Arctic Monitoring and Assessment Programme (AMAP)

Work plan for 2009 – 2011 and tentative list of deliverables 2009 – 2013

Assessments

- Publish the 2009 AMAP State of the Environment Report on Selected Pollution Issues, and the related 2009 AMAP Update Report on Selected Climate Issues of Concern, and present and disseminate these reports at appropriate venues.

Human Health

- Publish the 2009 Human Health scientific assessment report and present the assessment at appropriate venues, including a joint presentation with the results of the Canadian Northern Contaminants Programme health studies at a conference in Iqaluit, Canada in June 2009.

POPs

- Arrange for publication in scientific journals of the 2009 POPs scientific assessment and present the assessment at appropriate venues.

Radioactivity

- Publish the 2009 Radioactivity scientific assessment report and present the assessment at appropriate venues.

Update on Mercury in the Arctic

- Facilitate the work of AMAP Mercury Expert Group to deliver assessment in 2011.

Oil and Gas

- Follow-up AMAP-related recommendations as presented in the Executive Summary to the *Arctic Oil and Gas 2007* report.

Arctic Council Cryosphere Project - SWIPA

- Continue to implement the SWIPA-project.
  - Conduct workshops and meetings for the different SWIPA components and modules to develop the component reports, and meetings of the SWIPA Integration Team to integrate and synthesise the different components of SWIPA.
  - Produce the 2011 scientific report(s) and the 2011 synthesis report.
- Present a preliminary report on the Greenland Ice sheet at COP 15 (2009).
  - An initial report on the Greenland Ice Sheet component is currently under preparation and an extended summary will be provided for the April 2009 Ministerial Meeting, with the intention that it will be accepted for distribution at COP15.

- Produce the 2009 Greenland Ice Sheet scientific report and the 2009 summary report for COP 15.

- Implement the Communication Strategy for SWIPA
  - Present SWIPA at appropriate venues (e.g., COP15)
  - Present the 2011 scientific report(s) and the 2011 synthesis report at appropriate venues.
  - Develop recommendations pertaining to the SWIPA, as requested.
  - Produce fact-sheets, films, web based information, etc., as appropriate.

Non-CO_2 drivers of climate change

- Compile a report on the current, planned and potential activities regulating emissions of non-CO_2 drivers and evaluate possible further mitigation actions.
- Develop recommendations for national and international follow up action.
- Report the results of the above to the 2011 Ministerial meeting.
- Consult with appropriate UNEP bodies about UNEP considering incorporating information on black carbon and the need to mitigate emissions for Arctic climate benefit into its climate change programme.

Monitoring and Research

AMAP Trends and Effects Monitoring Programme

- Continue ongoing monitoring and assessment activities, including (long-term) temporal trend studies, and monitoring of spatial trends, human health, and biological effects in the Arctic, with special emphasis on the collection of information on new contaminants, assessment of the combined effects of climate/UV and contaminants, preparing reports on emerging issues, and improved information on sources of contaminants.
- Further develop appropriate monitoring, assessment, and special climate related projects to implement ACIA follow-up.
- Follow-up AMAP-related recommendations as presented in the Executive Summary to the *Arctic Oil and Gas 2007* report.
- Assess the past ten years of monitoring and develop plans for the next ten years, taking account of requests from Ministers and including the new monitoring needs and latest recommendations from science.
- Conduct a review of AMAP Trends and Effects Monitoring Programme (strategy and implementation) and revise the AMAP Monitoring Programme Guidelines, for the period after 2010, for presentation to Ministers in 2011.
- Hold a workshop in autumn of 2009 to discuss and coordinate the revision of the AMAP Monitoring Programme.
- Complete the AMAP project on climate and contaminants and produce the report on this activity.

- Implement the EU FP7 ArcRisk project (assuming it is funded) and seek support to implement complementary activities in Russia and the United States.

Sustaining Arctic Observing Networks - SAON

- Continue efforts to enhance, coordinate and integrate circumpolar monitoring efforts.
- Continue development of SAON and participate and represent the Arctic Council on the proposed Arctic Observing Forum (AOF).
- If agreed, provide Secretariat support for the AOF.

Non-CO_2 drivers of climate change

- Continue to assess the state of the science on short lived climate forcers and their impact on the Arctic.
- Identify gaps in observations of non-CO2 drivers and promote new observations to fill those gaps
- Assess and seek to improve the capacity of climate models to address short lived climate forcers.

