ACAP Report to Senior Arctic Officials. Selfoss, Iceland, May 4-5, 2004.

2004

Arctic Contaminants Action Program (ACAP)

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This Report is primarily based upon our most recent ACAP Steering Committee Meeting held in Washington D.C. on 24-25 March 2004.

1. Update on ongoing ACAP projects

1. Progress since last SAO Meeting

Multilateral Co-operative Project for phase-out of PCB use, and management of PCB-contaminated wastes in the Russian Federation

Phase1. Inventory and Proposals for Priority Remedial Actions and

Phase 2. Feasibility Studies for nine proposed actions to address the PCB problem in Russia have been completed and reports issued.

In Phase 3 four projects were prioritized for further action.

Projects under Phase 3 and their status

No	Project name	Objective	Activities and Status	Approx. cost & duration	Funding
1.	Cleaning of Trans-formers	100 transformers with about 250 tonnes PCB liquids	Emptying, cleaning and disposal of transformers in regions affecting the Arctic **Status:** Approval of site for plant location is complete and approval of conceptual design is underway.	0.9 million USD, 2Years	NEFCO full funding
2.	Destruction of liquid PCB	250 tonnes PCB liquids	Collection, draining and destruction of PCB liquids from transformers in regions affecting the Arctic **Status:** see No 1 above	1-2 million USD, 3Years	NEFCO full funding
3.	Destruction of PCB-containing capacitors	12,000 capacitors with about 200 tonnes PCB liquids	Collection and destruction of capaci-tors in regions affecting the Arctic **Status**: 19 industrial facilities have been evaluated for placement of the U.S. Plasma Arc destruction technology. Two sites were identified for Feasibility Studies, which are underway. (The technology is also being considered for destruction of obsolete and prohibited pesticides.)	Equipment value of $8M USD, contributed by the U.S An additional $900K to 1.5M will be needed for project implementation over a 3 year period.	Donor countries
4.	Collection and storage	30-40 tonnes PCBs (Leningrad Oblast and St. Petersburg)	Development of means of identi-fication, labelling, collection and storage of PCB, in waste and equipment in the selected region **Status**: Initial meetings with St. Petersburg officials and Leningrad Oblast officials have been held.	230,000 USD 1Year	Denmark+ Russian in-kind contribution

At the ACAP Steering Committee Meeting of 24-25 March 2004, Russian Ministry of Natural Resources proposed a project on "Rehabilitation of soils polluted with chlorinated biphenyls at the territory of Serpukhov (Moscow Region)". This will be deferred to the next meeting of the PCB Working Group.

A key issue for the success of the PCB Projects is the development of a satisfactory Business Plan to demonstrate sustainability of the projects after the demonstration phase is completed. Another challenge is to clearly identify all the licenses and permits necessary to operate the facilities. These PCB projects are a driving force for development of regulatory infrastructure and capacity building necessary to solve all related environmental problems.

The timing of this project and the other ACAP projects which address the priority pollutants under the Stockholm Convention is well coordinated since the Stockholm Convention has been ratified and will enter into force on 13 May 2004. Russia should be well positioned to immediately begin implementing solutions to reduction/elimination of these priority pollutants.

All the Arctic Council member countries and the Netherlands are participating in this project.

Evaluation of Dioxins and Furans in the Russian Federation

Successful development of this project will result in measurable reductions of emission sources of Dioxins and Furans from key industrial sectors to include the pulp and paper and metallurgical industries.

Phase I, Inventory development, is fully financed by Sweden and USA.

Three Priority regions have been selected for inventory development: Murmansk, Archangelsk and Komi.

Russian analytical chemists have been trained in standardized sampling and analysis of dioxin/furans in flue gas. Four Russian analytical laboratories are now prepared to perform the analyses.

Draft inventories for Murmansk and Arkhangelsk regions were prepared. The inventory for the Komi Region is underway.

During 2004, sites will be selected from the three priority regions and samples from the selected sites will be collected and analysed. This data will be compared with the estimates obtained from the inventories previously developed.

This will be the first opportunity to make confirmatory assessments of quantitative emissions associated with key source terms.

Sweden, Russia and the United States participate in this project.

Reduction of Atmospheric Mercury releases from Arctic States

Phase I . The final draft of the Arctic Mercury Assessment Report was completed in March and is under review.

> The largest contributions of atmospheric mercury releases are combustion of carbon fuels (mainly coal), metal extraction and processing, and waste treatment (particularly municipal waste incineration).
>
> The highest total of mercury emissions are from the U.S. followed by the Russian Federation with slightly lesser contributions by Canada and Denmark.

An assessment of uses, waste production, and releases of mercury in the Russian Federation has been prepared as a draft final report (March 2004) and is being reviewed by the Steering Group and in particular by the Russian Ministry of Ministry of Natural Resources. The assessment shows that a special release source of mercury in Russia is gold extraction.

Phase II will focus on site specific prioritization and selection of pilot projects. Discussions on Phase II began at the last Working Group Meeting in February 2004. Five source categories will be evaluated for possible pilot project demonstrations: coal-fired power plants; zinc extraction and processing; gold extraction; copper smelting; and storage/disposal/recycling facilities.

The next step is to finalize the inventory and prepare a regional assessment of existing and planned initiatives addressing source categories in the Arctic States in order to identify follow-on actions.

Denmark, Canada, Norway, Russia and the United States are participants in this project.

Environmentally sound management of stocks of obsolete pesticides in the Russian Federation

This is a very important project for meeting the objectives of the Stockholm Convention since nine out of twelve of the priority pollutants are pesticides.

