Westport
INNOVATIONS INC.

December 10, 2008

California Air Resources Board
1001 "I" Street
PO Box 2815
Sacramento, California
95812

Dear Chairwoman Nichols and Honorable Board Members:

Westport Innovations Inc., a global leader in alternative fuel, low-emissions transportation technologies, is pleased to release the findings of an independent third-party study conducted by California-based TIAX LLC. TIAX was commissioned to develop a life-cycle cost and emissions estimator for the comparison of current and future heavy-duty engines fuelled by diesel or natural gas.

The study has confirmed a 21% reduction in greenhouse gas (GHG) emissions in LNG trucks featuring a Westport ISX G engine and LNG fuel system based on a 10 year, 400,000 mile operating scenario. The model includes three different heavy-duty applications for California including urban buses, refuse haulers, and heavy-duty (long-haul) trucks. It was developed to determine the emissions of both greenhouse gases (GHG) and criteria pollutants including oxides of nitrogen (NOx) and particulate matter (PM).

The attached report details Phase One of the project; the development of a GHG and criteria pollutant estimator to be subsequently integrated into Westport's life-cycle cost model. The estimator is set-up as a lookup table for various emission factors based upon fuel type, fuel pathway and type of vehicle. Well-To-Tank (WTT) upstream emission factors are determined with the California modified GHGs Regulated Emissions and Energy in Transportation (CA-GREET) Model Version 1.7. The Tank-To-Wheel (TTW) emission factors are determined from the EMission FACtors (EMFAC) 2007 model created by the California Air Resources Board (CARB) version 2.30.3.501 and the CARB certification values for diesel and natural gas fueled heavy-duty engines.

Natural gas vehicles deliver a range of significant economic and environmental benefits. The fuel is not only cleaner and cheaper than diesel but is domestically available. TIAX modelled a WTW emissions analysis for 11 different natural gas fuel pathways. All natural gas pathways have less GHG emissions than ultra low sulphur diesel (ULSD), ranging from 18% to 25% reductions for North American natural gas. The NA-LNG-CE pathway of LNG trucked from the Clean Energy plant is the likeliest pathway to the South Coast Region and has a 21% GHG reduction. Using the example of the San Pedro Bay Ports, 8,400 LNG container hauling trucks operating at the Ports could realize 176,400 tonnes of GHG reductions, equivalent to removing more than 39 thousand cars from the road annually.

Westport Innovations is pleased to submit this technical paper to CARB. We would welcome the opportunity to work together in a greater way to remove the barriers to natural gas vehicle adoption and advance real emissions solutions for California's transportation sector.
Sincerely,

Tony Picarello
Vice President, Sales & Marketing
Westport Innovations Inc.