



13698 Coldicutt Avenue,  
White Rock BC Canada V4B 3A9  
☎ 1-888-888-7975

**Graham Kershaw**  
Manager, Property Services  
Okanagan College  
1000 KLO Road  
Kelowna, BC V1Y 4X8  
Office ph: 250-862-5444  
Cell Ph: 250-317-1820  
Email: [gkershaw@okanagan.bc.ca](mailto:gkershaw@okanagan.bc.ca)

15/07/2011

Re: Letter of Affirmation Request.

Good Day Graham Please share this letter of affirmation as required.

To whom it may concern. Please accept this letter of affirmation regarding the proactive steps taken by the Okanagan College to remove their contribution of mercury containing waste fluorescent lamps from their local landfill and removing harmful mercury from the waste lamps from entering the environment and diverting this waste stream for recycling.

**Back ground:**

In early 2007 I was first approached by Graham Kershaw from Okanagan College in regard to the removal and handling of the college's waste lamps. Mr. Kershaw wished to be proactive in removing this mercury containing waste from the out-going waste stream generated by the college and destined to the local Landfill. This in itself should be commended for at the time and to date no laws or regulation exists in Canada or the Province of British Columbia. Mercury is a known neuro toxin and is a heavy metal which accumulates in the organs and after long term exposure can be fatal.

When approached by Mr. Kershaw together we looked at two options regarding handling of the spent lamps. The first was the recycling of whole lamps. This would require the gathering, repackaging, storing and eventually shipping of the lamps to a recycling facility quite some distance away and was quickly dismissed for the second option which was to purchase a fluorescent lamp crushing machine called the Bulb Eater manufactured by a company out of the USA called Air Cycle with whom Sybertech has become the Canadian Representative.

This machine is able to condense Mercury containing Fluorescent lamps into a 205 litre steel drum and reduces two 4' x 4' skids of waste mercury lamps into one drum with no operator exposure. This allows a significant reduction in handling of the lamps which can be taken down and fed directly into the machine reducing handling means a reduction in risk of breakage, repackaging, storage, and at one eight

the size, one drum vs. two 4' x 4' skids a significant reduction in shipping cost and also carbon footprint as well as removal of the mercury from local landfills.

Once the drum is full we now have the ability to send that drum of waste to the Teck Metals operations in Trail BC where the drum is introduced to the smelter which volatilises any and all mercury and is collected and resold into the lamp making markets for true cradle to grave recycling. One other benefit as mentioned above with the choice of this technology as mentioned above is with the new Mercury regulations about to be introduced by Environment Canada and BC Ministry of environment is that 8 times as many bulbs can be shipped by crushing and condensing bulbs with the bulb eater reducing the impact of carbon footprint, but it is also the writers position that by doing so the lamps are already in a sealed container meeting TDG requirements unlike repackaged whole bulbs which are put back into cardboard boxes which are not TDG recognised and allow breakage and off gassing during storage and transport.

It has been a number of years in operation at the College demonstrating their ongoing commitment to be leaders in the community and leading by example and incurring cost even though not regulated to speak volumes and is a credit to the college and its staff.

Best Regards Randy Unrau

Vice President Sybertech Waste Reduction Limited