





ENVIRONMENTAL CHANGE: NORTHERN & INUIT PERSPECTIVES

**PIERRE AYOTTE,
UNIVERSITÉ LAVAL**

The logo of the University of Laval, featuring a red shield with a white cross and four red lions, and the text "UNIVERSITÉ LAVAL" in black.

Nunavik (Northern Québec)



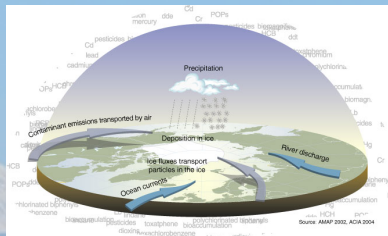
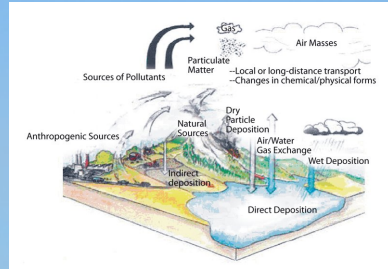
“Nordic peregrinations”
Avenue du Mont-Royal
(ends Oct 31)

Robert Fréchette, General
Director, Avataq Cultural
Institute; the Inuit cultural
organization of Nunavik

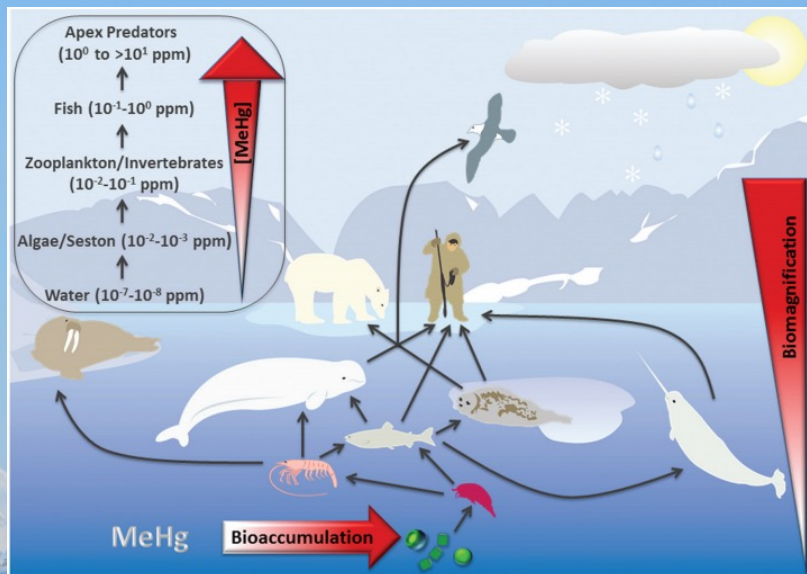


Robert Fréchette, General Director, Avataq Cultural Institute; the Inuit cultural organization of Nunavik

Long range atmospheric transport of contaminants to the Arctic



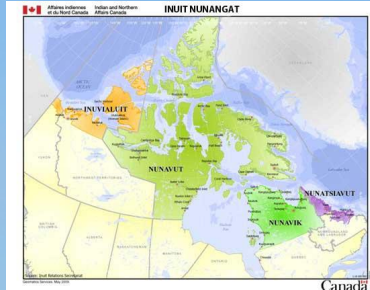
Methylmercury (MeHg) Bioaccumulation and Biomagnification in a typical Arctic Marine Food Web



Lehnherr, I. Environmental Reviews, 2014

Northern Contaminants Program (NCP)

- Established in 1991, run by Aboriginal Affairs and Northern Development of Canada (AANDC)
- Management Committee includes federal and regional government departments, Aboriginal organizations
- Research and Monitoring of contaminants in the Canadian Arctic environment and people
- Working towards reducing and, where possible, eliminating contaminants in country foods



Inuit Circumpolar Council (ICC)



- ICC is an international Indigenous Peoples' Organization representing approximately 160,000 Inuit living in the Arctic regions of Alaska, Canada, Greenland and Chukotka, Russia.
- Principal goals:
 - strengthen unity among Inuit of the circumpolar region;
 - promote Inuit rights and interests on an international level;
 - develop and encourage long-term policies that safeguard the Arctic environment;
 - seek full and active partnership in the political, economic, and social development of circumpolar regions.

