ACAP

Arctic Council Action Plan to Eliminate Pollution of the Arctic

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ACAP

PROGRESS REPORT

TO SENIOR ARCTIC OFFICIALS

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Chairman

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Syktyvkar, Russia

ACAP Highlights since SAO Meeting of 12-14 October 2005 in Khanty-Mansiysk

- The most recent ACAP Steering Committee meeting was held at the Danish Polar Center in Copenhagen, Denmark, on 29-30 March 2006.

- The ACAP Cleaner Production Project at Norilsk Nickel Company, completed in 2005, was awarded a Diploma from the Vernadsky Fund and Environmental Committee of the State Duma. This is one of the highest environmental awards in the Russian Federation.

- The ACAP Steering Committee approved the "Indigenous Peoples Community Action Initiative." **It has been distributed to the Senior Arctic Officials for information.**

- We have continued to work closely with RAIPON and Gwich'in Council International on Community Action Projects in Alaska and the Nenets Autonomous Region of Russia to identify local sources of contamination from PCBs and obsolete pesticides in the indigenous communities.

- ACAP has accepted an invitation to make a presentation at an Arctic Council event scheduled during the 5th Meeting of the United Nations Permanent Forum on Indigenous Issues, on 23 May 2006 in New York.

- The ACAP Chair was invited to make a presentation at the 7th Meeting of Environment Ministers of the Barents Euro-Arctic Council in Rovaniemi, Finland, 18 October 2005 on "Cooperation with the Arctic Council Action Plan to Eliminate Pollution of the Arctic (ACAP)".

- The Barents Euro-Arctic Council Ministerial Declaration of 19 October 2005:

    - "Commended the cooperation with the Arctic Council to identify and eliminate the hot spots, especially with the Arctic Council Monitoring and Assessment Program (AMAP) and the Arctic Council Action Plan to Eliminate Pollution in the Arctic (ACAP). The first example of this cooperation is the successful analysis, repackaging, and safe storage of obsolete pesticides in the Arkhangelsk Region implemented by the ACAP".

- It further "emphasized the importance of sustainable chemicals management in the Barents Region and the need for further exchange of experiences in this field... In particular the Ministers welcomed the Arctic Council's projects for monitoring persistent organic pollutants and heavy metals of importance in the region and **for reducing the sources of such pollutants**."

- ACAP continues its outreach with UNDP regarding support for technology transfer projects in the Russian Federation in anticipation of Russia ratifying the Stockholm Convention.

Note: At the recent negotiations of the Convention of Parties to the Stockholm Convention, polybrominated diphenyl ethers (PBDEs), a class of brominated flame retardants (BFRs), were recommended for addition to the list of priority pollutants. Since 2004, ACAP has been evaluating this problem of PBDEs in the Arctic as a project approved by the SAOs and Ministers. It is now an internationally-recognized problem.

ACAP PROJECTS

PHASE-OUT OF PCBS IN RUSSIA (CHAIR: RUSSIA AND AMAP)

Destruction of PCB-Containing Capacitors (USA)

- This is a technology demonstration project to destroy 12,000 PCB-containing capacitors (equating to approximately 200 tons of PCB-liquid waste) using plasma arc technology.
- Nine sites were initially evaluated for placement of the PCB-destruction facility. All sites, except Volgograd "Chimprom" and GITOS in the Saratov Region, have been eliminated from consideration because the facilities did not meet the project selection criteria.
- Currently a Business Plan is being developed by Volgograd Chimprom for completion by July 2006. NEFCO has agreed to review the Business Plan for ACAP.
- Volgograd "Chimprom" has indicated that all necessary RF permits, licenses and certifications to manage Class 1 hazardous waste are in place.

Destruction of PCB liquids from Transformers (NEFCO)

- NEFCO plans to construct a demonstration facility to destroy 250 tons of PCB liquids from transformers in Russia.
- NEFCO is continuing to evaluate possible sites for placement of the destruction facility (e.g. Rostov Region)

So far, NEFCO has not been able to obtain all the necessary permits required to place the PCB-destruction facility at the sites that they have evaluated.

PCB Collection and Storage Project (Denmark)

Denmark continues developing a collection and storage program in St. Petersburg and the Leningrad Region, to update inventories of PCBs and obsolete pesticides in the area, and to ensure proper storage conditions. They are currently awaiting inventory information.

General Issues: The PCB Project assists Russia in finding ways to phase out PCBs and manage existing PCB wastes. Since 2002, several attempts to find appropriate locations for destruction facilities and develop systems for collection and storage of the waste have met with difficulties at the Regional level.

Lack of clear national legislation and guidance, and limited coordination of actions between federal and regional/local authorities has been a serious problem for maintaining progress of the ACAP PCB projects.

