



Synthesis of Public Comment



*on the 2008 Progress Report
under the
Canada-United States
Air Quality Agreement*



INTERNATIONAL JOINT COMMISSION
COMMISSION MIXTE INTERNATIONALE
Canada and the United States | Canada et les États-Unis



Synthesis of Public Comment

***on the 2008 Progress Report
under the Canada-United States
Air Quality Agreement***

***International Joint Commission
Canada and United States***

September 2009

The views expressed in this synthesis are from the individuals and organizations who participated in the public comment process. They are not the views of the International Joint Commission.

Cat. No.: E95-2/9-2009E
ISBN: 978-1-100-92928-6

Cover photos – IJC photo archive

Cette publication est également disponible en français.



INTERNATIONAL
JOINT
COMMISSION

COMMISSION
MIXTE
INTERNATIONALE



Herb Gray
Chair, Canadian Section

Irene Brooks
Chair, U.S. Section

Pierre Trépanier
Commissioner

Allen Olson
Commissioner

Lyall Knott
Commissioner

Sam Speck
Commissioner

www.ijc.org

United States Section Office
2401 Pennsylvania Avenue, NW
Fourth Floor
Washington, DC 20440
Phone: 202-736-9000
Fax: 202-254-4564
Email: commission@washington.ijc.org

Canadian Section Office
234 Laurier Avenue West, 22nd Floor
Ottawa, ON K1P 6K6
Phone: 613-995-2984
Fax: 613-993-5583
Email: commission@ottawa.ijc.org

Great Lakes Regional Office
100 Ouellette Ave., 8th Floor
Windsor, ON N9A 6T3
Phone: 519-257-6700
Fax: 519-257-6740
Or
P.O. Box 32869
Detroit, Michigan 48232
Phone : 313-226-6740
Email: commission@windsor.ijc.org

Contents

Executive Summary.....	4
Introduction	6
General Comments on the Air Quality Agreement.....	8
General Comments of the Air Quality Progress Report.....	8
SECTION 1 – COMMITMENTS	11
Acid Rain Annex	11
Ozone Annex.....	12
SECTION 2 – RELATED AIR QUALITY EFFORTS	12
SECTION 3 – SCIENTIFIC AND TECHNICAL COOPERATION AND RESEARCH	13
Appendix	14
Sources of Comments Received on the 2008 Progress Report under the Canada-United States Air Quality Agreement.....	15

Executive Summary

Under Article VIII of the 1991 *Canada-United States Air Quality Agreement*, the governments of Canada and the United States established a bilateral Air Quality Committee to assist with implementation of the Agreement, to review progress made and to prepare Progress Reports at least every two years. Environment Canada and the United States Environmental Protection Agency are the lead agencies on the Committee. Under Article IX of the *Agreement*, the International Joint Commission (IJC) is assigned responsibility to invite comments on each Progress Report prepared by the Air Quality Committee, to submit a synthesis of the comments received to the governments, and to release the synthesis of comments to the public.

This report provides a synthesis of the comments received on the 2008 Progress Report for the years 2006-2008. The views expressed are not those of the IJC but of individuals and organizations. Fifteen submissions were received, four from the United States and 11 from Canada. Of these, seven represented state, provincial or municipal governments and eight represented non-governmental organizations. Their names may be found in Appendix 1.

Respondents generally expressed support for the Agreement and its success in fostering cooperation on transboundary air pollution control, monitoring, research, and information exchange. Additionally, the comments expressed satisfaction with the progress made by each country toward SO₂, NO_x, and VOC reductions.

Submissions from state, provincial and municipal governments were mostly brief and provided positive comments on the Agreement and the report. Some state officials commented on specific, technical points in the report. The full text of all comments have been provided to the governments of Canada and the United States. Some of the submissions from various governments commented on their governmental activities to improve air quality:

- Alberta is an active participant on the United States-Canada Air Quality Committee's Program Monitoring and Scientific Cooperation subcommittees. The Government of Alberta provided our input to the Air Quality Committee prior to the Progress Report's release, and will continue to provide comments to the International Joint Commission.
- Saskatchewan will continue to participate in the federal/provincial/territorial working groups to further the science, understanding and management of transboundary emissions between nations and between provinces.
- Since June 2008, businesses in Quebec are required to declare the emission of contaminants in the atmosphere. This requirement is a result of a regulation adopted in 2007 on declaring emission of certain contaminants in the atmosphere. ... (translation)
- As Canada and the United States continue to move forward with the negotiation of a Particular Matter Index to the Agreement, Health Canada representatives will ensure that consideration continues to be given to managing the health risks associated with the transboundary flow of air pollution.

