

August 5, 2009

Mr. Archie Riddell  
Project Assessment Director  
Environmental Assessment Office  
1st Floor 836 Yates Street  
PO Box 9426 Stn Prov Govt  
Victoria, BC V8W 9V1

**RE: Climate Change and the Proposed EnCana Cabin Gas Plant**

Dear Mr. Riddell:

We spoke in February 2009 with respect to the Pembina Institute's concerns about climate change issues related to EnCana's proposed Cabin Gas Plant. At that time, you suggested we contact Darcy Janko of EnCana directly as the project was in the pre-application phase. We did so and have not received a reply.

We understand that the application has since been filed, and would now like to share our concerns about this project with the Environmental Assessment Office. While there are many issues associated with the environmental and community impacts of the project, we have limited our submission to the climate implications of the proposed plant. We have four recommendations that we believe should be incorporated into the environmental assessment of the proposed project:

1. Include the greenhouse gas emissions from the facility in relation to B.C.'s provincial emissions reduction targets.
2. Require the proposed facility to meet emissions standards equivalent to a gas processing facility equipped with zero or low emissions technology such as carbon capture and storage.
3. Include the greenhouse gas emissions that would result from the expanded upstream gas production needed to supply the processing capacity of the proposed facility.
4. Include the greenhouse gas emissions of the end use of the gas processed by the EnCana Cabin Gas Plant.

Each of these issues is discussed in turn.

**1. Include the greenhouse gas emissions from the facility in relation to B.C.'s provincial emissions reduction targets.**

The *Greenhouse Gas Emission Reduction Targets Act* requires British Columbia to reduce provincial greenhouse gas emissions in the short, medium, and long term.<sup>1</sup> The environmental assessment application indicates that, if

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<sup>1</sup> Relative to 2007 emissions, B.C.'s legislated greenhouse gas reduction targets are: 6% below by 2012, 18% below by 2016, 33% below by 2020, and 80% below by 2050.



approved, the EnCana Cabin Gas Plant would emit 2.166 million tonnes of greenhouse gases per year when operating at full capacity, which would represent a 3.27% increase over B.C.'s 2006 emissions.<sup>2</sup> This would be the equivalent of adding almost 450,000 cars to B.C. roads.<sup>3</sup>

Given that the B.C. government has not yet indicated how it will fully meet the 2020 reduction targets,<sup>4</sup> we have real concerns about new project construction that would increase, rather than decrease, B.C.'s greenhouse gas emissions. Should the province approve any projects that would increase greenhouse gas emissions from new development, there will be a responsibility to achieve a corresponding decrease in emissions elsewhere.

Accordingly, the environmental assessment should address how the province will meet its mandatory greenhouse gas emission reduction requirements in the face of substantial increases due to the proposed project.

**2. Require the proposed facility to meet emissions standards equivalent to a gas processing facility equipped with zero or low emissions technology such as carbon capture and storage.**

In the initial project description that was filed with the EAO, EnCana indicated that it was investigating options to address vented carbon dioxide emissions from the plant. Yet the final project description merely indicates that options to manage vented carbon dioxide emissions such as carbon capture and storage and enhanced oil recovery are not viable or anticipated to be available for the 2011 initial start-up phase. The vented emissions from the proposed facility would release 1.572 million tonnes of carbon dioxide per year (approximately 75% of total emissions).<sup>5</sup>

As we indicated in our unanswered letter to EnCana, we recommend that the company be required to implement best practices regarding venting emission control and be subject to a requirement to achieve emissions comparable to a gas processing plant equipped with carbon capture and storage. We note that Spectra Energy is investing significantly in carbon capture and storage technology for its Fort Nelson gas processing plant. Planning for and implementing solutions to reduce greenhouse gas emissions is considerably more cost effective at initial construction rather than as a retrofit.

**3. Include the greenhouse gas emissions that would result from the expanded upstream gas production needed to supply the processing capacity of the proposed facility.**

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<sup>2</sup> B.C. Government, Environmental Assessment Office. Project No. 1047723 Cabin Gas Plant. *Application for an Environmental Assessment Certificate Section 8: Carbon Management Assessment*. July 2009. § 8-2.

Available at: [http://a100.gov.bc.ca/appsdata/epic/html/deploy/epic\\_document\\_341\\_30457.html](http://a100.gov.bc.ca/appsdata/epic/html/deploy/epic_document_341_30457.html)

<sup>3</sup> Pembina Institute calculation based on a vehicle with fuel economy of 10 litres per 100 kilometres (for example a 2005 Dodge Caravan minivan, based on Natural Resources Canada Fuel Consumption Guide), driving an average of 55 kilometres per day.

<sup>4</sup> The 2008 B.C. Climate Action Plan indicates that if all currently planned measures are implemented, the province would be 73% of the way to the legislated target with an additional 9 million tonnes of greenhouse gas emissions reductions still needed.

<sup>5</sup> B.C. Government, Environmental Assessment Office. Project No. 1047723 Cabin Gas Plant. *Application for an Environmental Assessment Certificate Section 8: Carbon Management Assessment*. July 2009. § 8-2.

Available at: [http://a100.gov.bc.ca/appsdata/epic/html/deploy/epic\\_document\\_341\\_30457.html](http://a100.gov.bc.ca/appsdata/epic/html/deploy/epic_document_341_30457.html)



Given that the proposed facility would initially be processing 400 MMscf/day of natural gas (eventually growing to approximately 800 MMscf/day), the environmental assessment should include a detailed estimate of the upstream emissions from the arriving natural gas. While these upstream emissions would likely be significant, a detailed estimate will depend on the specific geology, the technologies used, energy sources used, and the distance to processing.

Given that the project will be inextricably linked to natural gas expansion, we believe that the environmental assessment needs to address this anticipated increase in greenhouse gas emissions. As with the direct emissions from the facility, any emissions from new upstream production cannot be allowed to compromise B.C.'s ability to meet its greenhouse gas reduction targets. Accordingly, the scope of the environmental assessment should address the emissions that would result from the expanded upstream gas production needed to supply the processing capacity of the gas plant.

#### **4. Include the greenhouse gas impacts of the end use of the gas processed by the EnCana Cabin Gas Plant.**

In addition to the direct and upstream emissions from the proposed facility, which clearly fall under the provincial government's legislated commitments, most new gas production will eventually be combusted to produce additional greenhouse gas emissions. The gas that is burned in B.C. is accounted for in the current climate action plan, but no consideration is given to exported fossil fuels. To illustrate the potential magnitude of these emissions, burning 400 MMscf per day of natural gas for home heating would produce 7.9 million tonnes of greenhouse gas emissions per year. An accurate estimate will need to look at the exact output of the processing facility, the efficiency of the distribution system, and the end use of the natural gas.

We recommend that these emissions be included and evaluated as part of the environmental assessment in order to ensure that B.C. is living up to its commitment to lead on climate change action.

The climate issues surrounding the proposed EnCana Cabin Gas Plant proposal are significant. As B.C. moves towards a low carbon economy, sustainable, long-term infrastructure and responsible resource development decisions will be essential to position and maintain our place as a jurisdiction that leads in climate action. The Pembina Institute is concerned that projects such as the proposed EnCana Cabin Gas Plant, if approved in its current design, will be counterproductive towards achieving those goals. The four recommendations provided in this submission should be evaluated and considered in the environmental assessment for this proposed facility.

Sincerely,



Karen Campbell  
The Pembina Institute

