

# **GREAT LAKES WATER QUALITY AGREEMENT REVIEW**

## **SUMMARIES OF QUARTERLY REPORTS SUBMITTED TO AGREEMENT REVIEW COMMITTEE**

**April 28, 2006 to June 12, 2006**

### **Table of Contents**

REVIEW WORKING GROUP "A" .....	2
REVIEW WORKING GROUP "B" .....	3
REVIEW WORKING GROUP "C" .....	6
REVIEW WORKING GROUP "D" .....	7
REVIEW WORKING GROUP "E" .....	8
REVIEW WORKING GROUP "F" .....	9
REVIEW WORKING GROUP "G" .....	10
REVIEW WORKING GROUP "H" .....	12
SPECIAL ISSUE WORKING GROUP .....	15

# **REVIEW WORKING GROUP “A”**

## **Scope, Purpose, Objectives, Functions, Standards, Binational Arrangements**

### **EXECUTIVE SUMMARY**

GLWQA Review Working Group A (RWG A) has held three meetings to date (April 28<sup>th</sup>, May 11<sup>th</sup> and May 26<sup>th</sup> 2006). RWG A is making steady progress on its task and continues to receive good participation and continued interest from its membership.

RWG A has been tasked to examine the Scope and Purpose of the Agreement; Goals and Objectives; and Function, this includes:

- Definitions (Article I)
- Purpose (Article II and preamble clauses)
- General Objectives (Article III)
- Standards, Regulatory Requirements, Research (Article V)
- Consultation and Review (Article X)
- Implementation (Article XI)
- Standard Provisions (Articles XII, XIII, XIV, XV)

RWG A has agreed to a schedule and approach to meet their objectives. RWG A has decided to approach its task by holding conference calls once every two weeks on Thursday mornings from 9:00 am - 11:00 am CDT.

RWG A has agreed to take a systematic approach in their evaluation and divide their task into the three sections:

- (i) Articles X-XV** which address the management and administrative elements of the Agreement;
- (ii) Article V (Standards, Regulatory Requirements and Research)** and also include Article VI, which each Group has been asked to review; and
- (iii) Articles I-III** which address definitions and the purpose of the Agreement.

The proposed timeline for RWG A's efforts are:

- Early May, examine the first group of Articles (X-XV);
- May - June, review articles V and VI; and
- By the end of June, look at the third group of Articles (I-III);

Based on progress to date, RWG A will be re-evaluating and likely revising the above targets.

# **REVIEW WORKING GROUP “B”**

## **Chemical Integrity, Toxics, Hazardous Polluting Substances**

### **Executive Summary**

The Great Lakes Water Quality Agreement Review Toxics Work Group convened on April 28, 2006 in Chicago. Subsequent conference calls have been held on May 8 and May 26, 2006. See Attachment A for meeting agendas and Attachment B for summary notes. There have been approximately 20 to 30 attendees at each meeting or conference call from the United States and Canada.

The first three meetings of the Work Group have focused on Article 4 and Annex 1 of the Great Lakes Water Quality Agreement. To date, the Work Group has nearly completed the major review elements for the Article and Annex (see the comment summary below). Following the next conference call, recommendations for revising Article IV and Annex 1 will be drafted by the co-chairs. The following are some of the key issues that have been raised in Work Group discussions:

- There is general agreement in the Work Group that the values set for the chemicals in Annex 1 are out of date and do not reflect current science, however, the approach for updating and maintaining the Annex 1 list of chemicals has generated divergent opinions. These include the following: 1) keep the list of specific objectives as a part of Annex 1 and improve upon the protocol for updating the values and adding substances; 2) Remove the list from the Agreement, but maintain it as a separate document, with an improved protocol to be specified within the agreement for updating values and adding substances; 3) Replace the specific objectives with references to other WQ criteria set by the parties; 4) Remove the concept of Specific Objectives from the Agreement entirely.
- Some Work Group members believe that the language in Annex 1 should make it clear that the water quality objectives are interim goals on the way toward virtual elimination (of persistent toxic substances), otherwise there may be a potential contradiction. Others believe the idea of virtual elimination is antiquated and outside the ability of the GLWQA to achieve in light of international contributions of toxics to the basin.
- Some Work Group members believe that Article 4 is too passive in its management, coordination, and implementation (i.e., there is no accountability for the consultation process (or lack thereof)). Most Work Group members believe the biennial consultation process has not been

