Dear Sir or Madam

Arctic Council

Agenda Item 5 “Arctic Council Action Plan to Eliminate Pollution of the Arctic (ACAP)”.

We refer to the Ministerial meeting in Iqaluit, September 17-18 1998, where the Senior Arctic Officials (SAOs) were instructed to continue to develop an overall plan of action to eliminate pollution of the Arctic. The SAOs recommended that Norway take the lead in co-operation with other Arctic states and Permanent participants in developing the plan.

The second workshop to further develop ACAP was held in Oslo on September 14-15, 1999.

At our meeting in Oslo the following subjects were discussed:
- the further development of ACAP as an overall strategy for the Arctic Council on pollution issues;
- the further development of the operative part of ACAP (actions/co-operative projects);
- implementation of ACAP (organisational issues, support elements)

Based on the discussions in Oslo we have now developed a second draft of ACAP, which is hereby submitted for your information and possible comments.

We believe that our discussions regarding the strategic part of ACAP have progressed to the point that we are ready for official discussions. We suggest that the present draft is used as a basis for preliminary negotiations at a planned ACAP meeting in February (see workplan below).

The operative part of ACAP, the proposed concrete actions in the first phase of ACAP, is far from finalised and both the format and content need further development. In particular in order to bring this work forward we are dependent on countries devoting sufficient time and effort to develop action proposals. The success of ACAP will to a large degree hinge on the ability of the individual Council members to identify and propose appropriate actions, and on their commitment to bring the proposals forward (not necessarily involving financial resources).

1999-SA0-25
We had a very good discussion in Oslo on the issues connected to the implementation of ACAP, but did not conclude on any specific recommendations. This is an issue that needs further discussion and consideration. We enclose a summary of the discussions in Oslo.

We envisage the following work-plan:

**Nov. 18-19, 1999**  
SAO-meeting, Washington. (Presentation of second draft ACAP. Status report from the ACAP workshop, Oslo 14-15 September)

**Febr. 15-17, 2000**  
ACAP meeting, Oslo,  
- negotiate text for the strategy  
- discuss and elaborate concrete proposals for actions  
- discuss implementation mechanisms for ACAP and if possible develop recommendations to the SAOs

**April 27-28, 2000**  
SAO-meeting, Fairbanks

**May 2000**  
ACAP-meeting, Oslo *(if necessary)*  
- finalise the discussions and develop recommendations for SAOs

**Sept/Oct 2000**  
ACAP-meeting *if necessary* (back-to-back with SAO-meeting)

**Sept/Oct. 2000**  
SAO-meeting before the ministerial meeting (final approval of ACAP by SAOs)

We plan to have a finalised draft of the overall strategy, including proposals for actions and recommendations on implementation issues for discussion at the SAO-meeting in April. The discussion on actions will of course not be closed at this moment. Actions may be proposed continuously and also after the ministerial meeting in September/October.

We look forward to hearing your comments in Washington.

Yours sincerely

Per Døvle  
(Deputy Director)

Contact person: Gunnar Futsæter, Senior Advisor

Enclosures:
1. Second draft ACAP
Arctic Council Action Plan to Eliminate Pollution of the Arctic (ACAP)

Introduction

In June 1997, the report produced by the Arctic Monitoring and Assessment Programme (AMAP) entitled "Arctic Pollution Issues: A State of the Arctic Environment Report" was submitted to Arctic ministers under the Arctic Environmental Protection Strategy. In the Alta Declaration, the ministers agreed to a number of actions in response to the findings of AMAP. These included increasing efforts to limit and reduce emissions of pollutants into the environment, and the promotion of international co-operation in order to reduce the identified pollution risks.

In September 1998, Arctic Council ministers instructed Senior Arctic Officials to develop an overall plan identifying actions to address the pollution sources identified through AMAP. The ministers requested that the resulting Arctic Council Action Plan to Eliminate Pollution of the Arctic (ACAP) should:

- complement existing arrangements. This should include existing legal arrangements, and existing structures and mechanisms under the Arctic Council, such as the Regional Plan of Action for the Protection of the Arctic Marine Environment from Land-based Activities;
- allow for actions on a wide scope of pollution prevention issues and corresponding remediation measures; and
- include the identification of co-operative projects for implementation.

ACAP will act as a strengthening and supporting mechanism to encourage national actions to reduce emissions and other releases of pollutants. Co-operative actions will make an important and significant contribution to the overall international effort to reduce environmental damage on a global level.

The following ACAP consists of of two parts, an overall strategy designed to provide a structure for co-operation and an accompanying Action Plan (Annex A) which can evolve dynamically on a shorter time frame in response to emerging priorities reflecting specific projects and activities. The overall strategy is designed to cover all pollution issues of concern under the Arctic Council. The Action Plan will give priority to actions that are complementary to existing action plans and actions both under the Arctic Council and in other fora. The implementation of ACAP will take into account the responsibilities, capacities and work plans of the existing Arctic Council working groups as they pertain to pollution prevention. When appropriate, opportunities for co-operation with international organisations engaged in relevant pollution prevention and remediation activities will be utilised.
Overall Strategy

1. Objective

The objective of the [Arctic Council relative to pollution] [ACAP] is to prevent, reduce and ultimately eliminate pollution to provide for the protection and restoration of Arctic environmental quality and biodiversity, including human health.

