Environment Ministers take steps to improve air quality in Canada

Lake Louise – October 11, 2012 – Federal, provincial and territorial Environment Ministers are taking further action to protect the health of Canadians and the environment with measures to improve air quality in Canada, through a comprehensive new Air Quality Management System (AQMS). A flexible approach to implementation will assist jurisdictions to ensure good air quality outcomes while maintaining competitiveness in all regions of Canada.

“There is nothing more fundamental to Canadians than clean air,” said Diana McQueen, Alberta’s Minister of Environment and Sustainable Resource Development. “The AQMS builds on measures that jurisdictions already have in place, and helps to align the actions of federal, provincial and territorial governments to deal with air quality issues.”

“The System is the result of unprecedented collaboration by governments and stakeholders over the past five years,” said McQueen, who hosted her colleagues at the annual CCME meeting. “We’re grateful for the contributions made by the hundreds of stakeholders who participated in this ground-breaking work.”

The AQMS includes:

- Standards to set the bar for outdoor air quality management across the country;
- Industrial emission requirements that set a base level of performance for major industries in Canada;
- A framework for air zone management within provinces and territories that enables action tailored to specific sources of air emissions in a given area;
- Regional airsheds that facilitate coordinated action when air pollution crosses a border; and
- An intergovernmental working group to improve collaboration and develop a plan to reduce emissions from the transportation sector.

Governments have agreed on new standards under the AQMS for fine particulate matter and ozone, the two main components of smog. Work has also begun on new standards for sulphur dioxide and nitrogen dioxide, which are significant components of air pollution.

Jurisdictions, with the exception of Quebec, have agreed to begin implementing the AQMS, subject to further jurisdictional approvals. Although Quebec supports the general objectives of the AQMS, it will not implement the system since it includes

federal industrial emission requirements that duplicate Quebec's *Clean Air Regulation*. However, Quebec will collaborate with jurisdictions on developing other elements of the system, notably air zones and airsheds.

Ministers will work together to finalize all elements of the AQMS. Industrial emission requirements have been agreed to for some sectors including cement and base metal smelting, among others. Outstanding industrial emission requirements for sectors such as petroleum refining, coal-fired electricity generation, reciprocating engines and volatile organic compounds (VOCs) will be addressed through a continuing collaborative process. A flexible approach to implementation will recognize current measures being undertaken by jurisdictions, particularly for existing facilities.

The AQMS will include monitoring and reporting of outdoor air quality conditions and emissions from major industrial sources in Canada. The system also recognizes the substantial contributions that stakeholders and communities can make to improve air quality. In addition, the AQMS will enable Canada to work more effectively with the United States to reduce the cross-border flow of pollution that is a contributor to air quality problems in several regions of Canada.

Ministers are pleased that three years of work with major retailers, the restaurant and food sector, brand owners and the packaging industry has led to an industry-driven approach to reduce packaging in Canada. Industry partners commit to undertake initiatives that will reduce the amount of packaging destined for landfills, reduce greenhouse gas emissions, and increase recycled content in packaging. Together these initiatives will reduce Canada's packaging footprint.

The four specific commitments by industry include:

- Continuing to eliminate polyvinyl chloride (PVC) from rigid plastic packaging. PVC is a key contaminant in plastics recycling and its elimination will improve recyclability and reduce waste to landfill;
- Developing a database on the current use of packaging in Canada by 2014. These data will serve as a benchmark for industry to set future targets, timelines and reporting requirements;
- Developing a voluntary packaging design guide based on *Éco Entreprises Québec's* voluntary code and other international standards; and
- Improving communications with the public on packaging reduction.

These commitments are supported by companies and industry associations representing a majority of the packaging sector in Canada.

Ministers today approved a Canada-wide Approach for the Management of Wastewater Biosolids. It encourages the sound management and beneficial use of biosolids resulting from municipal wastewater treatment across Canada. Benefits

include minimizing greenhouse gas emissions and increasing nutrient and energy recovery.

Ministers also received a voluntary code of practice on residential wood burning appliances for consideration by jurisdictions.

Over the next year, CCME members will continue to work together to improve the environment by addressing water, air and waste issues. The next meeting of CCME will be hosted by Nunavut.