The Pilot Project in the Arkhangelsk Region including inventory development, screening analysis, repackaging, and safe storage of 56 tonnes of obsolete and prohibited pesticides has been completed and the original deteriorated warehouse in Beresnik District was dismantled.

The screening analyses were specific to identifying mercury-containing compounds. This was a very successful demonstration that required very little donor funding (less than $25K USD). There was a significant in-kind contribution by the Arkhangelsk Region. It was agreed that a promotional event for the completion of this project will be held later this year in Arkhangelsk.

The model project developed in the Arkhangelsk Region will be applied to the other ten priority regions where pesticides releases impact the Arctic environment.

Similar projects in Murmansk, Komi, Magadan, and Tyumen Regions are underway. The participants at the ninth meeting of the Working Group, held on 30 March-1 April 2004 in Syktyvkar, Komi Republic, emphasized that no pesticides analysed and repackaged under this project should be deposited into landfills such as Krasny Bor.

The successful experience of the ACAP Arkhangelsk Pilot Demonstration Project was specifically referenced in Parliamentary Hearings held in Moscow on 22 April 2004 in the State Duma of the Russian Federation. Not only was this project highlighted, but it was emphasized at the hearing that "the problem of obsolete pesticides can be solved only through their destruction and not burial".

Additional funding is required to complete the Phase 1 tasks for the other six priority regions by 2006.

Participation in this project has been prioritized by Canada, Denmark, Norway, Finland, USA, Sweden, Russia, UNEP Chemicals, AMAP, NEFCO.

Implementation of a Cleaner Production Program at the OJSC Norilsk Mining Company in the Arctic.

Three Cleaner Production Training Programs were conducted between January 2002 and March 2004.
The Program was co-financed by ACAP (Norway and USA) and the Norilsk Mining Company.

- 74 engineers were "certified".
- 224 low-cost environmental projects were developed, and 87 were implemented by the company without external investments.
- Final report received April 2004.

Some of the achieved environmental savings for the low-cost projects in the first two years are:

- Reduction of the fresh water consumption – 7 million cubic meters
- Decrease in waste discharges – over 2 million cubic meters
- Reduction of use of electric power – over 14 million kWh

Savings achieved in the medium and high-cost investment projects at Norilsk were an order of magnitude higher. The payback time for Norilsk's investments in these projects was one to two years.

2. ACAP Project Financing

We continue to explore options for reliable longer-term financing for our projects. We have recently consulted with NEFCO regarding their successful experience with revolving funds as applied to the Cleaner Production Program. Cleaner Production activities are a good example of how funds expended to support specific projects can be paid back by the industrial facilities thus replenishing the revolving fund. We are continuing to evaluate this option as it might apply to ACAP projects.

3. Coordination and cooperation with other organisations

Per SAO's recommendation to establish stronger ties with other Arctic-focused organizations, we initiated meetings with the following international organizations:

Barents Euro-Arctic Council, Working Group on the Environment

The primary focus of our discussions in February 2004 was on the recent Report on "Updating of Environmental "Hot Spots" list in the Russian part of the Barents Region". The meeting was hosted by NEFCO. There are forty-two hot spots identified in this report. Seven of the "hot spots"

were identified for potential cooperation and it was agreed that the project on obsolete pesticides in the Arkhangelsk Region was of an immediate mutual interest for cooperation. We will continue to discuss other projects for mutual cooperation.

Nordic Council of Ministers, Environmental Working Group

We discussed possible mutual activities under the new Arctic Cooperation Program developed in 2000 as the "Adjacent Areas" initiative. The most straight-forward approach to engagement is to file a project application for financing to either the "Environmental Sector" or the "Adjacent Areas and the Arctic" Program.

It was noted that a special Nordic Advisory Board has been created to review proposals submitted to the "Adjacent Areas and the Arctic" Program. This Advisory Board contains Nordic Senior Arctic Officials of the Arctic Council. We will be evaluating opportunities to seek funding for selected ACAP projects.

Local Initiatives Implemented by Permanent Participants

At our recent ACAP Steering Committee Meeting, it was recommended that the Indigenous Peoples Secretariat (IPS), through the individual Permanent Participants, should consider submitting project proposals, related to elimination of Arctic pollution, for a model program that can be implemented by local communities of indigenous peoples.

4. New activities

Reduction of Brominated Flame Retardants' (BFRs) Load to the Arctic

At the October 2003 SAO Meeting, there was agreement to initiate a new ACAP Project on Reduction of Brominated Flame Retardants. This followed the AMAP Report at the last Ministerial Meeting noting with concern the increased concentrations of BFRs in the Arctic environment over the past few years.

A Working Group was created and met in February 2004 to develop the project proposal. The problem statement and basic objectives have been outlined. The next step is to finalize the objectives and Phase I activities and develop the complete Proposal for Phase I of the project for approval by the SAOs and their recommendation to the Ministers for inclusion of this project into the Annex "A" list of approved projects under ACAP.

There will be a strong continuing reliance on the scientific data developed by AMAP to provide the fundamental basis for action on the wide range of BFRs that are found in the environment today.

5. Requests for SAOs support:

- To support the proposed ACAP cooperative initiatives with the BEAC/WGE and the NCM/EWG
- To support outreach opportunities with industry to find solutions to environmental problems addressed by ACAP
- To continue to evaluate options for creative financing of ACAP projects.
- To expand the participation of observer countries