2. Principles

In developing and implementing ACAP, Arctic States should be mindful of the following principles:

- application of the precautionary approach;
- polluter pays principle;
- promotion of the use of clean technology and/or the application of best available techniques (BAT), best environmental practices (BEP) and Environmental Impact Assessments (EIA);
- [recognition and use of traditional knowledge] [respect traditional knowledge, innovations and practices, promote their wider application with the approval and involvement of the holders of such knowledge, and encourage the equitable sharing of the benefits arising from its utilisation (with its holders). Note: This wording proposed by Canada];
- the need to avoid transferring, directly or indirectly, damage or hazards from one area of the environment to another or transform one type of pollution into another; and
- the need to co-operate on a regional basis for protection and preservation of the environment, taking into account characteristic regional features;
- integration of Arctic environmental concerns in all economic sectors.

3. Identifying Actions

3.1 Identification and Assessment of Problems

The identification of existing and potential threats will be based on all relevant information and sources.

AMAP, and as appropriate CAFF, will be responsible for identifying and assessing the scientific significance of existing and potential threats.

The severity of the problem to be addressed shall be determined in relation to its effect on the following factors:

- food security;
- human health;
- ecosystem health, including biodiversity;
- protection of living natural resources; and
- socio-economic benefits, including cultural values.
In addition, the assessment should identify the sources of pollution, be they point or non-point, and the affected areas of concern.

The identification and assessment of threats will be on-going. The importance of the application of the precautionary approach is emphasised.

3.2 Criteria for actions

Actions will be selected based on the following criteria:

(i) severity of the risk (associated with observed pollutant levels) for adverse environmental, human health or socio-economic consequences;
(ii) prevalence of a pollutant (i.e. if the pollutant has been found to be widespread in one or more compartments of the Arctic environment, or may endanger human health via consumption of food from the Arctic environment);
(iii) indications, by models or other scientific predictions, that present use, emissions, and other releases of the pollutants could cause serious effects on the environment or on human health;
(iv) the sources and pathways of the pollutants as they relate to Arctic pollution;
(v) the potential of the action to encourage countries to take measures (including under other international fora and agreements) that reduce the release to the environment of pollutants of concern;
(vi) financial implications and cost effectiveness of the action; and
(vii) local resources/participation;
(viii) common issues where there is existing or potential similarity in local and national problems which benefit from common approaches.

When evaluating proposed activities, it will be necessary to ensure that the activity is not being undertaken under other international arrangements.

4. Implementation

Actions may be undertaken at national, regional or global levels as indicated below, and may involve developing stronger links with relevant international bodies.

4.1 National

At the national level, the ACAP will encourage and facilitate the development and implementation of national actions by the Arctic states that control, reduce or eliminate emissions, discharges and other releases of anthropogenic pollutants to the Arctic environment.

At the national level, it is the responsibility of the individual states to implement ACAP, both in terms of domestic actions and in activities undertaken with other countries. Resources to implement actions pursuant to ACAP within an Arctic state, including those undertaken as part of a co-operative project, will be the responsibility of that state, although supporting resources may be obtained from other sources.

Note: Actions will address both: a) shared problems - ie problems where there is a reality, or risk of transboundary pollution; and, b) common problems which do not have transboundary implications but which can benefit from similar approaches.
4.2 Regional and Global

At the regional and global level, ACAP will encourage and facilitate the development and implementation of international actions to control, reduce or eliminate emissions, discharges and other releases of anthropogenic pollutants to the Arctic environment.

Actions may be undertaken through existing Arctic Council Working Groups and through the establishment of ad hoc arrangements, as set forth in the Action Plan (Annex A) plus [Note: How the full suite of actions will be listed will have to be clarified.]

Co-operative international actions may be implemented in various ways depending on the type of action; e.g. by the individual state or by nominated ad hoc expert groups...[....to be discussed!]

Another regional focus, and the main global focus, will be on the conclusion, ratification and strengthening of relevant international agreements, and on the initiation where necessary of new agreements. The Arctic states will, wherever possible, seek to advance common positions and interests in international fora dealing with pollution matters of importance to the Arctic. In order to facilitate the ratification and further development and strengthening of international agreements, the Arctic states will co-operate by initiating common projects (e.g. on awareness raising, technology transfer, development of alternatives to selected substances associated with Arctic pollution issues of common concern) and by exploring ways to finance such activities.

Consistent with ACAP the Arctic states will urge relevant international bodies (e.g. UNEP, UN-ECE, OSPARCOM, OECD, IMO, WHO and FAO) and countries to take the necessary measures to control pollutants or the use of products that may result in pollution on the grounds that these substances may enter the Arctic and impact the Arctic environment and its inhabitants.

