City of Port Moody Mandatory Waste Management Plans and Refundable Fees
Port Moody in Metro Vancouver, BC

Population¹: 34,479 (2013)
Land Area²: 25.89 km²
Density²: 1,273.8 persons/km²
Median Age²: 38.4
Housing Mix² – Single: Multi-Family – 64:36
Average persons per household²: 2.6
2012 Metro Vancouver Regional District disposal rate³: 561 kg per capita (all sources)

Program Highlights / Summary

Construction, renovation and demolition activities produce about a quarter of the waste disposed annually in the region. In 2011 the City of Port Moody adopted a bylaw to regulate and minimize the amount of waste sent to landfill by new construction or demolition of structures. The bylaw requires that a Waste Management Plan be part of both Building Permit Applications and Demolition Permit Applications. As a smaller municipality (under 35,000), Port Moody was in a perfect position to move forward with this program as they have a limited number of applications per year (only 12 demolition applications were received in 2013). An 84% diversion rate from this initiative was achieved in 2013.

Although the bylaw requires proof that 70% of recyclable material is diverted to licensed processing facilities, staff find reduction rates typically are closer to 100% once the waste management plan is in place.

¹ BC Stats data (http://www.bcstats.gov.bc.ca/StatisticsBySubject/Demography/PopulationEstimates.aspx)
Program Details

Port Moody’s Waste Management Bylaw 2822 requires that, for every construction and demolition permit application submitted, 70% of all recyclable materials created on site must be recycled by project completion. Application forms include a material checklist to ensure recyclable materials are identified and a website link is provided that lists licensed recycling facility locations.

Prior to the issuance of a Building Permit the following items are required:

- A completed Waste Management Plan (detailing waste generation rate by material type – estimates by construction type and size are provided)
- A Waste Management Fee (based on the value of construction – typically between $2,000 and $7,000)

For the issuance of a Demolition Permit the following items are required:

- A Hazardous Materials Report (detailing any asbestos, underground tanks, PCBs, etc. on-site and including a copy of the WorkSafeBC Notice of Project)
- A completed Waste Management Plan
- A Waste Management Fee (based on square footage of building).

The Waste Management Fee (less a small amount held to administer the bylaw) is returned to the applicant upon completion of project, provided the compliance report is submitted with accompanying licensed facility receipts.

After the bylaw was passed, there was a ‘one-year education phase’ to provide staff flexibility in enforcing the bylaw. During this ‘soft launch’ year, no fees were charged while contractors were introduced to the new rules.

Program Results

Financial Data

Capital Costs
No capital costs incurred.

Operating Costs
No additional operating costs.

Staffing Implications
Two municipal Building Inspectors administer the program as part of their regular duties, as they can confirm correct material segregation during ongoing site inspections. A larger municipality may require additional staffing in order to review all receipts. Staff report that they often rely on what developers/contractors submit without...
costly examination.

Cost Recovery
A portion of the Waste Management Fee is retained by the City to administer the Bylaw (typically between $100–$500).

Environmental
Reduction and Diversion
Demolition Projects:
An 84% diversion rate was achieved in 2013 (12 projects):
Tonnes Diverted = Total 638.98 tonnes
Tonnes to Landfill = Total 118.01 tonnes

Construction / Renovation Projects:
A 76% diversion rate was achieved in 2013 (12 Projects)
Tonnes Diverted = 30.54 tonnes
Tonnes to Landfill = 9.52 tonnes

2013 Diversion for all CR&D waste: 84% (24 Projects)

Although the bylaw requires proof that 70% of recyclable material be diverted to licensed processing facilities, staff find almost 100% of the potentially recyclable materials are being diverted once the waste management plan is in place. The City will consider amending the bylaw to 100% diversion requirement of recyclable materials to reflect this finding.

Disposal Impact / Landfill Space Savings
Compliance reports indicate diversion of 670 tonnes of materials from landfill in 2013.

GHG Reduction
Not quantified.

Social
Political Acceptability
The Bylaw is consistent with Port Moody Council’s 2009 Strategic Plan, Livability and Sustainability.

Metro Vancouver based their Construction and Demolition Waste and Recyclable Materials Management Bylaw for member municipalities largely on this Port Moody Waste Management Bylaw.

Community / User Acceptability
For the most part, all contractors now understand the bylaw’s requirements and use licensed CR&D processing facilities to ensure compliance. There is some ‘hand-holding’ by staff to ensure return of completed compliance reports. It is rare the municipality has to use the bylaw’s calculations to determine a penalty. The majority of fees have been returned.
Community Economic Development

Although not directly measured, the bylaw increases local economic activity in the waste hauling and processing sectors.

Lessons Learned

Recognizing that staff time is limited, the focus is on demolition projects. In new construction, waste materials are already being segregated for diversion, requiring less reporting and receipt verification. Overall, the time to review applications increased marginally, in order to explain program requirements and review the inventory of recyclable materials. Document review is estimated at 2 hours for each project that is audited.

Establishing an effective fee rate is challenging due to the need to create an incentive to participate without creating an undue financial burden on CR&D projects. Under the current fee structure, only one local contractor feels it’s not worth his time to separate and submit receipts. He pays the extra $7,000 each time claiming it is part of his building cost.

For some projects, there is a disconnect between the person signing the demolition or building application permit and the actual contractor completing the project. Often the person submitting the application is the homeowner or developer and they do not pass on the diversion requirements to the contractor who must collect and submit the receipts. The contractors often feel that the effort to get separate weigh scale receipts for each material at a transfer station (as opposed to a commingled CR&D facility) is time-consuming and therefore staff often have to rely on the contractor’s word that materials were separated properly at these sites.

As diversion rates have been consistently higher than the original bylaw target of 70%, Port Moody will likely increase the diversion target required for applicable CR&D projects.

Staff note that wood waste diverted from demolition and construction sites is largely being used for landfill cover or hog fuel. They feel that there is a market opportunity to reuse or recycle some portion of the wood waste. Additionally, they note that there are occasions when licensed concrete recycling facilities are at capacity and are unable to accept additional material due to space constrictions. For the bylaw to be successful, adequate processing capacity needs to be consistently available.

Communities with Similar Programs

North Vancouver requires contractors to submit a demolition waste recycling plan in order to obtain a demolition waste permit. City of Langley requires demolition permit holders to remove and recycle drywall by way of a $10,000 deposit requiring proof of proper disposal.

- City of North Vancouver
- City of Langley (drywall diversion / recycling via deposit)
Program Contacts

Robyn MacLeod, RBO, CRBO
Acting Manager Building Bylaw and Licensing
City of Port Moody
t: 604.469.4621 | f: 604.469.4533
rmacleod@portmoody.ca | www.portmoody.ca