



B e y o n d C o m p o s t i n g



BY DESIGN

COLLECTION VEHICLES ENSURE SEPARATION OF CURBSIDE MATERIALS

Since the Green Bin Program was launched in 2010, households have been sorting their curbside materials into three components: food waste, recyclables and garbage. But many of those receiving the service ask how these materials are kept separate when, depending on the week, two components go in the same truck?



Food waste collected in a split-packer truck is emptied and consolidated at the Church Road Transfer Station. The other compartment containing either curbside garbage or recyclables will be offloaded elsewhere at the Transfer Station (for garbage), or at the nearby BFI facility (for recyclables).

The answer is specially designed vehicles called “split packers”. They have two compartments, with separate chutes for drivers to empty curbside materials. The largest compartment, representing 70 per cent of the truck’s overall capacity, holds garbage or recyclables collected on alternating weeks. The smaller compartment is used for weekly food waste collection.

Benefits of dual stream vehicles

Split-packer trucks enabled food waste collection to be added to the curbside recycling program without requiring additional collection staff or increasing vehicle emissions. By using the

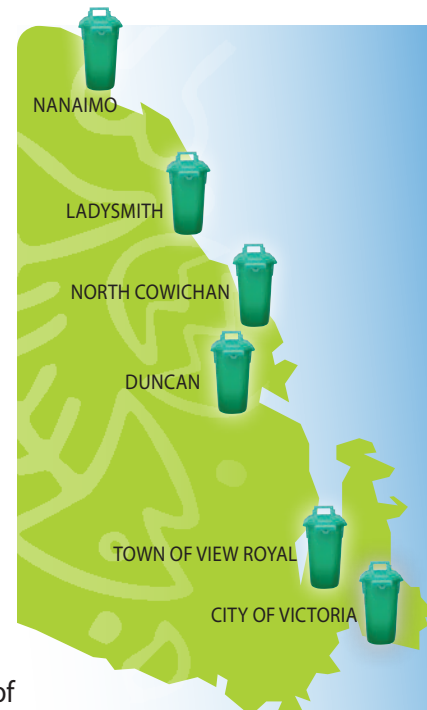
green bin, households now divert 30 per cent of their waste from the landfill. A further 30 per cent is diverted through the paper and metal and plastic containers collected in the blue box and yellow recycling bag.

Householders can rest assured the green bin materials and recyclables they sort and take to the curb don’t go to waste. Food waste is delivered to the ICC Group facility at Duke Point for processing into a renewable resource – soil-enriching compost – used in local landscaping, agriculture, and gardens. Recyclables are taken to BFI’s Material Recovery Facility in Nanaimo, where they are processed and shipped to manufacturers to make new products and packaging.

FOOD WASTE COLLECTION AROUND VANCOUVER ISLAND

Curbside collection of food waste is becoming more commonplace. A growing number of Island municipalities and districts are seeing the benefits of collecting and diverting residential food scraps. This past February, residents of the City of Victoria joined the growing list of people who are keeping compostable material out of local landfills. In addition to the RDN, the list includes the City of Victoria, the Town of View Royal, the City of Duncan, the District of North Cowichan, the Town of Ladysmith and the City of Nanaimo.

Other municipalities in the Comox Valley and the Capital Region have collection projects on the drawing board. Thanks for your efforts in making our program a success.



IN THIS ISSUE: Curbside Q&A • How Food Waste is Processed • Proposed Recycling Changes

Beans to bones in the bin!



Curbside Q&A*

When do I need to use garbage tags and where can I buy them?