4.3 Participation and Partners.

Local project participation, transparency and involvement in the design of actions/projects are key factors for public and political acceptance of the strategy. Involvement of and the implementation of actions in local communities will be essential to achievement of the overall objective (Local Agenda 21).

[Partnership with observer countries] Note: text to be proposed by Denmark.

The Arctic Council will work actively to obtain the co-operation of the private sector, including industry, business corporations, financial institutions and non-governmental organisations in fulfilling the objective of the ACAP.

The private sector is encouraged to assist in implementing actions through inter alia:

a. the incorporation into operations of the objectives of clean production and clean products, specifically through:
   (i) the use and development of environmentally sound products and the development of non-hazardous substances;
(ii) the employment of usages and practices, including waste handling and waste management, that avoid losses of hazardous substances to the environment;

b. the provision of reliable data on production volumes, use patterns, emission scenarios, exposure concentrations and properties of substances; and

c. in the case of individual businesses, ventures or enterprises, the remediation of past releases to the Arctic environment of pollutants of concern by that business, venture or enterprise.

[Partnership with NGO observers] Note: text to be proposed by Canada.

4.4 The Action Plan

The actions to implement ACAP are documented in [the accompanying Action Plan (Annex A) plus ?]². The Action Plan has been designed to facilitate expeditious response to emerging priorities, and therefore to change over time. The design, content and modification of the Action Plan will take place under the direction of the [Senior Arctic Officials] [ACAP Steering Committee/Arctic Environmental Officials].

4.5 Organisational Elements

The implementation of ACAP will take into account the responsibilities, capacities and work plans of the existing Arctic Council working groups as they pertain to pollution prevention and remediation. When appropriate in order to advance proposed actions, information may be required from the working groups, e.g. scientific assessments and advice, background information or policy advice.

The administrative follow-up of ACAP will be carried out by/through ....[to be discussed]

5. Reporting and reviewing

The Senior Arctic Officials [Arctic Environmental Officials] will report on the implementation of ACAP to the Ministerial meetings.

The ACAP strategy and related implementation actions shall be reviewed and revised [as needed] [(at least every 6 years)].

² Note: How the full suite of actions will be listed will have to be clarified.
Annex A

Action Plan

Note: In this version we have made few changes from the first draft Annex A. At the end of this annex is added the input from discussions on actions at the workshop in Oslo 14-15 September. Before the next ACAP meeting a new proposal on the format of Annex A will be distributed as a basis for discussions.

1 Priorities

Note: Based on the documentation provided by AMAP (brief summary of AMAP’s recommendations/list of substances for priority action could be included?) and the criteria for priority setting, ACAP will in its first phase give priority to the following issues (?):

- Persistent Organic Pollutants (POPs)
- Heavy metals
- Radioactivity
- Depletion of the ozone layer

The criteria for priority setting outlined in section 3.2 of the Strategy and a “gap-analysis” will be used to select the specific actions to be included in the Action Plan.

2. Actions

The type of actions may be divided into national action, international actions on both the regional and global level, and specific co-operative actions (projects):

National action: any activity/initiative that a country undertakes in responds to the strategy.

International action: On common concerns the Arctic States should, whenever possible collectively:

- work actively to encourage relevant countries to sign and ratify existing international protocols, and where necessary work to strengthen these protocols;
- assess the need for and promote new international protocols or agreements;
- ensure that Arctic concerns are fully addressed in relevant international instruments and institutions;
- provide information from the Arctic to relevant international organisations so the living situation for Arctic peoples, the state of the Arctic environment, and the effects of pollution on both are better understood (awareness raising);
- urge countries outside the Arctic to eliminate or reduce releases of pollutants that affect the Arctic environment, including the health of its human inhabitants.
Specific co-operative actions: The Arctic countries should initiate specific actions, including any kind of initiative that reduce pollution-related threats to the Arctic environment and its inhabitants. These types of actions can be:
- bilateral-multilateral actions to assist one Arctic country,
- bilateral-multilateral actions outside the Arctic countries that would reduce pollution effects on the Arctic, e.g. in developing countries.

2.1 POPs and Heavy Metals

2.1.1 Objectives

Note: Long term objectives related to the problem areas could be developed; e.g:

a) Elimination of selected hazardous products;
b) Restrictions on use of selected products;
c) Control/reduction of emissions (incl. discharges);
d) Substitution of hazardous chemicals and pesticides identified as being of concern to the Arctic environment, including its human inhabitants;
e) Remediation of significantly contaminated sites.

2.1.2 Actions

At the global level direct contact could be taken with international institutions and programmes such as the United Nations Environment Programme (UNEP) regarding global controls, World Health Organisation (WHO) regarding alternatives to persistent pesticides for controlling disease-carrying insects, Food and Agriculture Organisation of the UN (FAO) regarding finding less environmentally-harmful pesticides. (see proposal below).

National actions:

Potential area for action: engaging or improving co-operation with national developments aid agencies.
Possibilities of engaging or improving co-operation with national developments aid agencies (or others) to reduce long-range transport of pollutants, National developments aid agencies will be involved in or operate programmes related to agriculture or industry (training, capacity building, technical support, financial support etc.) in regions/countries that are sources of long-range transport of pollution.