CCME is the primary minister-led intergovernmental forum for collective action on environmental issues of national and international concern. Please visit www.CCME.ca for additional information.

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Related documents (TBC):

- The Air Quality Management System Qs and As
- Packaging Reduction: Qs and As
- Canada-wide Approach for the Management of Wastewater Biosolids: Qs and As

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The Air Quality Management System Q & As

1. What are the key features of the Air Quality Management System?

1) The System is comprehensive: it looks at all major sources of air pollution that contribute to air quality problems and supports actions that will address these sources.

2) The System is collaborative; it provides a framework for provincial, territorial and federal governments to work together to find the best way to improve air quality.

3) The System is inclusive: stakeholders and communities have an important role in finding the best ways to improve air quality.

4) The System is proactive: it focuses on effective actions that will reduce pollution levels overall and on keeping clean areas clean.

5) The System is flexible: it recognizes the important differences among Canadian jurisdictions and allows for tailored responses to air quality problems.

6) The System is accountable: it provides Canadians with information about the state of the air that they are breathing and about the actions underway to protect and improve outdoor air quality.

7) The System helps us internationally: it allows Canada to continue to demonstrate active management of air quality, strengthening our negotiating position with the US to expand the Canada/US Air Quality Agreement.

2. What are the major parts of the System and how do they work together?

The System has five major parts: 1) air quality standards to "set the bar" for air quality management across the country, 2) a framework for air zone management that supports actions to improve air quality and keep clean areas clean, 3) industrial emission requirements that set a consistent level of performance for all major industries across the country, 4) a mechanism to coordinate action when air pollution crosses a border – either inter-provincial or international and 5) a cross-country inter-governmental forum to collaborate on action to address emissions from the transportation sector

Because of the range of air quality challenges across the country, all of these parts are important to the success of the System. The air quality standards drive air quality improvement and the other components are, taken together, the means by which the improvements will be achieved.

The System's success also relies on collaboration among governments and engagement of stakeholders and communities. Governments will collaborate on the development of the outdoor air quality and industrial emission requirements. And, while provinces and territories will manage activities at the level of air zones, the federal government will collaborate on transportation sources and lead actions addressing international cross-border air pollution.

Finally, the accountability of the System will be supported by monitoring and reporting of outdoor air quality conditions and emissions from major industrial sources.

3. What are outdoor air quality standards and how do they work?

Standards for air quality are measurements of the concentrations of pollutants in outdoor air. The System's initial air quality standards are for two pollutants of concern to human health: fine particulate and ozone. Smog is largely comprised of these two substances. The System will develop standards for other pollutants over time.

The System's standards for these substances build on the Canada-wide Standards for Particulate Matter and Ozone developed by the Canadian Council of Ministers of the Environment in 2000. The new standards are more stringent than the Canada-wide Standards.

The new standards set the bar for action on air quality. Jurisdictions will monitor the concentrations of fine particulate and decide what actions need to be taken to either improve poor air quality or maintain good air quality.

The air quality standards will not be enforceable. However, they will be incorporated as objectives under sections 54 and 55 of the *Canadian Environmental Protection Act*. Provinces may also incorporate them into their regulatory regimes if they choose.

4. What is the relationship between the outdoor air quality standards and the industrial emission requirements?

The air standards deal with the quality of the air outdoors that people breathe. The industrial emission requirements deal with the emissions created by industrial activity.

The System operates on the principle that industries are one of a number of influences on outdoor air quality. In many parts of Canada other sources such as transportation can influence air quality even more than industrial sources.

The System's industrial pollution requirements are set to achieve a "good base level" of performance across the country. They are not designed, on their own, to address all air quality concerns or to achieve, on their own, the air quality standards. Rather, they work in concert with other actions to achieve the air quality standards. Where needed for better air quality jurisdictions can also impose stricter requirements on industry.

5. What are Air Zones and Airsheds?

Canada is a big country and air moves over it in six large "airsheds" that extend across provincial/territorial and even international borders. The System has identified these airsheds to help affected jurisdictions coordinate their actions.

Air zones are smaller areas created within provinces and territories to help manage air quality. Jurisdictions will monitor air quality within these zones and, depending on conditions and major sources, manage air quality to ensure that poor air quality improves and good air quality stays good. Air zone management is supplemented by collaboration at the regional airshed level on transboundary air pollution.

