University of Victoria
PO Box 3065 STN CSC
Victoria BC V8W 3V6 Canada

Tel: (250) 472-4001
Fax: (250) 472-4004
Email: weaver@uvic.ca
Web: http://climate.uvic.ca

School of Earth and Ocean Sciences
Climate Group

September 25, 2011

Clerk of the Board
California Air Resources Board
1001 I Street
Sacramento, CA 95812-2815

Dear Sir/Madam,

I am submitting this letter in response to your *Second Notice of Public Availability of Modified Text and Availability of Additional Documents and Information for the Adoption of a Proposed California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms Regulation, Including Compliance Offset Protocols*.

British Columbia, in which I reside, has a history of following California's leadership on climate mitigation related initiatives. As a member of the Western Climate Initiative, British Columbia has already passed enabling cap and trade legislation [Bill 18 – 2008: Greenhouse Gas Reduction Act (Cap and Trade]. If the government of British Columbia decides to fully implement a Cap and Trade system, it will almost certainly look towards regulatory guidance from California. As such, ongoing deliberations regarding California's Cap and Trade Program will also have profound influence on other jurisdictions.

A number of landfills in British Columbia are reaching capacity. As a consequence, several regions, including Metro Vancouver and the Capital Regional District, have begun to explore other options for dealing with their solid waste. Metro Vancouver recently completed an extensive assessment process and recommended a plan to the Province of British Columbia that was subsequently approved. The plan called for the introduction of substantial waste diversion, recycling and composting programs together with waste-to-energy (WTE) for the remaining solid waste. Metro Vancouver cited that an important reason for moving to WTE was its substantive greenhouse gas (GHG) mitigative potential relative to landfills, even with existing methane capture technology.

For reasons that are entirely unclear, California appears to have taken the odd position of including WTE in their cap and trade legislation while excluding landfills. This suggests that WTE is being treated as being part of the energy sector instead of being considered within the solid waste sector. This makes little sense as an internationally recognized means of reducing greenhouse gas emissions ends up being assigned punitive regulatory measures. In addition, a life cycle analysis of WTE within a cap and trade system would need to account for avoided methane emissions from landfill, avoided CO_2 emissions from fossil fuel energy sources, and

other avoided GHG emissions associated with the recovery and subsequent recycling of metals.

At the same time, it makes little sense to treat emissions within the solid waste sector separately from each other. Under the United Nations Framework Convention on Climate Change common reporting format for the national GHG inventories, waste sector emissions are listed together in Table 6.

Given California's influence on environmental regulation both within the US and Canada, I believe it is extraordinarily important for potential inconsistencies in the treatment of sectoral emissions to be dealt with prior to finalizing California's cap and trade system. The differential treatment of WTE versus landfill emissions is inconsistent with international standards. It will likely have the unfortunate and ironic consequence of encouraging enhanced GHG emissions within the waste sector.

Yours sincerely

Dr. Andrew J. Weaver OBC, FRSC, FAMS, FCMOS
Professor and Canada Research Chair in
Climate Modelling and Analysis