International action:

A. Engagement of the World Health Organisation (WHO) and the Food and Agriculture Organisation (FAO) to reduce long-range transport of pollutants (Feasibility-study).

Objective:
Identify possibilities of engaging or improving co-operation with the World Health Organisation (WHO) and the Food and Agriculture Organisation (FAO) (or others) to reduce long-range transport of pollutants.....

Description/activities:
Establish contact with WHO and FAO through a nominated lead country or a small ad hoc group. The task will be to explore how these institution could be influenced and also explore
what the Arctic states can contribute with, in addition to what they already are doing, to reduce the use of pesticides, to improve storage facilities for pesticides, to clean up old storages etc. It will important to argue that Persistent Organic Pollutants (POPs) are not only a problem for the polar animals, but involve a significant risk to human health both in the country of origin of the pollutants and in the Arctic. Recommendations for specific actions as the next step should be developed.

Milestones:
Information and recommendations to the SAOs in 2001 on concrete and specific steps that could be taken, individually and if possibly collectively.

Responsible parties/participants:
(Nominated lead country or the small *ad hoc* group.)

Report:
The nominated lead country or the small *ad hoc* group report to “the body who will be responsible to follow up ACAP”.

(Other institutions that could be approached could be financial institutions like GEF (Global Environmental Facilities) and the World Bank; e.g., could the possibility of opening additional operational programmes, amend criteria for financing projects be examined (including specific environmental conditions on importance for the Arctic).

Again other institutions involved in improvement of industrial technology and industrial training programmes such as UN’s Industrial Development Organis (UNIDO) and UN’s Institute for Training and Research (UNITA) be approached.)

B. The UNEP POP convention
We raise the question if any initiatives can be developed supporting the present negotiations to develop a global convention on POPs. Only a global convention could ensure the necessary reduction or elimination of sources of POPs to the Arctic environment. All possible initiatives that could facilitate the process should be considered.

C. Ratification of LRTAPs protocols.
We refer to Canada’s letter of July 22, 1999 to the Arctic Council chair regarding international action on persistent organic pollutants (POPs) and Heavy metals (HMs) under the convention on the long-range transboundary air pollution (LRTAP). Canada expresses concern about the progress in the ratification process which is a concern we share. The importance of ratifying the two protocols on POPs should be an issue. We question whether there is any specific initiatives that can be started, either at the national and international level to contribute to bring the protocols into force as early as possible.

D. Global protocol on Mercury.
The workshop in April saw the need for a global protocol on mercury. Under the umbrella of the Intergovernmental Forum on Chemical Safety (IFCS) the first initiatives will be taken in 2000 to initiate future restrictions on "non-POPs" (chemicals of global concern other than POPs). Denmark, the Netherlands and Germany are lead countries. Mercury will be an obvious candidate for this initiative. We raise the question if any actions could be developed that could support such a process.

E. Further phasing out of leaded gasoline.
This is also with reference to the workshop in April who saw the need of further phasing out of leaded gasoline.
Co-operative actions:

A. Multilateral Cooperative project for phase-out of PCB use, and management of PCB contaminated wastes in the Russian Federation.

Objective:
Develop a proposal for a model for the Russian Federal Programme orientated on:
- prevention of resuming of PCB production and use;
- development and construction/retrofit of facilities for production of alternatives to PCB;
- environmentally sound decommissioning of PCB stocks and contaminated equipment and containers;
- rehabilitation of PCB-contaminated territories.

Description/activities:
The project consists of three phases covering all stages, from evaluation of the situation to implementation of demonstration projects.

Phase 1: Evaluation of the current status of the problem with respect to environmental impact, and development of proposals for priority remedial actions:
- characterization of PCB production;
- characterization of PCB use in production of equipment and materials;
- characterization of PCB-containing equipment use;
- waste related characterization;
- release inventory;
- prioritization of production and use.

Phase 2: Feasibility Study, will cover the following issues:
- implementation/cost benefit analysis;
- selection of alternatives for replacement of PCB, with acceptable environmental characteristics and feasible production;
- selection of the site for construction/retrofit of a prototype facility for production of alternative fluids;
- selection of the site for construction/retrofit of a prototype facility for use of non-PCB alternative compounds in a major PCB use sector;
- selection/development of environmental sound technology for destruction of PCB-containing liquids;
- selection/development of environmental sound technology for destruction of PCB-contaminated containers, equipment and their elements;
- selection/development of standard/innovative technology for rehabilitation of PCB-contaminated areas.

Phase 3: Implementation of demonstration projects:
- production of alternative fluids;
- prototype facility for use of non-PCB alternative compounds;
- facilities for destruction of PCB-containing fluids;
- facilities for destruction of PCB-contaminated containers, equipment and their elements;
- rehabilitation of PCB-contaminated area in the Russian Arctic or in adjacent regions.
Milestones:
Phase I: 1 May 2000
Phase II: ca. 1 May 2001
Responsible parties/participants: All Arctic States, the Netherlands, NEFCO (Fast Track project in North-West Russia).
Report:
Report to AMAP WG and to the SAOs.

