

# CARIP/Carbon Neutral Progress Report Reporting Year 2013

## Supporting Documentation Contracted Emissions Template

<b>LOCAL GOVERNMENT</b>
City of Richmond 6911 No. 3 Road Richmond, BC V6Y 2C1
<b>PROJECT DESIGNATE</b>
Peter Russell, Sr. Manager, Sustainability & District Direct 604-276-4130 <a href="mailto:peter.russell@richmond.ca">peter.russell@richmond.ca</a>
<b>RATIONALE</b>
<p>An estimation methodology for hired equipment contractor emissions is being utilized for 2013 since actual emissions for some contracts over \$25,000 have not provided fuel usage values.</p> <p>The City has identified three main contract areas for delivery of traditional services:</p> <ol style="list-style-type: none"><li>1. Cascades Recovery Inc. and BFI provide recycling depot container collection and recycling services (T.4311);</li><li>2. Sierra Waste Services deliver residential solid waste and recycling services (T.2988);</li><li>3. BFI Canada Waste Management supplies of garbage containers and collection services at City facilities.</li></ol> <p>Each of these contracts was awarded prior to June 1, 2012 and are not required to be quantified as per BC government guidance. However, as the City is planning on achieving carbon neutrality for 2013, these contracted emissions have been included in our mobile fleet emissions reporting spreadsheet. With the exception of Cascades Recovery, fuel usage values were provided by the contractors and Provincial conversion factors were used to determine associated GHG emissions. For Cascades Recovery, fuel usage was estimated by from total kilometers driven.</p> <p>The hired equipment contracted emissions, with the exception of equipment used outside of the defined traditional service boundaries or for capital rather than maintenance projects, is listed in the table below by traditional service area.</p> <p>Option 3 is the estimation methodology used:</p> <ol style="list-style-type: none"><li>1. Hired equipment records sorted to exclude out of scope contracts;</li><li>2. City equipment operating records assessed to determine average consumption factors in litres per hour or kilometers driven for each equipment family;</li><li>3. Consumption factors used to estimated fuel consumption for hired equipment;</li><li>4. Environment Canada emissions factors applied to calculate GHG emissions.</li></ol>

<b>CONTRACTED EMISSIONS Option 3: Vehicle/Equipment Type and Hours or Kilometers of Usage</b>	
<b>Traditional Service Area</b>	<b>Estimated Annual GHGs (tonnes)</b>
<b>Drinking, Storm and Wastewater</b>	<b>56.8</b>
<b>Solid Waste Collection, Transportation and Diversion</b>	<b>8.0</b>
<b>Roads and Traffic Operations</b>	<b>173.1</b>
<b>Arts, Recreation and Cultural Services</b>	<b>3.0</b>
<b>Fire Protection</b>	<b>—</b>
<b>Total</b>	<b>240.9</b>