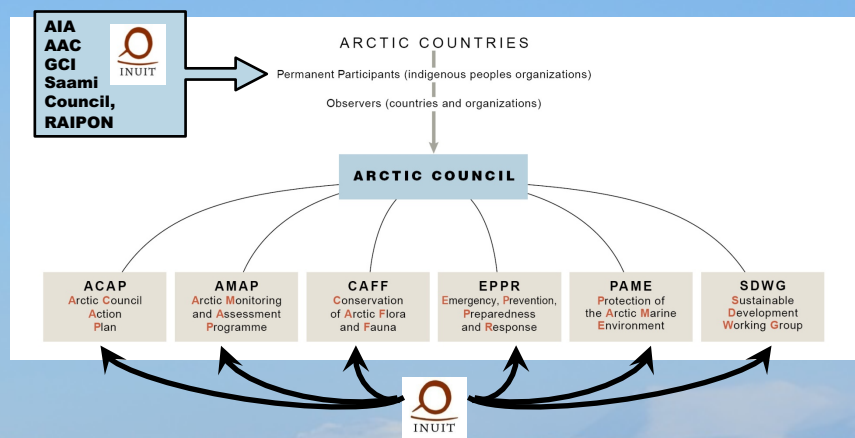
ICC's Role

- One of the NCP Indigenous partner organizations
- ICC represents Inuit internationally:
 - Arctic Council Permanent Participant Organization
 - United Nations Observer Status



Pictures: Eva Kruemmel

Arctic Council Structure



<http://arctic-council.org/article/about>

Arctic Council's Arctic Monitoring and Assessment Programme



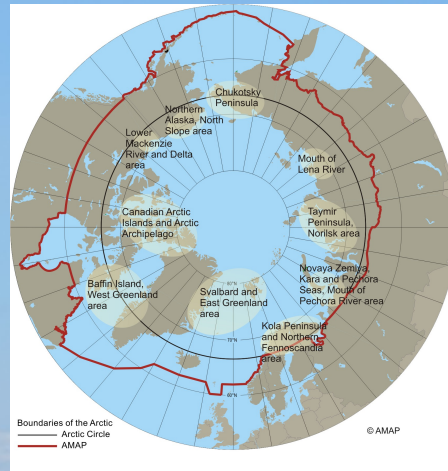
Members: Canada, Denmark/Greenland, Finland, Iceland, Norway, Russia, Sweden, USA; 6 Permanent Participant Organizations (including ICC)

Observers: 12 non-arctic countries, 9 IGOs, 11 NGOs

Priorities: POPs, Metals, Human Health; Climate, Ocean Acidification, Oil, Radioactivity

Media: Atmospheric, Terrestrial, Freshwater, Marine, Humans

Documenting: Sources, Pathways, Levels, Bio-accumulation, Trends & Effects, New Chemicals



AMAP work

Assessments recently completed or in progress:

- Climate Policy-Makers Summary
- Pollution Policy-Makers Summary
- Climate Issues Overview Report
- Pollution Issues Overview Report
- Black Carbon/Ozone Assessment Report
- **Human Health Assessment Report**
- Radioactivity Assessment Report
- Chemicals of Emerging Concern Assessment
- POPs Trends Assessment
- Biological Effects Assessment
- Climate Change and POPs assessment



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United Nations Environment Programme (UNEP)

1) Stockholm Convention on POPs

- Global, in force since 2004, over 160 countries ratified, now covers 26 POPs, 3 more under review
- Big impact of partnership between Canadian government and Indigenous groups in negotiations

2) Minamata Convention on Mercury

- Officially adopted and opened for signature in October 2013
- Currently has 128 signatures and 25 ratifications (as of Sept 2016)
- Will likely take another year or so until it comes into force (50 countries need to ratify it)

Importance of the Arctic

Preamble of the Stockholm Convention:

“Acknowledging that the Arctic ecosystems and indigenous communities are particularly at risk because of the biomagnification of persistent organic pollutants and that contamination of their traditional foods is a public health issue.”



Preamble of the Minamata Convention:

“Noting the particular vulnerabilities of Arctic ecosystems and indigenous communities because of the biomagnification of mercury and contamination of traditional foods, and concerned about indigenous communities more generally with respect to the effects of mercury,”



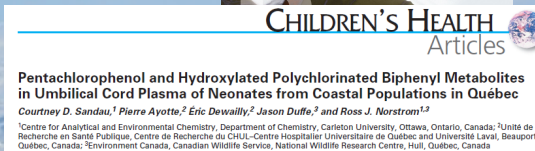
Stockholm Convention on POPs

Three more chemicals added:

- Hexachlorobutadiene (HCBd)
- Pentachlorophenol (PCP)
- Polychlorinated naphthalenes (PCNs)

Arctic data indication for:

- Environmental long-range transport
- Persistence
- Bioaccumulation
- Toxicity



Work ahead



- Stockholm Convention on POPs:

Chemicals under review:

- Dicofol (currently used pesticide)
- Short-chained chlorinated paraffins (SCCPs)
- Pentadecafluorooctanoic acid (PFOA –“Teflon”)

- Minamata Convention on Mercury: ratification, baseline data

- Arctic Council/AMAP:

- Adaptation Actions in a Changing Arctic (AACA)
- Utilization of Indigenous knowledge, community-based monitoring

Sheila Watt-Cloutier

- ICC International Chair (2002-2006)
- 2007 Nobel Peace Prize Nominee



"We must now speak environment, economy, foreign policy, health and human rights in the same breath, says Sheila Watt-Cloutier.

"Everything is connected."