B. Mercury
Could any specific remedial action to reduce emissions of mercury be developed?

2.2 Radioactivity

2.2.1 Objectives
The long term objectives are:
   a) to reduce the releases of radionuclides to the marine environment from nuclear fuel reprocessing plants;
   b) to reduce the risks and consequences associated with accidental releases of radioactivity; and
   c) to ensure the safe handling, transport and storage of nuclear wastes and spent nuclear fuel.

2.2.2 Actions

National actions
Each Arctic state should provide a written report to each ministerial meeting of the Arctic Council on:
- progress in the assessment of risks;
- steps taken to improve safety and management control of activities involving the generation, use and disposal of radioactive materials.

International actions
At the regional level, focus will be given to nuclear plants and activities in the Arctic within the Arctic states. Attention will also be given to local, national and regional radiological exposures and risks. The Arctic states should:
1) urge all states to introduce measures to keep radiation exposures associated with nuclear power and military activities within safe limits;
2) minimize the risk of accidents in the retrieval, handling, reprocessing and storage of spent nuclear fuel; and
3) urge all states to implement the Basic Safety Standards in nuclear activities.
4) to this end co-operate in their efforts to render both technical and economic assistance to relevant states, in order to accelerate the process of improving waste management, nuclear safety and environmental protection of the environment from radioactive contamination.

At the global level, the Arctic states should cooperate in all relevant IAEA, London Convention and Global Programme of Action activities leading to improved management control and surveillance of nuclear activities including the implementation of the Basic Safety Standards, the IAEA Nuclear Safety Convention, the Vienna Convention on Civil Liability for Nuclear Damage, the London Convention 1972 and the Global Programme of Action for the Protection of the Marine Environment from Land-Based Activities.

Specific co-operative actions
Co-operative actions have been proposed, based on recommendations from AMAP work, and where other international bodies at present do not have any activities (NATO and IAEA have no work in the Arctic. IAEA has a Contact Expert Group (CEG) monitoring ongoing activities, but they are not involved in any of the projects, AMEC is dealing with technical aspects of nuclear safety. IMO are working to reduce releases to the marine environment.)

A. Risk connected with releases from reprocessing plants in Europe and the Eurasia.
Discards from reprocessing plants, especially Sellafield, UK and La Hague, France, have been identified as one of the present major sources of radioactive contamination of the Arctic Seas. In addition, reprocessing plants i Russia, discharging into Ob and Yenisey have contaminated the environment, and little is known about the riverine input into the Arctic. There is ongoing work in AMAP, to assess the consequences of releases from Sellafield and La Hague, but international effort and political consensus is needed, when it comes to reducing the discharges. There is at present no project or joint activity to assess the consequences of accidents leading to radioactive contamination of the Yenisey River.

Objective:
Undertake a comparative assessment of the risks posed by previous, current and projected releases from reprocessing plants in Europe and the Eurasia.

Description/activities:
Conduct an analysis of the dose consequences to man and biota of previous, contemporary and projected releases from the nuclear reprocessing plants at Sellafield and Cap de la Hague. Make comparative analyses and identify issues of concern and interventions to reduce contemporary and future radiological exposures and the risks of exposures where warranted. Specially assess the consequences of the increased releases of technetium - 99 from Sellafield and work to reduce these releases. Conduct an analysis of the risks and consequences of radionuclide migration within the Ob and Yenisei drainage basins.

Milestones:
Information and recommendations to the SAOs in 2001 on comparative risks. Recommendations on work to reduce releases (with reference to OSPAR)
Responsible parties/participants:
(Nominated lead country, or a small ad hoc group)
Report:
Report to AMAP on risk, and to the SAOs.
B. Safety culture at the Kola Nuclear Power Plant

Kola Nuclear Power Plant (Kola NPP) is one of two power plants located within the Arctic. The second one is in Bilibino, far east Russia. Kola NPPs are identified at the by far largest potential source of radioactive contamination, and it is therefore important to prevent accidents at these plants. At present, there is joint Norwegian-Finnish-Russian co-operation at Kola NPP. ACAP could support this work.

Objective:
Assess and improve the safety culture at the Kola Nuclear Power Plant.

Description/activities:
Conduct an assessment of risks, causes and consequences of accidents from design and beyond-design accidents at the Kola Nuclear Power Plant. Evaluate the safety culture at the Kola NPP in the context of other nuclear power plants in the region and recommend and implement steps for its improvement taking full account of relevant IAEA activities.

Milestones:
Information to the SAOs in 2001 on accident related risks.

Responsible parties/participants:
(Nominated lead country, or a small ad hoc group)

Report:
Report to AMAP on risk, and to the SAOs.

C. Procedures for decommissioning of nuclear powered vessels

Russia's Northern Fleet on the Kola peninsula represents the largest concentration of nuclear powered vessels in the world. More than 50% of the nuclear powered submarines are today decommissioned, most of them still with spent nuclear fuel onboard. Important tasks are to find a storage for spent fuel, and to develop procedures for handling of spent fuel. There is ongoing bilateral Norwegian-Russian work on improving safe transport and storage possibilities for spent nuclear fuel, but the work should be expanded to also include environmental aspects.