The RDN's user pay residential garbage collection program provides for one standard size container of garbage collected every two weeks. Occasionally you may need to put out additional containers. Up to two additional standard size containers can be put out on your collection day by purchasing \$2 garbage tags and attaching one to each additional can or bag. Tags are sold at the following locations throughout the region:



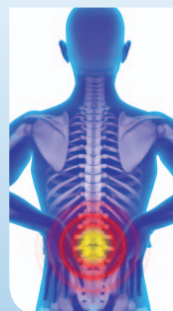
- Georgia Park Store, Bowser
- Meadowood Store, North Qualicum
- Ravensong Aquatic Centre, Qualicum Beach
- Qualicum Beach municipal office
- Church Rd Transfer Station, Parksville
- City of Parksville municipal office
- Oceanside Place, Parksville
- BFI Canada, Parksville
- Quality Foods, Nanoose Bay
- District of Lantzville municipal office
- RDN Administration office, Nanaimo
- Jingle Pot Store, Nanaimo
- Country Grocer, Nanaimo (Chase River)
- Millway Market, Cedar
- Cedar General Store, Cedar
- Regional Landfill, Cedar
- 49th Parallel Grocer, Cedar
- Tempo/Cassidy General Store, Cassidy
- Village Food Market, Gabriola Island

Why can't I put all my recyclables in the Blue Box instead of using the yellow recycling bag?

Since all curbside recyclables go in one separate compartment of the collection truck, we have been asked why it's necessary to place newspaper and mixed paper in the yellow recycling bag instead of using just the blue box. The reasons are simple.

First, the blue box doesn't have a cover and the yellow bag prevents paper from getting wet or blowing around and creating litter.

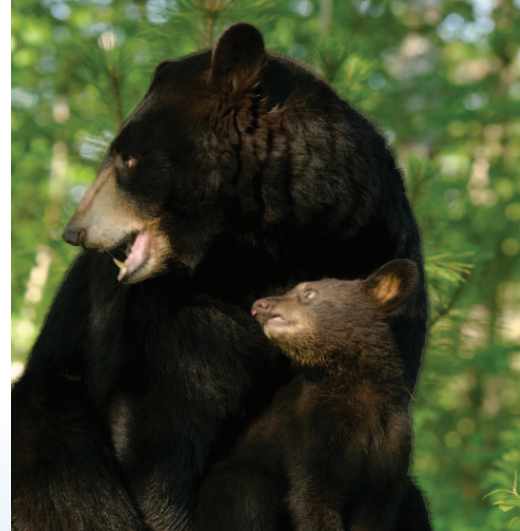
Second, using a single container would often result in loads that are excessively heavy for drivers to lift, causing possible injuries to collection personnel.



How can I replace my green bin?

When the curbside collection program changed in 2010 to include food waste collection, all homes in the region received a green bin free of charge. If you move to a home without a green bin or need a replacement, please call RDN Solid Waste Services at 250-390-6560 or 250-954-3792 for locations where bins are sold.

Please note that green bins are no longer provided free of charge.



How can I prevent my green bin from attracting bears and other wildlife?

Bears on Vancouver Island become active again in early spring to late fall. Here are some ways to avoid having your green bin and garbage cause problems with bears and other wildlife:

- Store your containers in a secure location and **ensure the lids are latched**.
- Put your containers at the curb on the morning of your collection day. **Don't leave them out overnight**.
- Regularly **rinse or hose out green bins** to remove any stuck on food waste.
- Use a spray bottle filled **with a bleach solution** to deodorize the lid and exterior of your green bin to prevent food odours from attracting wildlife.

For more information, see the "Preventing Problems with Bears" link on the Curbside Collection Guidelines at www.rdn.bc.ca

FROM CURBSIDE TO NEW PRODUCTS WHAT HAPPENS TO YOUR RECYCLABLES

Our 2012 Zero Waste newsletters traced the recycling loop for curbside recyclables. In this edition, we follow how food waste and food-soiled paper products are collected and processed into soil-enriching compost.

Green Bin Program Materials

Materials accepted include food scraps and wax-coated or food soiled paper products. See your Collection Schedule or visit www.beyondcomposting.ca for a complete list. By using the green bin, households throughout the region now divert 6,000 tonnes of food waste annually to the ICC Group composting facility (ICC) at Duke Point. Along with extending the capacity of the region's only landfill, those efforts reduce greenhouse gas emissions and help create a renewable resource.



Life Cycle of Food Waste to Compost

Collection and Consolidation

Vehicles with two compartments are used to collect food waste, keeping it separate from recyclables or garbage. Food waste from the Lantzville-area north is consolidated at the Church Road Transfer Station (CRTS). Food waste from the remainder of the region is delivered directly to ICC.

