

Public Health  
277 Victoria Street  
5<sup>th</sup> Floor  
Toronto, Ontario M5B 1W2

Tel: 416 338-7820  
Fax: 416 392-0713  
dmckeown@toronto.ca  
www.toronto.ca/health

November 12, 2007

The Honourable John Baird  
Minister of Environment  
Environment Canada  
Les Terrasses de la Chaudière  
10 Wellington Street, 28<sup>th</sup> Floor  
Gatineau, Quebec  
K1A 0H3

**Subject: Proposed Regulatory Framework for Air Emissions**

Dear Mr. Baird:

I am pleased to provide comments on the Proposed Regulatory Framework for Air Emissions, which was released on April 26, 2007. More detailed comments are attached.

A positive feature of the Framework is that greenhouse gases and air pollutants are addressed together, providing opportunities for synergies in emissions reduction. Emissions of both greenhouse gases and air pollutants are urgent health issues for the City of Toronto. Climate change is expected to cause more days of extreme heat and exacerbate the burden of illness due to smog in Toronto, which is currently estimated at 1700 premature deaths and 6000 hospitalizations per year.

However, the greenhouse gas emissions targets outlined in the Framework are not sufficient to address the urgency of predicted impacts, and the use of intensity-based targets could allow continued growth in greenhouse gas emissions. The compliance mechanisms available must offer certainty of greenhouse gas emissions reductions, and must ascribe an appropriate economic value to carbon emissions. Given the need for a concerted worldwide effort, a renewed commitment to the Kyoto process is the best way to ensure that greenhouse gas emissions reductions will occur on a global scale.

Setting national caps is a step forward in air pollution regulation; however, regulation on an airshed basis may be more protective of human health. Given that air pollution already affects the health of Canadians daily, reductions should begin before the proposed timeframe of 2012-2015. Finally, if air quality objectives are to be set for ozone and particulate matter (PM), they must be more stringent and enforceable than the currently existing Canada Wide standards for these substances.

The proposed actions outlined for the transportation sector, consumer products, and indoor air are all important steps forward; however, more detail in the Government's planned approach and schedules for regular review of the measures is needed.

Emissions-reduction targets for both air pollutants and greenhouse gases should be health-based and informed by international best practices, the precautionary principle, and pollution prevention rather than pollution control. I urge the Government of Canada to use the best of international experience to achieve targets that will protect health.

I look forward to further communication and consultation as the Framework is further developed.

Sincerely,

*Original signed by Dr. David McKeown*

David McKeown, MDCM, MHSc, FRCPC  
Medical Officer of Health

Copy to: The Honourable Tony Clement, Minister of Health  
Cécile Cléroux, Assistant Deputy Minister, Environment Canada

Attach: Attachment 1. Detailed comments from Toronto's Medical officer of Health on the Proposed Regulatory Framework for Air Emissions

**Attachment 1****Detailed comments from Toronto's Medical officer of Health on the Proposed Regulatory Framework for Air Emissions**

The proposed Regulatory Framework for Air Emissions includes some positive ideas that would improve on Canada's current approach towards greenhouse gas and air pollutant emissions. Most importantly, the Framework addresses both greenhouse gases and air pollutants. Greenhouse gases and air pollutants (smog precursors) share many sources, and addressing them together provides important opportunities for synergies when policies are designed and implemented in an integrated way.

I suggest that the Government of Canada also consider the following when drafting regulations relating to greenhouse gas emissions and air pollutants.

**Greenhouse Gas Emissions (Industry)**

I was pleased that the Government is proposing phased targets for greenhouse gas emissions. However, to ensure that emissions reductions take place, clear and obligatory short- and long-term goals must be adopted, and they must achieve significant, quantifiable reductions in absolute greenhouse gas emissions.

The targets for greenhouse gas reductions outlined in the Framework are not sufficient to address the urgency of predicted impacts from greenhouse gases. Climate change will result in environmental effects that impact health, and the cost of delay in curbing climate change is substantial. In Toronto, climate change is expected to cause more days of extreme heat and exacerbate the burden of illness due to smog.

Internationally recognized organizations including the Netherlands Environmental Assessment Agency and German Federal Environment Agency, have completed analyses which demonstrate that in order to avoid levels of greenhouse gases associated with "dangerous human interference" with the climate, industrialized countries must reduce their greenhouse gas emissions by 25-30% below 1990 levels by 2020, and 85-90% below 1990 levels by 2050. The Regulatory Framework's targets of a 20% reduction by 2020 and 60%-70% reduction by 2050 relative to 2006 levels, fall well short of these goals.

The Regulatory Framework indicates that initial targets for greenhouse gases will be intensity-based. Intensity-based targets can allow emissions to continue to grow over time. The Regulatory Framework also indicates that initial intensity-based industrial targets will be based on a 6% reduction each year from 2007-2010, followed by a 2% reduction each year after that until 2020. However, the anticipated greenhouse gas reduction from meeting these intensity targets is not quantified. The Government must demonstrate that its plan will result in real, absolute reductions in greenhouse gas emissions.