Submissions from non-government organizations were mixed. Some comments were brief, similar to those provided by governments, but most were detailed comments on the content of the report, primarily concerning improvements to the presentation of data and figures, corrections, and suggestions to include additional information. For example, one respondent who had commented on the 2006 Air Quality Agreement Progress Report expected that emissions from nuclear power plants would be addressed in the 2008 Progress Report.

Introduction

The 1991 Canada–United States Air Quality Agreement was put in place to establish “a practical and effective instrument to address shared concerns regarding transboundary air pollution.”

Under Article VIII, the governments of Canada and the United States established a bilateral Air Quality Committee to assist with implementation of the Agreement, review progress made, and prepare progress reports at least every two years. Environment Canada and the United States Environmental Protection Agency are the lead agencies on the committee.

In accordance with Article IX, the International Joint Commission (IJC) invites comments on each progress report prepared by the Air Quality Committee, submits a synthesis of views to the governments, as well as the full record of views if either government requests, and releases the synthesis of views to the public.

This 2008 Progress Report, prepared by the bilateral Air Quality Committee, is the ninth biennial report completed under the 1991 United States–Canada Air Quality Agreement. The report discusses key actions undertaken by the United States and Canada in the last two years to address transboundary air pollution within the context of the Agreement. Specifically, the report highlights progress made toward meeting the commitments established in the acid rain and ozone annexes of the Agreement.

To prepare this report, the Air Quality Committee took into consideration the public comments received through the International Joint Commission (IJC) regarding the 2006 Progress Report. (A summary of the 24 comments received can be found on the IJC Web site at www.ijc.org/php/publications/html/airquality/index.html).

Following release of the Progress Report in December 2008, the IJC invited public comment in a variety of ways through:

- A notice in the 2008 Progress Report;
- The IJC website;
- The IJC electronic mail list of organizations and people interested in IJC activities (list serve);
- Letters to a targeted list of over 400 agency, environmental, industry and individual contacts in both countries;
- Addressing the 2008 National Atmospheric Deposition Program Conference.

Comments were requested by April 24, 2009 and a total of 15 responses were received (11 from Canada and four from the United States). Of these, seven represented state, provincial or municipal governments representing millions of people, and eight represented non-governmental organizations. A full listing of the respondents is provided in the appendices to this report.

Every effort has been made to accurately reflect the views expressed and comments received, and the IJC apologizes for any errors that may have occurred. The views expressed are those of the respondents, not of the IJC. This is as required by Article IX of the Agreement. The full text of all comments received can be viewed on the IJC's website at www.ijc.org.

General Comments on the Air Quality Agreement

In assessing the 2008 Progress Report, respondents offered positive comments about the Canada-U.S. Air Quality Agreement itself. Respondents noted a reduction of pollution emissions and pollution deposition levels, and that this has been achieved as a result of work undertaken under the auspices of the Agreement. One provincial minister wrote: "I am pleased to note that, as noted in the report, both Canada and the United States continue to fulfill their obligations under the Agreement and that human and environmental health have benefited greatly from progress made in fighting acid rain and improving air quality." Likewise, a territory minister wrote: "I wish to acknowledge and commend those instrumental in achieving the noted reductions in ozone and acid rain in our respective countries to the benefit of the environment and all Canadian and American Citizens alike." This perspective was shared by other respondents:

- The report highlights the actions taken by both countries to manage air quality and meet the commitments of the Canada-United State Air Quality Agreement.
- The bottom line here seems to be that both countries are meeting or beating their obligations in terms of NOx, SO2 and VOCs, and environmental improvements are the result.

General Comments of the Air Quality Progress Report

Many respondents offered positive comments about the comprehensiveness of the 2008 Canada-U.S. Air Quality Agreement Progress Report. One respondent stated that the report is "especially valuable because it is one of the few documents where both U.S. and Canadian work is combined. The data sources are well referenced for anyone interested in looking at a particular issue in more detail." Similarly, a provincial minister wrote: "Ensuring that we have good air quality along our border requires close cooperation. The 2008 Progress Report reinforces this commitment. Ministry staff and I found the 2008 Progress Report to be informative and factual." Other respondents also commented that the information was complete and clearly presented in the report:

- I have reviewed the 2008 United States-Canada Air Quality Agreement progress report. I found that the report provides a useful and comprehensive summary of the latest research related to acidic deposition and critical loads.
- The report presents a clear, concise discussion of current rules, regulations, and programs (both regulatory and research).
- This report is a well-written and informative summary of the joint efforts, and results of those efforts by U.S. and Canada to address transboundary air pollution and deposition issues.