properly implemented, either due to a lack of commitment and resources by the Parties, and/or because the process for consultation is too vague. Minimally, the process by which the Parties consult pursuant to Annex 1, S.2(a), should be spelled out in the Agreement, and there must be an accountability provision included where the Parties fail to follow through with implementation.

- Some Work Group members believe that a new approach should be developed for bringing proposals for identifying emerging chemicals. Some believe the eligible petitioners should include the States, Provinces, Tribes, First Nations, and the general public. The Great Lakes Binational Toxics Strategy was mentioned as a vehicle by which this approach might be delivered. One Work Group member provided a list of chemicals to be added to Annex 1.
- It was noted pursuant to Article 4, S.3(a) regarding combined effects from multiple pollutants, that this issue has not been addressed adequately by the parties..

### **Cross Cutting Issues**

- Some Work Group members feel the focus of the GLWQA should remain exclusively on water quality, while others believe it should be broadened to an ecosystem protection agreement, a cross cut with Work Group A.
- There is general agreement by the Work Group that the GLWQA alone cannot address global sources of pollutants. Other means are needed to relate to other international agreements and organizations. The Great Lakes Binational Toxics Strategy was suggested as the organization to represent Great Lakes interests to international bodies, such as the UN and CEC. There was some question as to whether citing the Great Lakes Binational Toxics Strategy in the GLWQA should cross cut with Workgroup A, which is concerned with administrative organization.
- The close relationship among the Toxics Work Group and the LaMP/RAP and Sediment Work Groups is recognized, especially with regard to chemical objectives and emerging chemicals. The co-chairs will remain in close contact with the other Work Groups.
- There was some question as to whether emerging chemicals should be taken up by Work Group B or by the special issues Work Group. Emerging chemicals are anticipated by language in Annexes 1 and 12 (i.e., the consultation process cited in Annex 1 above, to consider new water quality objectives.)

- Clarification is needed as to whether Specific Objectives can currently be added to or modified by the parties exclusive of the 6-yearly review process in which we are currently participating. Although the language in the agreement seems to provide for this under the Supplement to Annex 1, S.2(a), there has been some suggestion during the Work Group discussion that this is not the case and that the parties could only update these as part of a renegotiation of the entire agreement.

### **Next Steps**

The co-chairs will develop a format for reporting out recommendations with the Work Group. The review will proceed on schedule to address the other Articles and Annexes assigned to the Toxics Work Group.

# **REVIEW WORKING GROUP “C”**

## **RAPs and LaMPS**

### **Executive Summary**

The Annex 2 Team has organized its efforts to Review Annex 2. There have been 3 phone calls/meetings held to discuss the review. The team co-chairs have held 6 phone conversations and communicated with the contractors in 20 phone calls and/or e-mails. The workgroup calls have included 25, 23, and 26 participants, respectively. A schedule for review has been set so that each review element is discussed every two weeks. Teams for leading the review for each element have been organized and leaders identified. These subgroups will provide summaries and analysis of comments from the full group and then forwarded to a core team for full review summarization. The clarity element will be discussed the week of May 30. Due to problems with the sharepoint site, the review has been delayed. This will not delay the final drafts due to the Secretariat.

# **REVIEW WORKING GROUP “D”**

## **Phosphorous, Non-Point Source Pollution**

### **Executive Summary**

The workgroup has met three times and has developed a working relationship that is moving ahead to review Annex 3 and Annex 13.

