9 March 2016

The Honourable Richard Neufeld, Senator
Chair, Standing Senate Committee on Energy,
the Environment and Natural Resources
The Senate of Canada
Victoria Building, Room 314
Ottawa, Ontario K1A 0A4

Dear Senator Neufeld:

Thank you for inviting us to appear before the Standing Senate Committee on Energy, the Environment and Natural Resources on 18 February 2016 to discuss my Fall 2015 reports. During the hearing, we agreed to provide further information in response to four questions from your Committee.

**Question 1**: How was the decision made to pick 49 from 1,041 conditions over a 14-year span?

**Question 2**: Is it in the mandate of the Commissioner of the Environment and Sustainable Development to audit call-before-you-dig legislation?

**Question 3**: What mechanism enables the Office of the Auditor General to access Cabinet documents?

**Question 4**: Experts are saying that $10 per tonne of CO₂ is not enough and that it should be $75 to $100. What is your opinion on carbon pricing?

Please find below the answers to these questions.

**Question 1**: How was the decision made to pick 49 from 1,041 conditions over a 14-year span?

One of the National Energy Board's key responsibilities is to ensure that companies implement the conditions that are placed on pipeline approvals. To determine whether the Board was doing this adequately, we examined a sample of 49 conditions from the total 1,041 that had been attached to pipeline approvals between 2000 and 2014. We went back to 2000 because we wanted to ensure that older pipelines were included in the sample, and because it was in 2000
that the automated central database was initiated. The 1,041 conditions were those that the 
Board had attached to a certificate of public convenience and necessity issued under section 52 
of the National Energy Board Act (that is, they were not conditions attached to Board exemption 
orders issued under section 58 of the Act, or to any other orders issued by the Board as part of 
its compliance and enforcement work).

When we use representative sampling in performance audits, two core considerations must be 
addressed. The first consideration is that the items must be sampled in a random manner to 
remove any bias in the selection, because it would be unacceptable to target the best or worst 
items and then claim that they represent the population. Whenever possible, we use 
computer-based random selection routines to remove such bias.

The second consideration is that the sample sizes must be sufficiently large to allow for 
statistical extrapolation to the sampled population. How do we determine that a sample is 
sufficiently large? We use a set of sampling parameters that have been mathematically 
established as supporting this determination. Among the decisions we make are the degree of 
precision (margin of error) with which we are generalizing to a population, and the level of 
confidence we can have in our generalization. We typically express both of these values as 
percentages.

For our performance audits, our minimum standard of reporting requires that our margin of error 
be no greater than 10 percent, and our level of confidence be no less than 90 percent. Were we 
to require a margin of error of no more than 5 percent, and a confidence level of at least 
95 percent, our samples would generally have to increase more than fivefold.

**Question 2: Is it in the mandate of the Commissioner of the Environment and Sustainable 
Development to audit call-before-you-dig legislation?**

As you know, for the Office of the Auditor General of Canada to audit call-before-you-dig 
legislation, the legislation must be at the federal level. One-call centres exist in New Brunswick, 
Quebec, Ontario, Manitoba, Saskatchewan, Alberta, and British Columbia to provide excavators 
with information on the location of underground infrastructure and to notify facility owners. In 
other areas of Canada, excavators must contact facility owners directly. A website called Click 
Before You Dig provides similar information.

Regarding federally regulated pipelines, the National Energy Board has information on its 
website pertaining to one-call centres, so excavators can call these centres instead of calling 
the pipeline companies directly. The Board states that most of its compliance efforts are focused 
on building individual awareness, and on holding companies accountable for their 
responsibilities to educate and inform. The National Energy Board Pipeline Crossing 
Regulations obligate the pipeline companies to have a public awareness program in place. 
These Regulations include any excavation activity that requires the Board’s permission or leave. 
Although the Regulations were outside the scope of the recent audit, they could be considered 
in a future audit.
Question 3: What mechanism enables the Office of the Auditor General to access Cabinet documents?