- The illustrations contrasting the United States and Canada were very interesting

However some respondents expressed concerns that the report did not adequately take into account the concerns of state and provincial governments as well as non-government organizations and citizens:

- ... Acid Rain is not just a concern in the heavily industrialized eastern provinces and north-eastern states. Federal, provincial and state governments have made significant efforts to expand the focus of work across the two countries.
- I also feel that the study is incomplete without references to Alberta and the numerous meetings held by the Premiers of Canada and Governors of the United States to solve the numerous problems, such as air quality in the western region. ... In your listing of Canada/U.S. Air Quality Committee members, it would have been helpful to see a member or two from industry as well as representatives from synergy-conservation groups, farmers and other interested people, rather than so many bureaucrats.

Comments on the format of the report were mixed. One responded appreciated the overall design and layout, noting that the report is a “very attractive document overall to the reader... The document is very well edited and laid out, and format, etc. are extremity consistent throughout the document. So it is clear that time has gone into the document.” On the other hand, some respondents found parts of the report incomplete and suggested improvements, particularly with respect to the introduction and conclusion:

- ... because of the length of the report, it could be improved by following the introduction with an executive summary to synthesize the material concisely.
- The document needs more conclusions. Many will just read the conclusions... and I think that the conclusions are too short and fairly weak. They read like updates or accomplishments rather than conclusions.
- Many websites are cited throughout the document. A list of URLs with a short description might be useful.

Respondents also noted that at various points, the report lacked consistency. For instance, data and figures from the two countries are not always comparable:

- Uniformity of information would be useful. The absence of information for one country or the other can be misinterpreted by the reader.
- The units “tonnes” and “tons” are used. It would be useful if either a single set of units was used, or if the equivalent value was presented in parentheses with the original value.
- It sometimes feels that the Canadian and U.S. portions of this report were written separately ... and not enough effort was made to combine the information in a clearer way.”

As well, there were differences in the spelling of certain terms were noted (e.g. sulfur/sulphur), and references to future activities that would have already occurred when the report was released:

- “measures will be in place to reduce NOx emissions by 2005, ...” Should this be reworded since 2005 is in the past?
- “beginning as early as 2008.” In many instances, it seems that the report was written very early.

SECTION 1 – COMMITMENTS

Acid Rain Annex

Many respondents noted progress achieved in reducing acid rain. However, several comments in this section suggested ways that the information could be more complete. One responded suggested that the maps and statements would be more correct if they were averaged over several years or supported by statistical trends analysis. Others concerned the comparability of data from the United States and Canada. One respondent noted that “the absence of information for one country or another can be misleading.” This view was reflected in other comments:

- The Canadian sections include percentage decrease in emission, the U.S. sections do not. Could similar information be presented for the U.S.?
- The figure on Monitoring Methodology for the Acid Rain Program is not complimented by a corresponding Canadian figure.
- It would be useful to have figures with the total emissions in the PEMA region of both countries (on the same graph).
- Would it be possible to compare the ambient concentration measurements between CAPMon and CASTNet? ... the source concentration data should be directly comparable.
- Standard Visual Range was not adequately defined and a complimentary figure for Canada is not available
- Is a figure available for the visual range in Canada? Again, presenting one portion of the story can be misleading.

Other comments concerned a lack of detail in the presentation of some information. For instance, it was not clear to respondents how wet sulphate depositions were corrected to omit the contribution of sea salt sulfate at near-ocean sites. Other examples related to the origins of the emission goals for SO₂ and NOx, use of the term “fine PM” rather than PM_{2.5}, and the transition to the section on Essar Steel Algoma under consultations and notification concerning significant transboundary air pollution (pg. 13).

Ozone Annex

Most of the comments in this section concerned the clarity of data represented in the figures, namely the figures representing the Pollutant Emission Management Area (PEMA) and ambient concentrations of pollutants.

One responded found the Figures 19-22 (pg. 28-29) on emissions helpful, particularly the notes indicating the difference in scales between the figures. However, the value of zero VOCs under biogenic emissions in the PEMA Emission 2006 table (Table 1, pg. 27) was questioned given the quantity of biogenic emissions from forest fires. Although the amount may be minimal, it was suggested that at least “<1” could be shown.

Also, Figure 14 (pg. 20) representing PEMA Region and NOx SIP Call States only shows the U.S. part of PEMA. A respondent observed that a complete map of the PEMA region would have been useful. For instance, figure 27 (pg. 33) on the Network of Monitoring Sites Used to Create Graphs of Ambient Ozone, NOx, and VOC Levels was cited as an example where the U.S.-Canada boundary was more adequately represented.