At ICC, green bin materials are emptied onto the tipping floor and checked for non-compostable contaminants. Next, food waste is mixed with ground yard waste using a recipe that balances carbon, nitrogen and moisture levels.

The Composting Process

After mixing, the food/yard waste mixture is sent by conveyor to one of three rotating composting drums. After two to three days, the material is sufficiently broken down to move to indoor piles. During this 14-day active composting phase, air is forced into the piles to maintain bacterial action and create temperatures reaching 70 degrees Celsius.

Next, the compost is moved to large outdoor aerated bays to cure for up to 60 days. During this stage, the compost must reach temperatures of 55 degrees Celsius for 15 consecutive days, sufficient to kill pathogens or weed seeds. Because ICC's composting process is aerobic, methane, a potent greenhouse gas is not produced.

Testing

Compost is sampled and tested during both the curing and screening process. The final product must meet the BC Ministry of Environment Organic Matter Recycling Regulation (OMRR) for Class A compost.

Products

Compost produced from the region's residential and commercial food waste is used in landscaping, agriculture, gardening and sports field applications. Bulk and packaged compost and compost-enriched soil can be purchased from Alpine Soil Mart, Nanaimo (ph. 250-751-1089) and First Choice Landscaping, Parksville (ph. 250-248-3850).

Beyond Composting

ICC is continuing to research ways to convert food waste and other organic material into synthetic fuels at its Duke Point plant. The biodiesel or bio-kerosene produced could be used to power vehicles or generate electricity.



Food waste arriving from CRTS is emptied at ICC.



Food waste is mixed with ground yard waste.



The composting process starts in a rotating composter drum.



Composting continues in indoor active piles.

Compost is cured in outdoor aerated bays.



The screened final compost product.



back to
the Earth

CHANGES COMING TO RESIDENTIAL RECYCLING IN BC

In British Columbia, provincially-mandated, industry-led product stewardship programs make producers and consumers, not the taxpayer or local government, responsible for recycling products that are no longer useful. The BC Recycling Regulation sets out the requirements for “product stewardship”, also known as Extended Producer Responsibility, or EPR.

Reducing landfill waste is the ultimate goal of the BC Recycling Regulation, which was amended in May 2011 to include packaging and printed paper (PPP) from the residential sector. These materials will be managed under a Product Stewardship Program, similar to programs for tires, batteries, electronics and paint.

This shift should not only increase material recovery but reduce waste generation and disposal rates because of incentives to design, produce and market products that eliminate unnecessary packaging.

What is PPP?



packaging and printed paper

In a typical home, PPP materials would include food and beverage containers, cereal boxes, plastic wrap, Styrofoam, cosmetic and hygiene product containers, plastic containers, cardboard, newspapers, magazines and flyers etc. The RDN curbside program already collects much of this material.

Who will manage the new Program?

Key industry players have formed a not-for-profit agency, Multi-Material British Columbia (MMBC), and have submitted a draft stewardship program plan for the Ministry of Environment's approval. The MMBC board includes representatives from the retail, grocery, food and restaurant sectors.

How could this new program affect curbside recycling in our region?

MMBC's draft stewardship plan recognizes many local governments already collect most PPP materials. Local governments, such as the RDN, would have the opportunity to become qualified collectors through the recycling collection programs they provide residents.

MMBC proposes an incentive for qualified collectors that would cover most costs of collecting PPP materials, as well as education, promotion and contract administration. As a qualified contractor, the RDN would use the incentive to offset recycling collection

costs and reduce residential user fees.

The draft stewardship plan lists five or six new product types that are not already collected through the RDN curbside program. Adding these new materials to curbside collection will not have a great impact on the region's already impressive diversion rates, however the draft list of new items does include plastic plant pots which, if approved, will likely please many local residents. Some difficult to collect items, such as glass containers and Styrofoam packaging, will not be included in curbside collection but continue to be accepted at local recycling depots.

When will any changes happen?

The Province has set May 2014 as the date that producers must comply with the approved stewardship plan. Leading up to that date, local governments such as the RDN will be working with MMBC to assess how the proposed plan may impact our current programs.



CONTACT INFORMATION

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Beyond Composting

zero|waste

