The Center for North American Energy Security
Our Fuels. Our Future.

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Dear Governor,

The Center for North American Energy Security is an organization based in Washington, DC dedicated to sound development of oil sands and other so-called non-conventional resources in North America. We write to urge you to oppose a Northeast Regional Low Carbon Fuel Standard (LCFS) that would discriminate against fuels derived from Canadian oil sands or other non-conventional sources.

As you may know, the Northeast States for Coordinated Air Use Management (NESCAUM) has recommended development of a regional LCFS in the Northeast. In December, 2009 the Governors of the 11 member states signed a Memorandum of Understanding aimed at development of a program framework by 2011. On the basis of the NESCAUM deliberations to date, it appears that NESCAUM staff are considering a standard that would effectively bar use in the Northeast of fuels derived from oil sands and other non-conventional resources. The ostensible basis for such a proposal is to encourage reduction of lifecycle greenhouse gas (GHG) emissions from development of such resources.

Such a proposal would be misguided for many reasons. First, it would not result in any reductions of GHG emissions, but is likely to increase them. The effect would be to discourage imports to the Northeast of fuels derived from oil sands and other unconventional resources in North America, such as oil sands in Canada or oil shale in the Western U.S. Fuels barred from the Northeast would simply be sold elsewhere in the world, where controls may be more lax and emissions from fuel transportation increased.

With such a standard in place, fuel costs in the Northeast are certain to rise. Fuels derived from non-conventional sources—both North American and worldwide—are on the increase, a trend that will continue as "conventional" petroleum resources continue to decline. These fuels would in effect be barred from Northeast markets, forcing reliance on increasing costly alternatives. This would have an inflationary effect that would hit low income citizens disproportionately. Neither these nor any other potential economic effects of a discriminatory LCFS have yet been considered by NESCAUM.

And what are the potential GHG benefits of such a scheme? As previously stated, they are likely to be zero, and a net environmental detriment is probable. But even if the program could successfully reduce lifecycle GHG emissions, how large is the expected reduction and would it be worth the potential costs?

As discussed further below, the current scientific consensus is that 70%-80% of GHG emissions from transportation fuels emanate from combustion in the vehicle. Accordingly, the "well-to-tank" (WTT) lifecycle emissions that the LCFS would seek to reduce (those related to the production of the fuels) are at most 30% of total emissions. As also discussed below, GHG emissions from current sands operations are at most 10% higher than conventional operations (without giving credit for effects of cogeneration facilities, which render the

emissions eventually the same). Accordingly, if the entire Northeastern supply of fuels were derived from sands, a prohibitive LCFS (which would replace them with conventional fuels) would reduce lifecycle GHG emissions from Northeast fuels at most by 3% (10% of 30%).

In fact, any potential benefits derived from a Northeastern LCFS would be much smaller. At present, only about 4% of Northeastern fuels is derived from sands. Accordingly, the maximum achievable emission reduction at present for a LCFS in the Northeast would be .12% (4% X 30% X10%). This is a "best case" analysis that gives no credit for the benefits of cogeneration, or future technological improvements, at sands sites. It also assumes that the sands-based fuels would not be sold elsewhere, which is clearly not the case. In reality, a discriminatory LCFS in the Northeast would provide no GHG benefits.

For further information about these matters, I recommend that you read the results of two independent analyses of sands emission issues which can be found at www.aeri.ab.ca (Life Cycle Analysis and Technology to Decrease Green House Gas Emissions) and www.cera.com(CERA Special Report/Growth in the Canadian Oil Sands: Finding the New Balance/CERA-Sands, PDF.).

Major conclusions drawn in these studies are as follows:

- Lifecycle GHG emissions attributable to sands-sourced fuels burned in the U.S. are less than1/2 of 1% of total U.S. emissions.

- At present, sands-sourced WTT emissions per barrel exported to U.S. refineries are approximately 10% more than those of U.S. domestic crude sources. Life-cycle GHG emissions from oil sands can be higher, lower, or on par with conventional crude oils since both oil sands and conventional crude have a wide range of emissions.

- Considering potential co-generation credits, oil sands WTT are about the same as those of U.S. imports from all other countries.

- Sands-sourced WTT emissions have declined by 30% in the last decade and are conservatively estimated to decline by an additional 30% in the coming decade due to more efficient production and refining processes.

- In contrast, GHG emissions from "conventional" production throughout the world are rising due to increased use of secondary and tertiary recovery methods and increasing ocean depths of offshore production.

- GHG emissions released during the combustion of refined products, such as gasoline, account for 70 to 80 percent of total life-cycle, well-to-wheels emissions. The well-to-tank portion of GHG emissions accounts for 20 to 30 percent of total life-cycle GHG emissions.

- Oil sands and other non-conventional resources offer North America the possibility of further increasing continental oil supply security, with corresponding reductions in the required volume of oil imports from elsewhere in the world.

- Canada and the United States have a long history of cooperation on energy issues, particularly on oil matters, and increasing technical cooperation, not unilateral prohibition by the U.S., is in the best interest of both countries.

For all these reasons, a discriminatory LCFS is a poor policy choice. We urge you to reject it as the NESCAUM framework is developed over the coming year.

If you have any questions or would like to discuss these issues further, please contact me at your convenience.

Sincerely,

Thomas J. Corcoran

Executive Director