On 27 December 1965, an order-in-council granted the Office access to certain Cabinet and Treasury Board documents and information. On 6 November 2006, a new order-in-council gave the Office access to certain other Cabinet and Treasury Board documents and information. According to the orders-in-council, the Office does not have access to information that reveals a recommendation or proposal presented to Council by a Minister of the Crown, or that reveals views, opinions, advice, or recommendations presented to a Treasury Board Minister or to the Treasury Board. The orders-in-council are enclosed for your convenience.

Question 4: Experts are saying that $10 per tonne of CO\textsubscript{2} is not enough and that it should be $75 to $100. What is your opinion on carbon pricing?

Regarding your Committee’s fourth question, on carbon pricing, we cannot comment on the government’s policy choices. However, we found in previous audits that the government’s actions on reducing greenhouse gas emissions were insufficient to meet its 2020 target. The federal government’s greenhouse gas projections published on 10 February 2016 in Canada’s Second Biennial Report to the United Nations Framework Convention on Climate Change show that with current provincial and federal measures, Canada is still unlikely to meet its target for either 2020 or 2030. In 2020, Canada’s emissions are expected to be 768 megatonnes, which is 23 percent higher than the 622-megatonne target. In 2030, emissions are projected to be 815 megatonnes, which is 56 percent higher than the 524-megatonne target.

In both our 2012 and 2014 audits, we found that the federal government had no overall implementation plan that indicated how, under the various regulations, federal departments and agencies would work together to achieve the reductions required to meet the 2020 target of the Copenhagen Accord. We considered the lack of a clear plan and effective planning process a particularly significant gap, given the projections that Canada would miss its 2020 emission reduction target.

Here are some experts’ suggestions for emission prices that are needed if Canada is to achieve its targets for greenhouse gas reduction:

- Analysis by environmental economist Mark Jaccard’s research group at Simon Fraser University suggests that to achieve the 2030 target, a Canada-wide carbon price starting at $30 per tonne in 2017 must jump to $10 per tonne each year, to reach $160 per tonne in 2030.
  (http://policyoptions.irpp.org/issues/want-an-effective-climatepolicy-heed-the-evidence)

- Dave Sawyer, also an environmental economist, calculated that to achieve the 2030 targets, the government would need to increase the carbon levy to $180 per tonne in 15 years, impose carbon costs indirectly through regulations, and use the tax system to fund climate policies.
• The Deep Decarbonization Project, an initiative of the Sustainable Development Solutions Network and the Institute for Sustainable Development and International Relations, involved examination of policy options for countries to reduce emissions to 1.7 tonnes per capita by 2050 to limit temperature increases to 2 degrees Celsius. The Canadian report of the project recommended hybrid carbon pricing with a cap on heavy industry and a flexible carbon price on the remainder of the economy, which would rise to $50 per tonne in 2020 and then increase in increments of $10 per tonne until 2050. The report also included a number of other complementary regulations for other sectors, such as electricity and buildings. (http://deepdecarbonization.org/wp-content/uploads/2015/09/DDPP_CAN.pdf)

• A recent blog post by Canada’s Ecofiscal Commission provided references to recent Alberta and British Columbia reports. The Alberta report suggested that an economy-wide carbon price would need to rise to $100 per tonne in 2030 in order to achieve its provincial target. The British Columbia report suggested that the price should rise to $160 per tonne by 2030 in order to reduce the level of emissions forecast for 2030 by approximately 30 percent. (http://ecofiscal.ca/2016/02/03/carbon-coordination-gaps-emissions-policy-prices)

Your Committee may also be interested to know that our 2016 Spring reports will include reports on the safety of consumer products, federal support for sustainable communities, and federal support to mitigate the effects of severe weather:

For your convenience, I have also enclosed a list of past reports that may be of interest to your Committee. If your Committee or research staff wishes to discuss any of these issues, we would be pleased to meet with you. For more information, please contact Marie-Josée Gousseon, Director, Parliamentary Liaison, at 613-952-0213, extension 6363.