The System recognizes that air pollutants may cross a provincial/territorial border. Because the authority to act to reduce pollution resides within provincial/territorial borders, there needs to be a mechanism – airshed coordination – in place to support action between governments to address

cross-border air pollution problems. All affected governments will be involved in coordinating action to address cross-border pollution. When the border at issue is the Canada-United States border, the Canadian federal government will lead the effort.

6. What is air zone management? Who is responsible for it?

The provinces and territories are responsible for air zone management, and will delineate their air zones and manage their air quality as conditions require.

The System provides for considerable flexibility in air zone management to accommodate the range and variety of air quality challenges in Canada. The Canadian Council of Ministers of the Environment has developed guidance documents regarding the delineation and management of air zones and a guidance document that can help governments to determine if they are exceeding the $PM_{2.5}$ and ozone standards.

7. What are Canada-wide requirements for industrial emissions?

In Canada currently, actions to manage industrial emissions vary from province to province, creating a patchwork and an uneven playing field for Canadian enterprises. The System will establish consistent industrial emission requirements to level the playing field. Major industrial facilities will have a good base level of air emission performance regardless of the air quality where they are located.

Canadian industrial emission requirements and the actions governments will take under the System will allow Canada to continue to demonstrate to the United States that we are actively managing our air quality, and so be in a strong position to engage the United States.

The System's industrial pollution requirements are set to achieve a "good base level" of performance across the country. For some industrial sources, provincial standards are already as good as or better than this base level of performance. The requirements aim to ensure that this good performance is achieved across Canada and in some cases the requirement may be more stringent than what is currently applied in some provinces. As part of their air management, provinces and territories can choose to impose stricter requirements on industry. The System also operates on the principle that the industrial requirements can be reviewed and made more stringent over time.

8. Will the System help with pollution coming from the US?

Many parts of Canada, such as the lower Fraser Valley in British Columbia and much of southern Ontario, receive air pollution from the United States.

All of the success Canada has seen to date in negotiations with the United States about stemming this cross-border air pollution has relied on an effective demonstration of strong measures in Canada to control air pollution that may flow into the United States.

The System's standards and requirements, and the actions governments will take under the System to implement them, will allow Canada to continue to demonstrate to the United States that we are actively managing our air quality, and be in a stronger position to work with the US to expand the Canada/US Air Quality Agreement.

9. Where do transportation emissions fit in the System?

Cars, trucks, boats, construction equipment and even lawn mowers all fall into the category of transportation – or mobile – sources. In many parts of Canada, these sources are by far the leading contributors to air pollution.

The federal government has over the past decade made great progress in reducing the amount of harmful pollutants from mobile sources. Provinces and territories have also made important contributions in areas such as vehicle inspection and public transportation. However, congestion and the sheer volume of traffic along major roads and highways can create air quality problems in places where there are also lots of people.

Actions taken in individual air zones will help to address these sources. However, the System recognizes that issues around mobile sources are common across air zones. To help deal with the broader issues, representatives from Canadian provinces and territories and the federal government, representing transportation, environment and other sectors have created a cross-Canada working group on mobile sources. The working group will share information and look for opportunities for collaboration on key initiatives intended to reduce air pollution. The work of the group will support actions at the air zone level to address emissions from transportation.

10. What was the role of stakeholders in the development of the System?

From the earliest days of the System's development - when the federal government convened a multi-stakeholder meeting in early 2008 – representatives of industrial, health and environment organizations have contributed their time, expertise and perspectives to the development of the System and its major elements. The industrial emission requirements and the outdoor air quality standards have been developed through an innovative multi-stakeholder, intergovernmental collaborative process that involved over 400 individuals in 17 technical expert groups.

11. Does the System replace existing air management policies and regulation?

The System builds on existing initiatives to improve the management of air quality in Canada. Some jurisdictions are already active in improving the air quality and keeping clean areas clean. The System offers additional tools to governments that they can use to enhance air management.

Policies and regulations already in place in jurisdictions will continue to apply and jurisdictions will decide whether they need to be modified or not.