Two subgroups have been struck to address issues for Annex 3 and Annex 13. For the annex 3 work group, an invitation letter over the signatures of the co-chairs has been sent to outstanding United States and Canadian scientists recognized for their work and ability to technically evaluate appropriateness of the models and revise model outputs used to develop the loading requirements for the Great Lakes. We have had 100% acceptance of this invitation. For Annex 13, membership from Workgroup D involved in watershed planning have agreed to provide advice to the Workgroup D regarding the operation and effectiveness of this annex.

Annex 3 work group is charged to evaluate the stated goals of restoration of year-round aerobic conditions in the bottom waters of the Central Basin of Lake Erie and substantial reduction in the present levels of algal biomass to a level below that of a nuisance condition in Lake Erie. Recent observations indicate that both of these goals are not being met in spite of external measured total phosphorus loads being below the 11,000 metric tonnes. In three of the last five years that loads were reported (1999-2003) external loads were below 9500 metric tonnes. Loads at this level were expected to essentially eliminate the area of anoxia.

Annex 13 work group is evaluating the operation and effectiveness of this annex. At this point, the workgroup is looking at getting a handle on the scope of non-point pollution watershed management plans in both countries (estimate of above 150 some watersheds at the 8 digit Hydrological Unit scale). Methods of evaluating the effectiveness of the watershed plans in place are being considered. Effectiveness measures include looking for plans that identify the significant non-point pollution issues in the watershed, and what implementation plans are proposed to remediate or mitigate the significant issues. The definition of terms “priority HU” and “priority areas” in article 2b have also been questioned whether they are enabling to drive actions if they are not identified and ranked.

# **REVIEW WORKING GROUP “E”**

## **Sediment Related Issues**

### **Executive Summary**

The Sediment Review Working Group has augmented its membership list to include sediment experts from Academia. Much time has been devoted at the last two meetings to instructing participants on how to access SharePoint. Pranus Pranckevicius attended the May 9<sup>th</sup> meeting to provide advice.

The Sediment RWG has developed unique sediment workbooks for each of Annexes 7 (Navigational Dredging) and 14 (Contaminated Sediment) which include actual text from the Agreement, the review questions that are being asked and the pertinent comments made at the last review in 1999. These workbooks have been uploaded to the Sediment RWG site.

At the May 30<sup>th</sup> meeting there was some discussion on the CLARITY and RELEVANCE issues. There was consensus that there is a need to coordinate with the groups that deal with Annexes 1 (Toxics) and 2 (AOCs and LaMPs).

# REVIEW WORKING GROUP “F”

## Research and Monitoring

### Executive Summary

The Review Working Group F: Research and Monitoring has met face-to-face once, at the “kickoff meeting” on April 28, and it has convened 4 conference calls to date. Initial discussions focused on the process by which the RWG would conduct the review of Annex 11 and Annex 17. Subsequent discussions were primarily centered on methodically applying each of the Evaluation Framework elements to each Annex, in order.

The issue of the overall purpose of the GLWQA was raised several times. Some participants advocate adhering to a strict interpretation of the Agreement to address water quality, and therefore it should focus primarily on issues of nutrients and toxic contaminants. Others view the Agreement as having evolved over time and therefore must be viewed in the context of a Great Lakes basin ecosystem management Agreement. The findings of the review of the Agreement for the elements of clarity, relevancy, achieving results, management framework and accountability depend strongly on which viewpoint is taken. Most of the RWG agree with the ecosystem management orientation, but they also agree that the Agreement was written with the more narrow focus which provides context for the current text in the Articles and Annexes. The review process would benefit from a clarification of this issue for all the RWGs.

The RWG found that discussions of the Annexes of the current GLWQA were most helpful when combined with visioning for potential future revisions and improvements. In the meeting/call summaries (posted on the sharepoint site), issue statements and potential recommendations for some of the issues are included. For the purposes of this quarterly report, the issue statements are summarized but the potential recommendations are not included.