The figures under Ambient Concentrations of Ozone, NOx, and VOCs (pgs. 31-32) were also found to be imprecise. It was suggested that term highest, or fourth highest, should have been used in the description of Figure 24 because annual ozone levels might leave a different impression to readers who are not familiar with ozone regulations. Likewise, the two tables in Figure 26 could be misinterpreted because they do not indicate the same range of VOC concentrations.

Some comments also concerned the clarity of text. It was not clear to one respondent how regulating the sulfur content of gas and diesel fuel would have an impact on NOx and VOC emissions. Another responded noted that emissions of precursors are shown to be lower in the United States than in Canada, whereas Figure 23 (pg.30) on Ozone Concentrations along the Canada-U.S. border would suggest the opposite. Regarding this figure, another respondent wondered if more monitoring sites could be indicated as the density of the monitoring network would be useful information to accompany the isopleths.

SECTION 2 – RELATED AIR QUALITY EFFORTS

Under “PM Annex Negotiations,” one respondent suggested that ammonia should be mentioned as a precursor given its particulate forming abilities and its importance on both sides of the border.

SECTION 3 – SCIENTIFIC AND TECHNICAL COOPERATION AND RESEARCH

Respondents provided positive comments regarding the presentation of data in this section. One respondent appreciated the inclusion of critical loads and exceedances as it provides a basis for discussion on effects and the evaluation of progress. The three figures on national SO₂, NOx and VOC emissions in the United States and Canada (pgs. 40, Fig 29, 30, 31) were likewise appreciated as they provided the “big picture” of what is occurring in terms of emission changes.

Some respondents noted corrections that could be brought to this section. In the section on Emission Inventories and Trends, the report states that the distribution for NOx emissions in the two countries is similar. A respondent commented that although the NOx emissions may be more similar than the distribution of sulfur, the NOx emission in the two countries should not be presented as similar. Another comment noted that ammonia concentrations are sampled biweekly, rather than on a half week basis, as part of the new initiative to implement a pilot network.

Others respondents suggested information that could have been included in the report. One respondent would have appreciated more discussion on the movement toward recovery as indicated by a positive trend in Gran alkalinity and by negative trends in sulphate, nitrate, base cations, and hydrogen ions. It was suggested that instrument calibration and comparability of measurements of all pollutants, not just ozone and particulates, is the responsibility of each country. As well, a respondent stated that Table 2 (pg. 43) should also include NADP/AIRMoN, noting that “... the NADP passive ammonia network is now up and running and should be included in a table like this in future reports. ...”

Signed on this 11th day of September, 2009 as a synthesis of views received from the public on the 2008 Progress Report of the Canadian and United States Governments under the Canada-United States Air Quality Agreement of March 31, 1991.



Rt. Hon. Herb Gray
Chair, Canadian Section



Pierre Tépanier
Commissioner



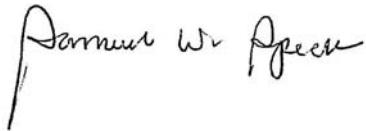
Lyall Knott
Commissioner



Hon. Irene Brooks
Chair, United States Section



Allen Olson
Commissioner



Sam Speck
Commissioner

Appendix

Sources of Comments Received on the 2008 Progress Report under the Canada-United States Air Quality Agreement

Government of Ontario, Minister of Environment, John Gerretsen

Government of Quebec, Ministry of Natural Resources and Fauna, Office of the Deputy Minister and Secretariat, Coordinator of International and intergovernmental Affairs, François Boutin

Territory of Yukon, Minister of Environment, Elaine Taylor

Government of Canada, Minister of Transportation, John Baird

Government of Saskatchewan, Minister of Environment, Nancy Heppner

Government of Alberta, Minister of Environment, Rob Renner

Government of Canada, Minister of Health, Leona Aglukkaq

Lakeland Industry and Community Association (LICA), Chairman, Robert Deresh

Royal College of Physicians and Surgeons of Canada, Chief Executive Officer, Andrew Padmos

Canadian Institutes of Health Research, Alain Beaudet

Institute of Natural Resource Sustainability, Illinois State Water Survey, National Atmospheric Deposition Program, Christopher Lehman

Institute of Natural Resource Sustainability, Illinois State Water Survey, National Atmospheric Deposition Program, Coordinator, David Gay

Institute of Natural Resource Sustainability, Illinois State Water Survey, National Atmospheric Deposition Program, Mark Rhodes

Connecticut Hill Atmospheric and Precipitation Chemistry Research and Monitoring Facility
Institute of Ecosystem Studies, Site Manager, Tom Butler

Citizens for Renewable Energy, Coordinator, S. (Ziggy) Kleineau