12. How important is intergovernmental collaboration to the System?

The System will build and sustain a framework that is both strong and flexible so Canadian governments may effectively respond to many different air quality challenges across the country. Even though there are important individual government roles, a comprehensive system of this nature can only be successfully developed and implemented with strong collaboration among the federal, provincial and territorial governments. The System fundamentally recognizes the value of consistent standards and requirements implemented by provinces and territories across Canada. Governments need to collaborate in order to achieve these objectives of the System and make the best use of available government resources to protect the environment**.**

Packaging Reduction Q & As

1. Why were these commitments developed?

Concerned with the amount of packaging material in the Canadian marketplace, Ministers announced in June 2011 that CCME will build on existing initiatives from governments and industry groups in Canada and abroad to develop a Canada-wide approach to optimize packaging reductions. A CCME-Industry Task Group on Packaging Reduction was established to assist in the development of the approach.

2. What are the industry commitments?

Goal: Industry commits to undertake initiatives that will result in a **reduced packaging footprint**:

- Less packaging to landfill
- Reduced greenhouse gas emissions
- Increased recycled content in packaging.

1. In order to measure success, industry commits to creating a baseline by 2014 to measure how much packaging is in the marketplace, by using best available data as well as identifying sources for new data. With this information, industry and government will proceed with discussion of quantitative targets to reduce the environmental footprint of packaging through packaging optimization upon completion of baseline data.

2. Industry commits to facilitate the development and implementation of a national voluntary design guide by March 31, 2013 for the optimization of packaging through the Packaging Association of Canada PAC NEXT initiative.

3. Industry commits to continue its efforts in eliminating the use of PVC in rigid plastic packaging. Through the packaging baseline (Commitment 1), industry will identify how much PVC is in the marketplace, set timeline for its elimination, and develop mechanisms to track progress on an annual basis with reporting on how much PVC remains in rigid plastic packaging and barriers that must be overcome to achieve this objective. Industry will promote best practices and encourage adoption of the design guide (Commitment 2) to facilitate the elimination of PVC.

4. Industry commits to enhance communication with the Canadian public on industry successes in packaging reduction.

3. How do these commitments meet ministers' direction?

3.1. Industry is committed to reducing its packaging impact.

Industry efforts to optimize packaging in the Canadian marketplace are leading to reductions in both the absolute amount of packaging and the overall environmental footprint of packaging. Examples include:

- Laundry detergent compaction resulting in up to 43% in plastic reduction
- Bottled drinking water manufacturer using a closed loop system that takes discarded plastic bottles and recycles them into new ones

- Lamp fixture package redesign resulting in up to 36% cube reduction and 0.086 metric tonnes of GHG avoidance.
- Retailer converted 115 Health and Beauty products from a PVC bottle to a recyclable alternative material.

3.2. Establishing a baseline enables industry and government to identify targets and timelines for reducing packaging.

There is a lack of coordinated information about how much packaging is in the Canadian marketplace. The number of imported products and packaging adds to the complexity and cost of the data collection. The majority of the Canadian retail sector is developing a database in partnership with GS1 Canada to enable trading partners to share product level sustainability information based on a common set of packaging sustainability metrics as described in the Global Packaging Project for Sustainability; the GS1 Canada baseline is expected to be operational by 2013.

The expanded baseline will measure how much packaging is in the marketplace in the grocery and general mass merchandise retailers, food and consumer product manufacturers, and restaurant and quick service sectors (i.e., those sectors represented on the Task Group). The baseline will be developed by using:

- Best available data (e.g., existing stewardship data);
- Current projects underway to collect sustainable packaging information (e.g., GS1 Canada); and
- Sources for new data to ensure that all sectors are captured in the industry baseline. (e.g., compiling information from industry associations).

Establishing this baseline is a first step in establishing quantitative targets for reducing the environmental footprint of packaging going forward. Once the baseline is established in 2014, industry and government will proceed with discussion of quantitative targets to reduce the environmental footprint of packaging through packaging optimization.

3.3. Better-designed packaging reduces environmental footprint.

A national voluntary design guide will present industry's best practices for optimizing packaging. The voluntary design guide, to be coordinated through the Packaging Association of Canada's PAC NEXT Initiative, will be aligned with the Global Protocol on Packaging Sustainability 2.0 (GPPS 2.0) and will build on other known products including the Éco Entreprises Québec (ÉEQ) Voluntary Code and the Sustainable Packaging Coalition design guide. Industry supports the adoption of international standards such as GPPS 2.0 as a common language that can be used to facilitate the exchange of information related to packaging sustainability between supply chain partners.