Objective:
Assess and improve the procedures for the storage of fuelled submarines, spent fuel recovery, transport and storage associated with the decommissioning of nuclear-powered vessels to determine areas of improving the safety of such operations. Improvements should be proven to be environmentally acceptable, and the risk for radioactivity releases to the environment should be decreased.

Description/activities:
Conduct a comparative evaluation of existing and planned procedures for the decommissioning of nuclear powered vessels to identify appropriate measures to reduce the risks of exposures and accidents during the decommissioning process especially regarding the Russian Northern Fleet. Identify relevant agreements and conventions that would provide a regulatory framework for specifying safe procedure and minimising risks.

Milestones:
Assessment of procedures for decommissioning.
Recommendations on storage facilities

Responsible parties/participants:
(Nominated lead country, or a small ad hoc group)

Report:
Report to AMAP on risk, and to the SAOs.
D. Guidelines for performing Environmental Impact Assessments

International attention has been brought to the protection of the environment against radioactive pollution, and not only man. Traditional radiation protection has been focused on man, and as long as man is protected, the environment is assumed to be protected. This is not always the case. Before action is taken, to reduce risk or to restore areas, it is important that an environmental impact assessment is performed. Today environmental impact assessments are rarely conducted when remedial action is taken, e.g., building radioactive waste treatment plants in NW Russia.

Objective:
Develop guidelines for performing Environmental Impact Assessments in relation with radioactive operations, in particular before remediation actions or change in practises involving handling radioactivity.

Description/activities:
Statements relating to environmental protection have been introduced into the contents of international conventions (e.g., OSPAR) and the legislation of individual countries. At present there is no recommended way of performing an environmental impact assessment, i.e., criteria for quantifying the effects on the environment for a given release of radioactivity, and thus there are no guidelines for showing that the environment is being protected from ionising radiation. We propose such guidelines to be developed as a co-operative project.

Milestones:
First draft of guidelines for EIA.
Recommendations on regulatory work to ensure EIA.

Responsible parties/participants:
(Nominated lead country, or a small ad hoc group)

Report:
To the SAOs.

Input from the discussions on actions at the workshop September 14-15, 1999.

General Comments

The workshop reviewed various projects for consideration for inclusion in ACAP. In its review, the workshop noted the need to attempt to have draft project proposals that address the four priorities identified in the draft ACAP (i.e., POPs, heavy metals, radioactivity, and depletion of the ozone layer). In other words, the list of potential projects for ACAP consideration should include projects for each of the priorities.

It was noted that the action proposals are in various stages of development and that there is a need for further action proposal development. It was suggested to have lead countries designated for various action with the responsibility to further develop those projects proposals. The role of a lead country includes: (1) identification and development of project
proposals; and (2) initiation of discussions and fostering participation of others. Identification as lead country, however, does not mean that the lead country has committed funds for the actual project.

Proposals for actions
Denmark/Greenland proposed two draft projects for ACAP inclusion:

1. Develop fact sheets on Arctic contaminants for use by Arctic Council countries' delegations in other fora
The objective of this proposed project is to further ensure that Arctic issues are communicated to other fora so that Arctic concerns are more likely to be considered when such fora are formulating and implementing actions which may have an impact on the Arctic.

2. Develop ACAP project guidelines that correspond with project proposal format requirements of international organizations which fund or provide assistance for environmental issues
The objective of this proposed project is to help ensure that project proposals will not have to be revised to meet the format or information needs of international funding organizations. Such revisions could delay the consideration of a project for such funding. It may also help to identify whether the proposed project would meet particular eligibility requirements of such international organizations.

The United States Environmental Protection Agency proposed two draft projects for consideration for inclusion in ACAP. One pertains to lead and cadmium releases from mining and associated operations in the Russian Federation, and the other involves cohort expansion of the Arctic cord blood studies to include a Russian Federation cohort. Specifics of the draft proposals are described below.

1. Multilateral Cooperative Pilot Project for Reduction of Lead and Cadmium Releases from Associated Lead and Zinc Mining and Disposal Operations, and Improvement of the Environmental Management of Lead and Cadmium in the Russian Federation
The draft project proposal consists of three phases with the objective to protect the Arctic ecosystems and Arctic populations by assisting the Russian Federation to: (1) reduce air and water releases of lead and cadmium from zinc and lead mining, smelting, or refining in regions of northern Russia; (2) develop and construct/retrofit equipment, facilities, and techniques at a facility (production, smelting, refining, incineration) for reduction of lead and cadmium releases to the atmosphere and water; and (3) remediate the prioritized facility and surrounding site that has the greatest potential for risk/threat of impact to the Arctic and to the local environment (workers and residents). An expectation of the project is that it would further encourage the Russian Federation to sign the LRTAP protocol for heavy metals.

