



# **A Primer on British Columbia Extended Producer Responsibility**

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## **Background**

At the outset of the new program in British Columbia, municipalities had the option to retain control over their curbside and multi-family collection systems. If a municipality did not want to retain this responsibility, they had the opportunity to turn over the responsibility to Multi-Materials British Columbia (MMBC now RecycleBC). If the municipality retained control, they could elect to participate in the RecycleBC program and are paid a fee per household which they can use to offset their collection costs. Municipalities could also retain control over their program and elect not to participate in the RecycleBC program. Under this option they were ineligible for fee recovery from RecycleBC. Municipalities that elected not to sign up during the initial window were not guaranteed acceptance afterward by RecycleBC.

## **Collection Methodology**

Municipalities are allowed to choose between single stream and two stream collection provided there was a facility that could accommodate the collection choice. At the outset of the new program, almost every community already had an existing collection program so this condition had minimal impact. Recycle BC also did not permit bag based collection. This condition impacted one program which was obliged to switch. For new programs or where RecycleBC is in control, with minor exceptions, they have opted to implement two stream collection.

## **Transfer and Processing**

Regardless of who controls collection of the recyclables, from the curbside single family or multi-family households, [Green by Nature EPR](#) (GBNE), a partnership between Cascades Recovery Inc., Emterra Environmental and Merlin Plastics, with approval from RecycleBC, stipulates where the materials are to be taken. There are contractual limits restricting how far the materials can be moved without providing the hauler with additional compensation. In the lower mainland, (i.e. Greater Vancouver), the hauler only has to go a maximum of 30 minutes measured from the closest corner of the municipality to the MRF, with the time assumption based on travelling speeds achievable between 10a.m. and 2p.m. Outside of the lower mainland, the hauler can be asked to travel up to 60km to the drop-off point at their cost.

GBNE, has a network of Receiving, Consolidation and Transfer facilities (RCTs) and Pre-Conditioning Facilities (PCFs) where curbside and multi-family trucks are directed. Although the distance the curbside trucks travel can push the limits of the allowable time or distances, in no instance do the drivers have to go further than the time or distance noted above to reach a drop-off facility.

The expectation, when the drivers show up at the facilities, is that they will follow all rules, just as they would if the facility was under contract to the municipality rather than to GBNE. The contract calls for all material to be delivered with no more than 3% non-PPP in the mix. Even though glass, film and expanded polystyrene foam are not collected commingled curbside, the presence of these materials in delivered loads is not considered when determining if a load has exceeded the 3% residue threshold.

The receiving facility does not have the ability to reject a load for excessive contamination unless the contamination is hazardous in nature. Load rejection for any other reason requires GBNE to notify RecycleBC and request permission to reject a load. RecycleBC then notifies and charges the contracted

municipality (or hauler) for the rejected load. In the first three years of the program, no load was rejected by GBNE.

Under their contract with RecycleBC, GBNE is required to randomly sample 146 loads per month. Grab samples of 100kg average are randomly selected from around the Province. Each sample has the hauler and source of materials noted allowing the materials to be tracked back to the source. Each quarter, the haulers receive report cards on their performance showing the average percentage residue in the inbound materials. If the percentage is too high, the contracted municipality (or hauler) is expected to devise a mitigation strategy which must be submitted to RecycleBC. Not surprisingly, several years into the contract, municipalities are increasingly being asked to develop and act on their mitigation strategies. This contractual obligation has the potential to have significant cost impacts on the affected municipalities.

Samples are not just taken from the curbside and multi-family collectors. A portion of the 146 samples are taken from some of the 200+ depots spread around British Columbia. Report cards on the sampling results are provided back to depots as well.

Depot materials, once collected, become the responsibility of GBNE to move from the depot to the receiving facility. The quantity of materials from each depot is reasonably well understood allowing GBNE to schedule pickups of the materials. It is GBNE's responsibility to ensure that no depot is burdened with storing material such that they cannot carry on their regular activities. Conversely, the depot is expected to keep the PPP under cover and protected from the elements and meet other site operating standards (e.g. fencing, staffing). Most of the materials are collected in 4'x4'x4' megabags which are placed on pallets for pickup. Some depots bale some materials. If a depot goes through a busy spell, as can occur over the summer holiday season, the depot can also call into GBNE for an additional pickup as needed.

GBNE does not own any processing facilities, instead it is a logistics company that figures out how and where to move the materials around the Province. It is their responsibility to select the RCT or PCF to which materials are shipped such that processing efficiencies are realized by the network. GBNE uses both private and public sector facilities as well as some not-for-profit facilities to fulfill the consolidation, transfer and/or processing functions. GBNE holds materials management contracts with numerous parties, including: Waste Management, Progressive, Do Your Part Recycling, Mount Waddington RD, Sonbird Recycling, Abbotsford-Mission Communitas, Town of Princeton, City of Salmon Arm, Alpine Recycling, Northern Recycling, Carneys, Central Cariboo Disposal, Bresco, Bulkley Valley, Skeena Queen Charlotte RD and many others, in addition to the three GBNE partner companies.

Not all of the contracted facilities continued to process recyclables the way they did prior to the program change. To maximize processing efficiencies, GBNE streamlined operations across the Province to produce five primary commodities. The revised sorting system was applied to all operations including the partner facilities. Paper sorting from two stream programs was eliminated completely regardless of location. Container sorting was reduced to remove residue, glass and steel. Sortation of the remaining container stream was consolidated to one downstream operation. Despite these changes, the overall infrastructure of the Province continued to be used, albeit repurposed.

All container sorting of all plastics and aluminum from PCFs and all containers received and baled at RCTs are shipped to and sorted at the Merlin Plastics Container Recovery Facility (CRF) located in New

Westminster, BC. This approach allowed GBNE to avoid having to add unnecessary, expensive and what would be under-utilized (i.e. used less than two shifts per day) infrastructure across BC while ensuring recovery and quality targets were met. Merlin Plastics CRF in the lower mainland processes containers for up to two full shifts per day (varies by season). The plant, which also acts as a pre-conditioning facility for the plastics which are all sold to Merlin Plastics, allows Merlin Plastics to focus on maximizing recovery and product quality in one location without having to rely on other contractors to meet market expectations. It also allowed GBNE to provide a higher guaranteed recovery rate for Provincial containers as the CRF was purpose-built to capture more material.

The approach also allows GBNE to be more flexible with respect to the evolving tonne. With 12 optical sorters in the facility that go as far as colour sorting PET and HDPE, the plant can be reconfigured as necessary to capture different streams of material as they are presented in the recyclables stream. The plant continues to evolve even after being in operation for two and a half years. Additional screens and optical sorters have been added since the plant first opened in January 2015. The overall network and the CRF are capturing all of the materials obligated under the RecycleBC program, which includes a number of items typically not included in Ontario programs, such as paper cups and coffee pods. Data on residue levels and other performance factors are not readily available highlighting the need for transparency in any Ontario based program.

The open market approach taken by RecycleBC is consistent with other producer run programs. This approach is expected to be part of a continuing trend in the development of EPR programs because of the flexibility it provides municipalities and the private sector to participate (or not) in the ongoing evolution of the recovery supply chain.