

## Appendix A: Methane Conversion Factors

Regional District	Methane Conversion Factor	Regional District	Methane Conversion Factor
Alberni-Clayoquot	17%	Kitimat-Stikine	17%
Bulkley-Nechako	17%	Kootenay Boundary	17%
Capital	17%	Metro Vancouver	19%
Cariboo	17%	Mount Waddington	17%
Central Coast	17%	Nanaimo	17%
Central Kootenay	17%	North Coast	17%
Central Okanagan	17%	North Okanagan	17%
Columbia Shuswap	17%	Okanagan-Similkameen	17%
Comox Valley	17%	Peace River	17%
Cowichan Valley	17%	Powell River	17%
East Kootenay	17%	Squamish-Lillooet	17%
Fraser Valley	19%	Strathcona	17%
Fraser-Fort George	17%	Sunshine Coast	17%
Islands Trust	17%	Thompson-Nicola	17%

Note: Methane conversion factors are taken from the 2006 IPCC Guidelines for National Greenhouse Gas Inventories: Volume 4, Chapter 10, Page 10.44, Table 10.17 and are based on average annual temperature of each regional district. Aside from the Fraser Valley and Metro Vancouver, all regional districts in B.C. have average annual temperatures <10°C. For these regional districts, and because the 2006 IPCC Guidelines don't provide methane conversion factors for temperatures <10°C, the methane conversion factor for 10°C has been used. The methane conversion factor for liquid/slurry without natural crust cover has been used as all dairy and hog farms in B.C. have manure pit agitators to prevent the formation of a crust cover during storage.

## Appendix B: Decay Rate of Food Waste & Yard Waste

Landfill Name	Decay Rate	Landfill Name	Decay Rate
Alberni Valley	0.11	Heffley Creek	0.05
Armstrong	0.05	Knockholt	0.05
Bailey	0.11	Lower Nicola	0.05
Bessborough	0.05	McKelvey Creek	0.09
Cache Creek	0.05	Mini's Pit	0.11
Campbell Mtn	0.05	Mission Flats	0.05
Campbell River	0.11	Nanaimo	0.11
Central	0.09	Ootischenia	0.09
Central Subregion	0.05	Prince Rupert	0.12
Columbia Regional	0.05	Roosevelt	0.03
Comox Valley	0.11	Salmon Arm	0.09
Ecowaste	0.11	Sechelt	0.11
Foothills	0.09	Squamish	0.12
Ft. Nelson	0.05	Terrace	0.11
Ft. St. John	0.05	Thornhill	0.11
Gibraltar	0.09	Vancouver	0.11
Glenmore	0.05	Vernon	0.05
Hartland	0.09	Westside	0.05

Note: This table was produced using 2009 Landfill Gas Generation Assessment Procedure Guidelines, Page 14, Table 5.2 and annual average precipitation values from Environment Canada, National Climate Data and Information Archive (Canadian Climate Normals or Averages 1971-2000).

**Appendix C: Composting Methane & Nitrous Oxide Emission Factors**

Composting Category	Description	CH <sub>4</sub> Emission Factor	N <sub>2</sub> O Emission Factor
		(TCO <sub>2e</sub> /T Digestate)	
Turned compost (basic)	Non-forced aeration, turned windrows or piles	0.09	0.09
Turned compost (optimized)	Non-forced aeration, windrows covered with 15 cm or more of finished compost for first 3 weeks of composting cycle	0.06	
Forced aeration compost (basic)	Aerated static pile (ASP) or other forced aeration system	0.06	0.06
Forced aeration compost (optimized)	- ASP systems using synthetic covers; or - Positive aeration – piles covered with 15 cm or more of finished compost for first 2 weeks of composting cycle; or - Negative aeration - exhaust gas directed through a control system consisting of wood chips or other biofilter	0.03	

Source: Climate Action Reserve (2010, updated 2012) "Organic Waste Composting Project Protocol" - Table 5.2