

**149th Meeting of the International Joint Commission
Science Advisory Board
May 14 – 15, 2008
IJC Great Lakes Regional Office
8th Floor Board Room
100 Ouellette Avenue, Windsor Ontario**

**Meeting Record
Members Present**

Michael J. Donahue (U.S. Co-chair)..... URS Corporation, Farmington Hills, MI
David Carpenter University at Albany, Rensselaer, NY
Miriam Diamond.....University of Toronto, ON
C. Scott Findlay University of Ottawa, ON
Gary Klecka Dow Chemical Co., Midland, MI
Joseph Koonce Case Western Reserve University, OH
Donna Mergler University of Quebec, Montreal, PQ
Jeffrey Ridal.....St. Lawrence River Institute, Cornwall, ON
Susan Schantz University of Illinois at Urbana Champaign, IL
Deborah Swackhamer University of Minnesota, Minneapolis, MN
William Taylor.....University of Waterloo, ON
Marcia Valiante.....University of Windsor, ON
Richard Whitman USGS, Porter, IN

Members Absent

William Bowerman..... Clemson University, Pendleton, SC
John Carey (Canadian Co-chair).....NWRI, Burlington, ON
Milton Clark..... United States Environmental Protection Agency, Chicago, IL
Pierre FillionUniversity of Waterloo, ON
Hugh MacIsaacUniversity of Windsor, ON

Liaisons, Invited Guests, and IJC Staff

Douglas Alley International Joint Commission, GLRO
Kay Austin International Joint Commission, US Section
Peter Boyer..... International Joint Commission, GLRO
David Dix (conference call presentation) USEPA
Bruce Kirschner International Joint Commission, GLRO
Karen Vigmostad International Joint Commission, GLRO
Joel WeinerInternational Joint Commission, CDN Section

May 14
12 Noon – 17:00

- 1. Welcome and Introductions – Michael Donahue**
- 2. Approval of Agenda**
- 3. Scientific Briefing: National Center for Computational Toxicology, Dr. David Dix**
<http://www.epa.gov/ncct/toxcast>

4. IJC 14th Biennial Report Update

The report was identified as comprising two components:

- LaMP Assessment Component
- Municipal Discharge Component

Mike Donahue expressed the SAB's willingness to contribute in the development of the 14th Biennial Report that is to address programs and measures pertaining to pollution from municipal and industrial point sources. SAB members were encouraged to examine the Commission's requests for information that were transmitted to governments in early March and provide any suggestions on the focus of work to Kay Austin, Joel Weiner and Bruce Kirschner. SAB members were also encouraged to become involved in the development and review of material to be included in the biennial report.

May 15
8:30 AM – 12 Noon

Agenda continued

5. Invited Scientific Presentation: “PCBs, MeHg and Hearing Loss: Findings in Rodents and Implications for Humans” Dr. Susan Schantz, Professor, University of Illinois at Urbana-Champaign, Department of Veterinary Biosciences, Chair, Interdisciplinary Environmental Toxicology Program.

NB. As this presentation contains unpublished research, please do not cite or quote.

Dr. Mergler commented that Inuit children suffer high hearing loss associated with PCB exposure. She said that the condition is related to repeated ear infections related to impaired immune system function. She commented that the problem could be a double effect of the cochlear system as well as infections.

A brief discussion also addressed the role of additive effects of PBDE's and Dr. Schantz said no additive effect was present. She also commented that mercury seemed to block the effect of PCBs.

6. WG Updates and Scientific Discussion:

• **Nearshore Framework**

Dr. Vigmostad provided a brief synopsis of the priority history beginning with the IJC letter to governments of July 2007 indicating that nearshore concerns were a sufficient basis per se for reopening the Agreement. She then referenced the two nearshore workshops held in November 2007 and March 2008. Dr. Vigmostad stated that the next

step will be for IJC staff to compile a final report based on the outcomes of the two workshops. A brief discussion ensued on the status of the Agreement revision process with Mr. Weiner reporting that the IJC has followed up with governments and that the matter is now under the auspices of the Canadian Department of Foreign Affairs and International Trade, and the U.S. State Department. He stated that there is recognition that the 2009 centennial celebration of the Boundary Waters Treaty might be an opportunity for the governments to make a GLWQA announcement.