# **REVIEW WORKING GROUP “G”**

## **Coast Guard Annexes**

### **Executive Summary**

This review group is tasked to undertake a review of Annexes 4,5,6,8 and 9 (the so called “Coast Guard Annexes”). The wording reflects the organization and duties of the United States and Canadian Coast Guard as at the time of the Protocol of Nov 18, 1987.

The United States Coast Guard continues to have responsibility for all the above Annexes and is actively engaged.

Significant changes have occurred on the Canadian side such that the Canadian Coast Guard as of June 2006 is now responsible for only the operational aspects of Annex 9. The remaining Annexes are now the responsibility of Transport Canada as a result of changes to the structure of government – first in 1995 when the Canadian Coast Guard was merged with the Department of Fisheries and Oceans. Coast Guard Marine Safety remained with Transport Canada and responsibilities under Annex 4, 5, 6 remained with the ‘new’ Transport Canada Marine Safety. The Canadian Coast Guard retained responsibilities with respects to ballast water discharges under Annex 6. Dredging under Annex 7 as well as Oil Handling Facilities under Annex 8 and the Joint Contingency Plan under Annex 9. In 2000 further structure of government changes took place under Ministerial Letters whereby responsibility for ballast water discharges was transferred to Transport Canada Marine Safety and the Department of Fisheries and Oceans (Science) was tasked to provide scientific advice to Transport Canada on the issue. Further changes took place in 2004 when the Office of Boating Safety and Navigable Waters Protection and the Policy portion of Oil and Hazardous Substance Prevention was also transferred to Transport Canada.

From a review of the appropriate Annexes for review group G it was therefore appropriate to provide Co Chairs that reflected the reality of the current responsibilities. This has been done with the appointment of TJ Mangoni from the United States Coast Guard and Chris Wiley who represents both Transport Canada and the Department of Fisheries and Oceans ( Science). The Canadian Coast Guard is expected to be represented with respect to its current responsibilities under Annex 9 but has yet to name it’s representative.

To date there have been two working group sessions. The first attended by those present at the April 28 kick off meeting in Chicago as well as a number of members on the phone.

The intent of the first meeting was from the Co Chairs point of view, to scope out the various interests of the memberships with these particular Annexes and to ascertain the priorities of the membership with respect to the review. The minutes of that meeting reflect a diversity of views with particular desire to focus on spills (of all sorts – oil , sewage etc) and the threat of ballast water and Invasive Species to the Great Lakes.

There was some evidence that not all members of the review group had seen the latest joint report of the parties to the IJC and a promise was made to post the report on the Share Point system.

Alas, the Canadian Co Chair of the review was unable access the Share Point system reliably until the end of May. As a result the report and minutes of the first meeting were kindly put on the system by Jamie Shardt of EPA. Members were additionally e mailed both the GLWQA report and minutes as well as coordinates for the second Conference call.

In the interval between the first and second calls two conferences took place that were specifically related to the Annexes under review and both attended by staff and / or Commissioners of the IJC (i.e. the International Conference on Aquatic Invasive Species in Key Biscayne and the AWMA Ship's Emission's Conference in Vancouver)

The second meeting / conference call occurred on May 26 and dealt specifically with Annex 5. Minutes have yet to be posted but generally reflected a step by step review of the specific Annex in the context of the questions posed under the Terms of Reference. Unfortunately there were relatively few members on the call.

# **REVIEW WORKING GROUP “H”**

## **Groundwater**

### **Executive Summary**

#### Attendance and Group Membership

Meeting on April 28, 2006

Norm Grannemann (USGS – Co-chair), Fred Fleischer (MOE – Co-chair), Judy Beck (USEPA), Laura Mammoser (Mittal Steel), Todd Nedesheim (USEPA-GLNPO), Stephen Carty (MOE), John Morton (ALCOA) , Andrew Piggott (EC), Sarah Miller (CELA), Charles LaMontagne (MDDEP, Prov. Quebec) )