3.4. Eliminating PVC will facilitate increased recycling of rigid plastic packaging.

PVC is a key contaminant in the plastics marketplace that prevents recycling of other non-PVC plastics. In 2009, approximately 5.7 billion pounds of rigid plastic packaging (such as clamshells) went to landfills in North America. By committing to move away from plastics that are not easily recycled and into plastics that are more easily recycled, industry will be able to recover more of its plastic packaging, reducing the strain on municipal landfills.

Off-shore suppliers pose a significant challenge to eliminating PVC from the Canadian marketplace, particularly for smaller Canadian organizations lacking the information needed to eliminate PVC from their packaging. Industry is committed to first understanding how much PVC

is in the Canadian marketplace through the establishment of a packaging baseline (Commitment 1), establishing timelines for its elimination, and promoting best practices with its suppliers to facilitate the elimination of PVC. Alternatives to PVC will be featured in the national design guide (Commitment 2).

3.5. Improved industry communication will increase public's understanding of industry successes in packaging reduction.

In conjunction with PAC NEXT, industry will develop a website to highlight examples of packaging reduction and packaging sustainability success stories. The regularly-updated website will draw together and highlight examples of innovative sustainable packaging strategies undertaken by industry to optimize packaging reductions.

4. Who participated in developing these commitments?

Industry representation on the Task Group consisted of associations from grocery retail and general merchandise retail (Retail Council of Canada), consumer packaged goods–food sector (Food and Consumer Products of Canada), the quick-service food sector (Canadian Restaurant and Food Association) and the broad packaging sector (Packaging Association of Canada); as well as individual companies representing their industry associations. This group represents a majority of the packaging sector in Canada but does not represent 100% of the market. Specifically, general merchandise and apparel manufacturers were not included. The CCME-Industry Task Group was co-chaired by Manitoba and the Packaging Association of Canada.

Canada-wide Approach for the Management of Wastewater Biosolids Q & As

1. What are municipal biosolids?

Municipal biosolids are organic-based products produced from the treatment of municipal sludge. They can be solids, semi-solid or liquid. Municipal biosolids are municipal sludge which has been treated to meet jurisdictional standards, requirements or guidelines and is a mixture of water and solids separated from various types of wastewater as a result of natural or artificial processes.

2. Why do we need a Canada-wide approach?

In 2009 the Canadian Council of Ministers of the Environment (CCME) endorsed The *Canada-wide Strategy for the Management of Municipal Wastewater Effluent* (the Strategy). The Strategy sets out a harmonized framework to manage discharges from more than 3,500 wastewater facilities in Canada and provides a path forward for achieving regulatory clarity in managing municipal wastewater effluent across the country. Performance standards contained in the Strategy are intended to increase protection for human health and the environment across Canada.

The quantity of municipal biosolids produced is expected to increase as new and upgraded wastewater facilities are constructed as a result of implementation of the Strategy. Anticipating this, CCME, in consultation with interested and affected parties, developed the *Canada-wide Approach for the Management of Wastewater Biosolids* (the Approach).

3. What does this Approach promote?

The Approach promotes the beneficial use of valuable resources such as nutrients, organic matter and energy contained within municipal biosolids, municipal sludge and treated septage. Beneficial uses should be based on

- consideration of the utility and resource value (product performance)
- strategies to minimize potential risks to the environment and human health
- strategies to minimize greenhouse gas (GHG) emissions
- adherence to federal, provincial, territorial and municipal standards, requirements or guidelines.

4. How can municipal biosolids be beneficially managed?

Municipal biosolids, municipal sludge and treated septage can be beneficially managed in a number of ways including composting, agricultural land application and combustion for energy production. However, in Canada some municipal biosolids are still disposed of rather than being used in a beneficial manner. Disposal options include combustion without energy capture and burial in landfills, both of which are not considered to be beneficial uses. The Approach does not promote disposal; it encourages the beneficial use of municipal biosolids, municipal sludge and treated septage, while maintaining protection of the environment and human health.