It is also not clear how these targets will be enforceable. The timing of the Framework means that to meet the targets, industries should already be taking action, although there is no legal obligation yet to do so. I encourage the Government to clarify the legal obligations of the industries that will be affected, to ensure that the compliance with the targets will be achieved.

The Regulatory Framework outlines several mechanisms for industries to comply with the targets, and it appears that some of the compliance options can be used in combination. The Government needs to provide assurance that regardless of the compliance mechanisms offered, they will succeed in reducing greenhouse gas emissions. For example, the Regulatory Framework indicates that compliance may be achieved in part by making contributions to a technology fund. However, I am concerned that the approach to assigning value to the contributions could undermine appropriate valuation of carbon emissions in Canada. In a June 2007 report, National Round Table on Environment and the Economy calculated that in order to achieve a 65% CO<sub>2</sub> reduction (below 2003 levels) by 2050, the price per tonne of CO<sub>2</sub> should be \$75 by 2020, \$225 by 2030, and \$275 by 2050, which is much higher than what the Regulatory Framework proposes: an initial allocation value of \$15 per tonne for carbon until 2012 and \$20 per tonne in 2013, and increasing at the growth of nominal GDP thereafter.

For any nation, addressing climate change while participating in a global economy is complicated. Understandably, individual regulatory jurisdictions and industrial sectors are unwilling to face regulations or restrictions that put them at a competitive disadvantage. For this reason, I believe that an international mechanism is the only way to achieve global greenhouse gas emissions reduction - by ensuring that every nation is subject to equitable restrictions and regulations. I believe it is important for Canada to clearly recommit to the Kyoto process with a fresh commitment to achieving emissions reductions. I recommend setting a series of legally binding absolute reduction targets that begin in 2008 and become progressively more stringent by 2050, using 1990 as a base year.

### **Air Pollutants (Industry)**

Each year, air pollution contributes to 1,700 premature deaths and 6,000 hospitalizations in Toronto alone. Air pollution exaggerates health inequalities since vulnerable groups (the elderly, children and those with existing illnesses such as asthma) are most affected. The national and sector-specific caps on nitrogen oxides (NO<sub>x</sub>), sulphur oxides (SO<sub>x</sub>), volatile organic carbons (VOCs) and particulate matter (PM) proposed in the Regulatory Framework are an important step forward for reducing harmful air pollution.

The Regulatory Framework proposes that the caps will come into effect between 2012-2015. Given that air pollution is already affecting the health and quality of life of many Canadians, we must strive for air quality improvements as soon as possible. I suggest that regulations on air pollutant include a series of health-based air pollutant reduction targets that begin with short-term targets for 2010, and become progressively more stringent by 2015.

Setting national caps may not prevent “hot spots” from developing in particular regions of the country. Regulation on an airshed basis would be more protective of human health. The Framework does indicate that if a firm is in an area where the quality of the air does not meet national air quality objectives, restrictions will be placed on the use of credits from outside that area. However, since PM is the only capped pollutant for which an air quality objective is proposed, the regulations must be clear that trading in smog precursors such as NO<sub>x</sub>, SO<sub>x</sub>, VOCs will also be restricted in non-attainment areas.

The Regulatory Framework indicates that the Government will set air quality objectives for particulate matter and ozone that will specify a target concentration for ambient air. Since Canada-wide standards (CASs) already exist for these substances, new air quality objectives will need to go

beyond the current CWSs in terms of both stringency and enforceability. I also recommend that the Federal Government consider reviewing and updating the National Ambient Air Quality Objectives (NAAQOs) for CO, NO<sub>2</sub>, and SO<sub>2</sub> so that they are based on the most current understanding of their health impacts. To achieve these air quality objectives, it would also be beneficial for the Government to support for their implementation through a system of incentives and penalties.

**Actions that relate to both Greenhouse Gases and Air Pollutants (Transportation, Consumer Products, Indoor Air)**

The Government has indicated that it intends to address vehicle fuel efficiency and regulations for the rail sector, and has also indicated willingness to support international efforts to reduce emissions from the aviation and marine sectors, and I support these directions. However, the anticipated reductions from any of the reduction strategies outlined for the transportation sector (which include MOUs and adopting international standards) are not quantified. I recommend that the Government assess and publish an estimate of the anticipated emissions reductions in each of the transportation sectors, and that these estimates be revised as new regulatory regimes are introduced.

More specifically, the Regulatory Framework does not characterize any fundamental requirements for the proposed North American Clean Auto Pact. At minimum, Canada should adopt California's vehicle rules to reduce emissions of both air pollutants and greenhouse gases.

The Government has also indicated that it intends to address energy efficiency and indoor air quality, and in the near future, and I support these directions. In addition to the initial actions for strengthening efficiency standards from commercial and consumer products, I recommend that the Government publish a schedule for regular review of the planned energy efficiency measures.

The Regulatory Framework indicates that the goal of the actions taken under the Clean Air Regulatory Agenda is "to improve significantly and measurably the health of Canadians and the environment by reducing emissions of greenhouse gases and air pollutants". I support this goal, and I urge the Federal Government to build an environmental policy that truly empowers us to meet it.