Meeting on May 17, 2006

Fred Fleischer, Norm Grannemann, Dajana Grgic (MOE), Laura Mammoser, John Morton, Andrew Piggott, Jackie Fischer (USEPA-GLNPO), Judy Beck, Carol Ptacek (EC), David Jones (Huron Potawatomi), Charles LaMontagne, Greg Zwiers (GRCA) , Sarah Miller, Todd Nedesheim.,

Meeting on May 31, 2006

Fred Fleischer, Norm Grannemann, Jack Dutra (Mid-America Cropflight Assoc) , Judy Beck, Sarah Miller, Scott Duff (OMARA) , John Morton, Andrew Piggott, Charles LaMontagne, Greg Zwiers, Todd Nettesheim, Mark Kelly (Battelle MI), Doug Alley (IJC) , Monica Lim (for the ARC Secretariat), Marc Hudon (Nature Quebec), Dajana Grgic.

#### Membership Composition

Currently 34 people are on the email list – about half U.S. and half Canadian actively – 12 have governmental affiliations, 6 have tribal affiliations, 4 have NGO affiliations, 8 have business or industrial affiliations, and 4 are uncategorized ; 12 of the 34 appear to be actively participating in the biweekly teleconferences. Of the 6 Ontario CA representatives listed, one is participating. No municipal representatives are listed or participating.

### **Meetings**

Teleconferences are held every second Wed. from 1000-1200hrs Eastern. Open discussions are held at each meeting relevant to the individual framework criteria.

### **Overall Progress**

1. Pertinent documents previously released, that have references or recommendations relating to Annex 16, have been briefly discussed and some are posted to the SharePoint site. The issues in these documents are being synthesized as background information for the review of Annex 16.
2. We have discussed the definition of “Waters of the Great Lakes” and how groundwater fits into the current definition but have yet to make any recommendations on changing the definition.
3. General Observations:
  - a. There has been considerable progress in identifying point sources of groundwater contamination and developing technologies to detect and mitigate the contaminants.
  - b. Progress on groundwater contamination from non-point sources is less well understood than from point sources. Groundwater can play a significant role in the delivery of non-point contaminants to surface water.
  - c. There is a need to recognize that groundwater quantity can be a quality issue and that quality can be a quantity issue.
  - d. Groundwater quantity and quality relative to in-stream conditions and aquatic habitat are widely recognized but poorly understood.
  - e. Consistent and seamless mapping of groundwater conditions is required for both understanding and management purposes.
  - f. Ambient groundwater quality and processes of natural attenuation of contaminants need to be represented.
  - g. Programs are currently aimed at groundwater as a source of drinking water but seldom incorporate the role of groundwater as a mechanism of transporting contaminants to surface water or vice versa.
  - h. Programs seldom incorporate the role of groundwater for ecosystem function.
  - i. Programs seldom show links between groundwater withdrawal and groundwater quality.
4. Evaluation Progress:
  - a. Preliminary reviews have been completed for the evaluation criteria for CLARITY, RELEVANCY, ACHIEVING RESULTS. The contractor is currently preparing summaries of these discussions which will then be posted on Sharepoint for additional review and comment by the participants as well as those who are on the list but have not participated in the teleconferences.
  - b. The topics of MANAGEMENT FRAMEWORK, ACCOUNTABILITY, are to be addressed in the upcoming two meetings. Similar documentation will be provided and tabled for secondary reviews and commentaries.
5. Cross-Over Issues:
  - a. Monitoring of groundwater quality and quantity.

- b. Connection of groundwater with non-point source issues and watershed management.
- c. Toxic contaminants – Arsenic, some radionuclides

# **SPECIAL ISSUE WORKING GROUP**

## **Executive Summary**

Since April 28th, the Special Issue Working Group (SIWG) has held three meetings and is on a bi-weekly meeting schedule. The group identified a list of 29 potential issues to scope, and has voted on their significance. Two sub-groups are being formed, one for Aquatic Invasive Species, and the other for Climate Change Impacts to the Great Lakes.

Other issues for scoping will be determined with further input and guidance from the ARC and other workgroups.