Solid Waste Services Tel. 604 432-6200 Fax 604 451-6180

February 26, 2015

AASHE STARS Steering Committee

Re: STARS Innovation Credit - University of British Columbia

In 2012, Metro Vancouver and UBC's Brain and Attention Research Lab (Dept. of Psychology) commenced a collaboration to identify best practices for instructional signs in recycling collection areas. The research confirmed that signs with icons resulted in the public recycling more accurately compared to signs with words.

In my opinion, this submission meets the criteria of the AASHE STARS Innovation Credit. The work done by UBC was innovative in its application of laboratory-based behavioural research to address behaviour change challenges faced by local governments and recycling service providers. Traditionally, signs and educational materials with words have been predominantly used to engage the public in recycling activities, with limited effect.

This work informed the development of recycling instructional signs that were piloted at five Metro Vancouver Housing Corporation social housing sites. Waste composition compared against a baseline confirmed that fewer recyclables were ending up in the garbage bins. The next iteration of those recycling signs was deployed across all Metro Vancouver Housing Corporation sites in 2013. Metro Vancouver shares icons for recyclable materials with its 21 member municipalities, recycling service providers, and the public on its website, with significant uptake.

The financial benefits of this research were also significant. Garbage removal costs at the Corporation's sites, including regular weekly collection and illegal dumping costs, decreased¹ with the implementation of those new signs as well as through the optimization of garbage collection capacity:

2011 (\$145,945) over budget

2012 (\$26,529) over budget

2013 \$51,012 under budget

2014 (YTD available) \$85,857 under budget

¹ A variety of external factors can affect garbage volumes, e.g. down cycles in the economy

Residents at the Metro Vancouver Housing Corporation sites report that the use of icons has made it easier for them to recycle properly.

Sincerely,

Esther Bérubé, P.Eng. Senior Project Engineer