The proposed project would be conducted in three phases. Actions in Phase I would be to estimate the source term including production facilities, amounts of lead and cadmium produced, and estimated annual environmental releases from mining, smelting, and refining facilities that impact the Arctic. Phase II would involve the development of a feasibility
study for conversion/retrofit of equipment, facilities, and techniques to reduce lead and cadmium releases to the atmosphere and water including beneficiation techniques. Phase III would involve the implementation of a demonstration project to remediate zinc and lead mining, smelting, and/or refining sites that have the greatest potential to impact the Arctic.

2. **Multilateral Cooperative Project to Coordinate Arctic Cord Blood Studies and Cohort Expansion**

Arctic indigenous people have expressed a strong desire for programs to evaluate biological levels of POPs and heavy metals and to look for associated health, especially in pregnant women and their newborn children. Since maternal - umbilical cord studies are being conducted in some Arctic countries, it is proposed that the studies and their associated cohort base be broadened and integrated to include Russian Arctic indigenous populations. Because individual maternal - umbilical cord blood studies are already underway, an advantage of this proposal is to link together existing studies and allows a rapid start-up of this project as one feedback mechanism for the effectiveness of individual technology-transfer and remediation projects initiated under ACAP.

The draft project proposal consists of four stages/tasks and are as follows:

1. **Examine the AMAP database.** The AMAP database would be examined for significant gaps in data relating to the exposure of POPs and heavy metal contamination to indigenous people of the Arctic. This effort will indicate the regions of the Arctic in which cord blood studies may need to be included, as a minimum, as they relate to proposed remedial actions under ACAP.

2. **Broaden the cohort base to include Russian indigenous people.** The information gathered in stage/task 1 can be used to identify areas of the Russian Arctic for inclusion in the study. Coordination with NGOs, such as the Russian Arctic Indigenous Peoples of the North (RAIPON) can be undertaken to focus on appropriate areas.

3. **Standardize the testing procedures and examine the intercomparability of the various databases.** This task will provide an opportunity to review the analytical procedures that are being utilized for sample collection and analysis, and to examine the comparability of data that are contained in the various databases.

4. **Expand the analytes to be tested.** This task will provide an opportunity to expand the analytes to be tested, as is feasible, to include additional priority POPs and heavy metal pollutants contained in the Protocols on Long Range Transport of Pollutants for POPs and Heavy Metals.

Action proposals for ACAP inclusion where implementation of such actions could build upon existing working group actions were considered. In such cases, the new action could be implemented by the working group responsible for the already existing project. Two proposals were discussed:

1. **Developing mining guidelines for coastal and inland mining operations.**

   Rationale: PAME under the RPA is examining the development of Arctic wide environmental guidelines on opening and closing mines in the Arctic Coastal Zone.
Keeping in mind that the RPA is a building block for ACAP, this PAME effort could be extended to include inland mining.

2. Develop a reporting procedure and format for the assessment of ACAP projects based on specific agreements like UNECE and LRTAP.
   The objective is to evaluate the implementation and effectiveness of ACAP or specific agreements. Rationale: PAME under the RPA is examining the development of RPA reporting procedures (see the assessment of the RPA implementation and effectiveness) keeping in mind that the RPA is a building block for ACAP. Those efforts could be extended to cover all environmental compartments addressed by ACAP. (Note: This proposal would not be an action, but rather be a part of the implementation procedures).

Other proposals or ideas for actions:

1. Develop a template for an Action Plan addressing POPs-byproducts (dioxin, furans and hexachlorobenzene) as is discussed within present negotiations under the rubric of UNEP on Global Convention on POPs. (PAME)
   The rationale for this proposal is that not all POPs-byproducts are being addressed by the Arctic Council and its workgroups.

   WWF suggested three projects for consideration for inclusion in ACAP, which are identified below. The rationale for these projects is that there are actions taken by other organizations in Arctic and non-Arctic countries that may impact the Arctic. Participation by the Arctic Council and its workgroups in such actions is another avenue which could reduce contamination of the Arctic.

   1. Investigate opportunities and need for cooperation with WHO's Pesticide Evaluation Scheme and its advisory committee (GCDPP) so as to ensure that pesticides developed for control of disease-carrying insects will not have Arctic environmental and health efforts (WWF)

   2. Investigate ways of supporting FAO's Integrated Pest Management dissemination of non-chemical alternatives to pesticides for use in developing countries (WWF)

   3. Work with FAO on non-Arctic and possible Arctic application of FAO's Prevention and Disposal of Obsolete Pesticides (WWF)
A summary of the discussions on possible options for implementation of ACAP.
ACAP Workshop, 14-15 September 1999, Oslo, Norway.

We had a very good discussion in Oslo on the issues connected to the implementation of ACAP, but did not conclude on any specific recommendations. This is an issue that needs further consideration and discussion.

To facilitate the discussion on how ACAP could be implemented, it was found useful to identify the various functions that ACAP might have and the various implementation mechanisms (execution procedures) which might perform these functions. Considerations which should be taken into account in choosing between these functions and mechanisms was also discussed.