- **Eutrophication**

Dr. Koonce reported that the Work Group held its first meeting at the time of the Lake Erie Millenium Meeting in March in Windsor. He said that the WG will apply a weight of evidence approach similar to that advanced by Dr. Findlay in the SAB's 2005-2007 Priorities Report. The work plan is also being developed with a view to the IJC 15th Biennial Report. He summarized the central issues in terms of cladophora, blue green algae, and eutrophication in relation to zebra mussels and perhaps excess nutrients. He also noted the context of lower water levels, which could be influencing the entire system. He said that the uncoupling of the nearshore and the off shore could be explained in terms of other influences than zebra mussels. However he noted that if the cause is zebra mussels, there are no management implications and only a change in expectations will be required. He added that where it is known that phosphorus loads are too high in some hot spots that these should be identified for remediation. He concluded by saying that the WG will be able to make recommendations for both the 14th and 15th Biennial reports. Dr. Koonce cited a couple of areas for recommendations in terms of addressing the failure to track nutrient loading adequately and the federal focus on the open lake, and the need for a greater understanding of physical dimensions of the system (per Scudder Mackay Nearshore Workshop). Mr. Weiner suggested that a letter be written to the Upper Lakes Study Board regarding the need to better link water quality and quantity issues. Two suggestions were made to include a GLERL and GLFC representative on the WG.

- **Beach Closures**

Dr. Whitman indicated that the WG has held 4 meetings and has commissioned 3 white papers to date. The intent will be to hold a workshop in the fall, possibly in association with SOLEC and develop recommendations from the workshop.

- **Fish Consumption**

Dr. Carpenter reported that the WG held a one day consultation in March centered around the problem of the benefits in terms of omega 3's and the risks from contaminants from fish consumption. He said that resolution of the issue is difficult because of the lack of information on Great Lakes fish. To address this problem, the WG has decided to award two contracts (1) to review current levels of contaminants and omega 3's in Great Lakes fish, and, (2) to review the health effects literature in relation to contaminants and omega 3's. Dr. Carpenter said that the WG plans to propose a session on fish consumption at IAGLR in 2009, and perhaps generate an article for publication in Environmental Health Perspectives. He said that the other issue to be addressed relates to information on current consumption and the availability and use of advisories. He said that information suggests that people know about the advisories but ignore them.

- **Chemicals of Emerging Concern**

Dr. Klecka reported that the WG has held 4 conference calls and two meetings to date. He said that the initial work is ongoing and relates to identifying the current scientific

information that is available on chemicals of emerging concern. Dr. Keri Hornbuckle and her student, Ms. Carolyn Persoon are assisting in developing an annotated bibliography of available studies and data. The intent is to develop a data base for this information showing concentration, trend, frequency of detection and location and presenting the information in a GIS format. Along with this work, the WG has begun to review policy and programs in both countries with respect to management and control of CEC's. He said that Joel Tickner of the University of Massachusetts at Lowell and Fe De Leon at the Canadian Environmental Law Association will be assisting with this work. Dr. Klecka indicated that their reports will be available for review at the October SAB meeting. He indicated that this will lead to an expert consultation in early 2009 and a WG report in spring 2009 in time for use in the 15th Biennial report. A discussion ensued on the nature of the data base to be developed, and the merits of taking a systematic approach that could be standardized for the use of others. Dr. Findlay said that he would provide a template that he has developed, and suggested that this be a topic for discussion by the Board at its next meeting.

- **Aquatic Invasive Species**

Since Dr. MacIsaac was absent, the secretary indicated that he would contact the secretary of the WG and obtain an update for inclusion in the minutes.

The RFP for the contracted work for the WG is posted on MERX, an internet based public contracting system. It will be open for bid until June 30. The proposals will be reviewed using the scoring matrix, qualified bids will be reviewed and a selection will be made by the work group. Background information on this work and all the other work groups is available at the following link:

<http://ijc.org:8080/glro/glro-web/priorities/2007-09/>

7. Other Business

- **Carbon Offsets for Travel to IJC Meetings**

Dr. Findlay introduced the topic, and suggested that fewer meetings e.g. 2X/year with conference calls would be appropriate. He said that in person meetings could then be offset by purchasing carbon credits using several of the systems that are now in place for this purpose. Several comments were made concerning whether carbon offset programs are mature and accountable, and doubt was expressed whether the IJC had the authority to use its budget in this manner. e.g. what is the price of carbon? Support was expressed for the concept in principle, and in reducing the number of in person meetings. Dr. Findlay volunteered to provide additional information for the next meeting. Dr. Vigmostad indicated that she would follow up on whether it is possible within Treasury Board regulations to use the budget for this purpose.

8. Future Meetings

- **#150; October 28 – 29, or alternatively October 30 – 31, 2008 to coincide with the IJC Fall Semi Annual Meeting in Ottawa. Jointly with the WQB - Dates to be determined based on the operational requirements of the Boards and will be announced under separate cover.**
- **#151; January 7 – 8, 2009, Windsor, Ontario**
- **#152; Proposed – March 25 – 26, 2009, Windsor, Ontario**

- **#153; Proposed – June 17 – 18, 2009, Windsor, Ontario**
- **#154; Proposed – September 23 – 24, 2009, Windsor, Ontario N.B. Alternative date of October 5 to coincide with the IJC Biennial meeting on October 6 – 7, in Windsor, Ontario.**

9. Adjournment

There being no further business of the Board, the meeting adjourned at 11 AM.