Climate research and improving predictive capability

- Facilitate further development of reliable regional climate models.
- Further developing the AMAP programme activities related to combined effects of climate change and other impacts.
- Facilitate studies on the Arctic carbon cycle to identify key sensitivities and major feedbacks to regional and global climate

Use of Unmanned Aircraft Systems for monitoring in the Arctic

- Examine further extended use of unmanned aircraft in the Arctic.
- Establish a project team comprising scientists and representatives of civil aviation authorities to review the issues associated with and to facilitate and coordinate the safe use of unmanned aircraft systems for research and monitoring in the Arctic

Other Outreach and Coordination Activities

- Coordinate an ‘Arctic Event’ at COP 15 in cooperation with Denmark and other AC WGs.
- Further develop cooperation with UN ECE LRTAP groups, in particular EMEP, and the task forces on Hemispheric Transport of Air Pollutants and Measurements and Modelling.
- Continue cooperation with UNEP on the Stockholm Convention and the UNEP Mercury process with respect to provision of relevant information and harmonization of methodologies for monitoring, etc.
- Circulate AMAP work plan to AC observing countries and IASC member countries for distribution to relevant institutes in their countries.

- Complete the publications of the Oil and Gas Assessment scientific assessment reports and follow-up on recommendations, as appropriate.
- Continue to coordinate and expand activities to promote quality assurance/quality control of AMAP monitoring data, including the circumpolar Arctic Contaminants QA/QC monitoring program spearheaded by the Canadian Northern Contaminants Program, and the AMAP human health laboratory intercalibration programme.
- Continue to coordinate and expand activities to ensure appropriate data reporting and archiving, including reporting of data to AMAP thematic data centres.
- Produce additional fact sheets reflecting AMAPs assessments.
- Continue to support ACAP projects, in particular those on mercury, obsolete pesticides, dioxins and furans, FJL clean-up, and other relevant projects as identified in the workplan for ACAP, including the development of AMAP/ACAP joint fact sheets.
- Continue a close cooperation with international bodies to avoid duplicating work and to coordinate work programmes in an efficient and cost effective manner.
- Participate in activities to compile and synthesis results of the IPY.
- Participate in the further development and implementation of special projects such as the project on the Lena and other Siberian rivers, and follow-up of the PTS project, and communicate this to SAOs for their consideration.
- Participate in relevant international meetings and symposia to communicate AMAP results and information on ongoing activities.
- Support the implementation of the CBMP as the vehicle for implementation of the coordinated AMAP-CAFF monitoring projects.
- Implement, together with SDWG the Human Health Risk Reduction Project, relevant climate-related projects and OGA follow-up activities.
- Continue to coordinate GIS related activities with EPPR and other WGs.
- Improve the financial support for the AMAP work.

List of possible AMAP deliverables and timeline for their production during the coming years

For	Delivery date to AMAP WG	Product	Expert group
Arctic Council			
AC 2009	2009	AMAP 2009 State of the Arctic Environment report on selected pollution issues	AMAP WG
AC 2009	2009	AMAP 2009 Update on Selected Climate Issues of Concern	AMAP WG
AC 2009	2009	Extended summary of initial report on the SWIPA Greenland Ice Sheet component	SWIPA GRIS Component group
AC 2011	2010	Comprehensive update assessment of mercury in the Arctic	AMAP Hg assessment group
AC 2011	2010	SWIPA component and module scientific assessment reports	SWIPA Component groups
AC 2011	2010	SWIPA integration and synthesis report	SWIPA Integration Team
AC 2010/2012	2011/2013	Update assessment on climate and contaminants	POPs/Hg/metals expert groups and/or climate expert group
AC 2012/2014	20011/2013	Comprehensive update assessment on Arctic climate change (impacts, including ozone and UV)	Climate assessment group
AMAP WG			
AMAP 2010	2010	Updated version of the AMAP Trends & Effects Programme	All AMAP expert groups
External Groups (UNEP, UN ECE)			
UNEP Governing Council	2009	Mercury time trend data products	Mercury Expert Group
UN ECE Metals Protocol / task force HTAP	2009	Gridded global anthropogenic mercury emissions to air datasets (2005 and 2020 scenarios)	AMAP Secretariat
UNFCCC COP15	2009	Presentation of the preliminary report on the SWIPA Greenland Ice Sheet component and arrangement of an Arctic side event/Arctic Day	CEC
UNEP Stockholm Convention	2009	Protocols for monitoring contaminants in human blood	HHAG
UNEP Governing Council	2011	AMAP Mercury assessment	Mercury Expert Group