Yours sincerely,

[Signature]

Julie Gelfand
Commissioner of the Environment and Sustainable Development

Enclosures (2)

c.c.: Hon. Grant Mitchell, Deputy Chair
   Ms. Lynn Gordon, Clerk
Orders-in-Council

P.C. 1985-3783
27 December, 1985

HER EXCELLENCY THE GOVERNOR GENERAL IN COUNCIL, upon the recommendation of the Prime Minister, hereby directs that the Auditor General of Canada be granted access to the following information contained in a confidence of Council (as defined under subsection 36.3(3) of the Canada Evidence Act) that comes into existence on or after January 1, 1986, and that relates to public expenditures,

(a) a Submission to the Governor in Council;

(b) a Submission to the Treasury Board;

(c) any explanations, analyses of problems or policy options contained in a Memorandum or Discussion Paper presented to Council for consideration by Council in making decisions but not information revealing a recommendation or proposal presented to Council by a Minister of the Crown;

(d) a final decision of Council; and

(e) a decision of Treasury Board.

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CLERK OF THE PRIVY COUNCIL - LE CLERQUET DE CONSEIL PRIVÉ
Orders-in-Council (continued)

Her Excellency the Governor General in Council, on the recommendation of the Prime Minister, hereby directs that the Auditor General of Canada be granted access to the following information contained in a confidence of the Queen’s Privy Council for Canada, as defined in subsection 39(2) of the Canada Evidence Act, that comes into existence on or after February 6, 2006, and that relates to public expenditures:

(a) a submission to the Governor in Council,

(b) a submission as presented to the Treasury Board and any explanations, analyses of problems or policy options contained in or prepared by officials in relation to the submission, but not information revealing views, opinions, advice or recommendations presented to a Treasury Board Minister or to the Treasury Board,

(c) any explanations, analyses of problems or policy options contained in a record presented to Council, as defined in subsection 39(3) of the Canada Evidence Act (“Council”), for consideration by Council in making decisions but not information revealing a recommendation or proposal presented to Council by a Minister of the Crown,

(d) a final decision of Council, and

(e) a decision of the Treasury Board,

all of which information remains a confidence of the Queen’s Council for Canada for the purposes of any Act of Parliament.
List of Past Reports That May Interest the Committee

Reports of the Commissioner of the Environment and Sustainable Development

2015 Fall Reports
Report 1  Pesticide Safety
Report 2  Oversight of Federal Regulated Pipelines
Report 3  Departmental Progress in Implementing Sustainable Development Strategies
Report 4  Environmental Petitions Annual Report

2014 Fall Report
Chapter 1  Mitigating Climate Change
Chapter 2  Environmental Monitoring of Oil Sands
Chapter 3  Marine Navigation in the Canadian Arctic
Chapter 4  Implementation of the Canadian Environmental Assessment Act, 2012
Chapter 5  Departmental Progress in Implementing Sustainable Development Strategies
Chapter 6  Environmental Petitions Annual Report

2013 Fall Report
Chapter 1  Background on Biological Diversity
Chapter 2  Meeting the Goals of the International Convention on Biological Diversity
Chapter 3  Conservation of Migratory Birds
Chapter 4  Protected Areas for Wildlife
Chapter 5  Funding Programs for Species at Risk
Chapter 6  Recovery Planning for Species at Risk
Chapter 7  Ecological Integrity in National Parks
Chapter 8  Federal and Departmental Sustainable Development Strategies
Chapter 9  Environmental Petitions

2012 Fall Report
Chapter 1  Atlantic Offshore Oil and Gas Activities
Chapter 2  Financial Assurances for Environmental Risk
Chapter 3  Marine Protected Areas
Chapter 4  A Study of Federal Support to the Fossil Fuel Sector
Chapter 5  Environmental Petitions

2012 Spring Report
Chapter 1  Kyoto Protocol Implementation Act
Chapter 2  Meeting Canada's 2020 Climate Change Commitments
Chapter 3  Federal Contaminated Sites and Their Impacts