The meeting pointed out that at present there does not exist an overall body or mechanism under the Arctic Council that can follow up and administer the activities under ACAP and review the implementation and the effectiveness of ACAP as a whole. The working group structure of the Arctic Council has gaps in the area of designing/implementing/administering actions with regard to pollution issues. It was pointed out that there is a need for a meeting/forum to co-ordinate actions, to keep the oversight and report to the SAOs. When assessing the various possible implementation mechanisms, it will be important to distinguish between the implementation of ACAP as a whole (the oversight, coordination and total reporting) and the implementation (the steering) of the individual actions.

Various functions that ACAP might have

From the discussion the following list of functions could be made:

1. Catalytic/facilitating: Provide for stimulation of ideas which are consistent with the strategy. For many actions ACAP’s “role” could be restricted to action/project design and initiation, with the expectation that any large scale projects which might result would be handed over to an implementing agency. Such an approach would have the benefit of avoiding a cumbersome decision-making procedure as projects become more complex. A reporting requirement could also be included in this approach;

2. Ideas Market: Provide a mechanism (forum) for discussion and elaboration/development of possible actions. As such, it would afford an opportunity to perfect proposals and identify partnerships;

3. Oversight: provide for coordination (i.e. in areas of “common responsibility”/ collective/coordinated actions) and oversee action progress, and provide for a uniform and collective application of the ACAP criteria;

4. Implementation: ACAP could have an implementation function, whereby actions are actually carried out. A part of this could include the identification of implementing parties (who should do what; existing WGs, ad hoc groups?). Identification of implementing parties outside the Arctic Council will be necessary when actions are not conducted by existing WGs or ad hoc groups, but are to be handed over to others (see no.1). Another part would be reporting on actions;
5. "Arctic Council Labelling": ACAP could provide a mechanism where the Arctic Countries could formally designate a proposal as being a part of ACAP (i.e. have the countries collective support at a policy level), while not becoming involved in project elaboration or implementation.

Considerations
In choosing functions and mechanisms, the following should be considered:

1. How do we keep the ACAP strategy and action plan under review, coordinate actions and the reporting to SAOs, and retain the oversight over the actions? The scope of ACAP is wide so it is important to have a flexible mechanism. Development of action proposals should be taken care where there is competence, using the whole organisation under the AC (WGs and secretariats).
2. How do we involve appropriate technical expertise for SAOs when reviewing the strategy and the action plan?
3. How do we design practical implementation procedures without establishing unnecessary bureaucracy, - eg how complex and at what level should decision-making procedures be? (A mechanism must not hinder the development and initiation of actions.);
4. What decision making process is appropriate and necessary to support and/or approve actions under ACAP;
5. How do we ensure the uniform application of action selection criteria?
6. How do interested parties find ACAP and what do they find? (eg a strategy and a comprehensive list of actions? Who should make this list?)
7. How do we avoid creating new and unnecessary administrative burdens for the SAOs. The SAOs should have ultimate oversight responsibility for ACAP initiatives. However discussing actions and deciding which actions belong to which working group, and whether new ad hoc groups were needed should be avoided on the SAO-level. Multiple individual projects presented at the SAO level could overly burden the SAOs with technical details.
8. A mechanism must be flexible to be able to involve all possible financial institutions;
9. All actions initiated should have a lead country;

Possible implementation mechanisms
The following options for implementation of ACAP was mentioned in the discussion:

1) Use of existing structure (working groups) and establish ad hoc-groups when necessary
2) Establish an ACAP steering committee.
   This option was given some consideration at the meeting. Meetings of Arctic environment officials could review the strategy, undertake action development and oversight, and report to SAOs. It was pointed out that it could build on the meeting of the working group chairs to co-ordination the wg-activities, and it would provide a centralized mechanism to supervise the implementation of ACAP. The group could be chaired by the Arctic Council chair. Secretariat support by the Arctic Council secretariat and the WGs secretariat as appropriate.
3) Broaden the mandate of an existing Arctic Council working group
4) Lead-country approach to ACAP initiatives (lead countries would be responsible for "secretariat/administrative" work concerning its initiative).
Types of actions

The implementation mechanisms could benefit from having a clearer picture of the possible type of actions and having a suite of concrete action proposals on the table (the types of actions will be relevant for selecting the best implementation mechanism for ACAP). When elaborating action proposals it will be important to keep in mind the functions that ACAP could have (see above).

An ACAP action should in general be understood as any activity/initiative that any country(ies) undertakes in response to the strategy.

The actions may be undertaken by individual countries, as co-operative actions between two or more countries or supported by all countries. Within these categories of actions it is also possible to envisage several "types of actions": eg. a) work on international instruments (various activities which could accelerate the negotiation or ratification of protocols, b) co-operation with international organizations (WHO, FAO, etc.), and c) concrete initiatives to reduce input of pollutants to the Arctic (eg. PCB-prosjektet, development of operational guidelines for industry). Some actions might need a mapping, feasibility or research study before initiating a "concrete action" (phase 1 of an action). Such activities should also be included as part of the Action Plan (eg phase 1 of the PCB-project).