeds what is required for fire truck access?

YES  NO

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- If recycling totes/bins cannot be stored temporarily on public streets/alleyways, where can they be stored on collection day if the permanent storage area is too far away for collection crews?

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- How far are collection crews willing to travel on foot to retrieve recycling totes/bins from the permanent recycling storage area to the loading area?

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- Do you have any other comments regarding vehicle access and loading area requirements?

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#### Temporary Recycling Storage Area

If the loading area will be located more than 100 feet from the recycling storage area, a closer temporary collection day storage area for recycling containers must be provided for use on collection days.

The temporary storage area must:

- have a level and hard surfaced floor
- be configured such that no horizontal dimension is less than 1 m
- be located within 100 feet of the loading area to facilitate collection
- be connected to the loading area and recycling storage space via a level grade or continuous slope of no more than 6%
- be equal in size to 45% of the recycling storage space allocation
- be available for recycling container storage on the day of collection but may be used for other purposes at other times.

### Vehicle Access to Loading Area

The vehicle access route requirements are also intended to minimize traffic disruptions and avoid unnecessary maneuvering by collection vehicles.

Whether provided indoors or outdoors, the vehicle access route shall:

- Be designed in such a way as to allow a collection vehicle to enter the site, collect the garbage / recycling and exit the site in a forward motion, or via the use of a turnaround area allowing for a three-point turn of not less than one truck length – trucks will not be allowed to reverse onto a public road
- Be situated in a location that will minimize interface with pedestrian traffic and public vehicular access to the building's main parking area, including underground garage and visitor parking areas
- Be constructed to accommodate the weight of a 28-tonne collection vehicle
- Provide a minimum width of 4.5 m throughout the vehicle access route and access driveways with a minimum width of 6 m at the points of entrance and exit for the site
- Maintain a minimum vertical clearance of 4.4 m throughout the entire access route
- Provide the collection vehicle a minimum turning radius of 12.5 m throughout the entire access route
- Ensure that the slope of the access route does not exceed 6%.

The site plan should include a diagram illustrating the anticipated movement of the collection vehicle through the building site. This diagram should indicate turning radii, and show how the layout of the loading area meets the necessary turning radius requirement for an appropriately sized collection vehicle.

### Occupant Access

The centralized storage area for recyclables must be accessible to all occupants of the development, and as accessible as the garbage containers.

The following criteria must be observed:

- The storage area must be well lit and conveniently accessible to residents of the development
- Occupant access to the storage area should be shown on plans
- Bins or containers should be configured so that residents have direct access to each container, without having to move any other containers or maneuver around other containers
- The storage area should be accessible to all occupants, including those with restricted mobility.

In addition to providing a common area for waste storage, developers and builders of multi-family residential buildings are encouraged to include recycling space or systems within each individual residential suite. Space within the suite should be allocated for both current and future diversion programs, and may take the form of built-in systems under sinks, in the pantry, or in other convenient locations. At least three cubic feet (0.085 m<sup>3</sup>) of space per suite is recommended.

## MFC TOPIC 4: Compliance

Development proponents would be made aware that regulatory requirements must be met in order to obtain a development permit, or a building permit (in certain cases where a development permit is not required for new construction or building alterations). Unless the project receives a variance or an alternative proposal is submitted and accepted, development permits or building permits, where applicable, will not be granted until the building design includes the appropriate recycling space and access provisions.

Typically, municipalities could ask for clarification or additional information during the review process, to allow developers to demonstrate how they will comply with the stated requirements, and to present comparable alternatives if necessary. However, development proponents would be encouraged to provide sufficient information regarding a proposed development or re-development at the first point of contact with a municipality to show how the requirements will be met.

Development proponents should be aware that these requirements may also apply during a rezoning application.

Municipalities would reserve the right to review site plans again if more than three years have elapsed between the approval of the site plan and the start of construction. New or additional requirements, as a result of operational changes or municipal policies, may be imposed upon follow-up review.

- How could municipalities confirm that recycling space and access requirements have been respected during construction?

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- After occupancy, how could municipalities confirm that recycling storage and/or loading space are being used for the intended purpose?

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- If developers propose designs with reduced storage area or vehicle access, municipalities may require letters of assurance from developers guaranteeing that the property will retain specialized recycling collection services that can comply with such a design. These could include increased frequency of collection, smaller collection vehicles, door-to-door service, or other levels of service. How could building owners and managers be informed and held accountable to these conditions?

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- Do you have any other comments regarding compliance?

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### Compliance at the Building Permit Stage and After Occupancy

To ensure that space allocated towards recycling amenities at the development stage remains dedicated to this use during and after construction, municipal building bylaws could include recycling space requirements to ensure that design elements approved at the development stage are actually built and maintained. Development permit applicants could also be asked to provide a letter of assurance guaranteeing that the building will adhere to an alternative approach for recycling collection, if the proposed design depends on recycling collection service with different storage and access criteria than those required by the municipality.

**Thank you for providing your comments.**

**Please forward this form by November 30, 2011 using the information provided on the inside cover.**



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