ENVIRONMENTALLY-SAFE MANAGEMENT OF STOCKS OF OBSOLETE AND PROHIBITED PESTICIDES IN RUSSIA (CHAIR: FINLAND)

- Inventories have been completed and reported for: Komi Republic (19 tons), Tyumen (314 t), Omsk (540 t), Altai Republic (97 t), Magadan (23 t) and Arkhangelsk (62 t).
- In Altai Krai, work is in progress and 251 tons of pesticides have already been inventoried. Altai Krai pesticides stocks are of particular concern because of the risks associated with potential release to the thousands of rivers which flow through the region.
- Over 1306 tons of obsolete pesticides have been inventoried and placed into safe storage in seven priority regions.
- A total of 1022 tons of pesticides have been repackaged in seven Arctic and sub-Arctic regions.

- Over 457 additional tons of obsolete and prohibited pesticides were discovered during the inventory development in the seven regions.
- 235 tons of unidentified pesticides have been analyzed.
- Significant funding has been contributed by the Russian regions to co-fund these ACAP regional projects.
- Pesticides have been placed into safe storage in the Komi Republic, Tyumen, Omsk, Altai Republic, and Altai Krai.
- Repackaged pesticides from Magadan Region have been sent to the Tomsk Polygon for sub-surface storage.
- Repackaged pesticides from Arkhangelsk Region have been shipped to Krasny Bor for land burial. This action contradicted the agreement ACAP had with the Regional Authorities to store the repackaged obsolete pesticides in the Region until a destruction facility was available.
- The Pesticides Project Steering Group visited the Tomsk Polygon toxic and hazardous waste storage site. It was decided to:
    - Determine whether the Tomsk Polygon meets current Russian regulatory requirements for Class 1 toxic and hazardous waste disposal or storage
    - Seek a commitment from Federal and local authorities to strengthen the prohibition on transport of obsolete pesticide wastes to landfills and other facilities that do not meet RF regulatory requirements
- Phase 3 of this project will be the destruction of the obsolete pesticides, where possible, using the same plasma arc facility which is being developed for destruction of PCBs from Russian capacitors, or the facility being developed by NEFCO for PCB-containing transformers in Russia.
- Finland noted that it has the technical capability to assist Russia in the destruction of the obsolete and prohibited pesticides at a cost which is only one-half of the cost for disposal at Krasny Bor near St. Petersburg.

Bi-lateral Project of Denmark with Pskov and Vologda Regions

- Identification, inventory, repackaging, removal of obsolete pesticides, and improvement of storage facilities has continued in Pskov and Vologda.
- A total of 180 tons of obsolete and prohibited pesticides have now been placed in safe storage in Vologda and 500 tons in Pskov.
- Storage facilities, Pskov I and II, have been improved and designed with optimal stacking and drive-through arrangements.
- An unfortunate fire occurred late in 2005 at Pskov II which is currently under investigation and subsequent remediation by local authorities.

- An additional 200 to 400 tons of obsolete pesticides stocks remain in Pskov awaiting repackaging and transport to safe storage.

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REDUCTION OF DIOXINS/FURANS RELEASES INTO THE ENVIRONMENT (CHAIR: SWEDEN)

- Phase II has been initiated
  - A Cleaner Production program to reduce dioxins/furans releases is in progress at a second pulp and paper facility in Arkhangelsk Region, the Kotlas Pulp and Paper Combine.
  - A Feasibility Study will be developed to identify measures to reduce/eliminate dioxins and furans from major sources identified in the Phase I report, which was titled, "Evaluation of Major Dioxins/Furans Sources in Arkhangelsk and Murmansk Regions and Republic of Komi".
- Phase III will focus on implementation of pilot demonstration projects identified in the Phase II Feasibility Study and the Cleaner Production program.

REDUCTION OF ATMOSPHERIC MERCURY RELEASES FROM ARCTIC STATES (CHAIR: DENMARK)

Phase 1, Projects to Identify Main Source Categories and Prioritize Source Categories for Possible Reduction Measures

- The Fact Sheet, "Mercury – a priority pollutant", has been updated and released in collaboration with AMAP
- Final hardcopy and electronic copies of the following reports are available:
- " Arctic Mercury Releases Inventory"
- " Assessment of Mercury Releases from the Russian Federation" (in English and Russian languages)
- An additional report, "Assessment of Existing and Planned Initiatives Addressing Mercury Sources in the Arctic States and Identification of Possible Measures for Follow-up," is scheduled for release later in 2006.

Phase 2, Demonstration Projects for Reduction of Mercury Releases

Improved System for Collection, Storage, Transport, and Treatment of Mercury-Containing Waste (MCW) in Northwest Russia

- A feasibility study is underway to be completed in 2007.

- Fact-finding visits in January-February 2006, to sites identified on the NEFCO-AMAP-Barents Euro-Arctic Council "Hot Spots" list, revealed the following:
    - The "hot spot" in the Nenets Autonomous District lacks facilities and capacity to manage MCW . There is strong interest in addressing this problem from both the Regional Rostechnadzor and the municipality.
      A project to exchange mercury-containing street lights, as well as collecting other stored mercury-containing waste in Naryan-Mar, has been prepared by the City and the local Energy Efficiency Centre for implementation in Spring 2006. The collected MCW will be transported to the Archangelsk Recycling Center. The project will be financed by the local budget, NEFCO, the Barents Hot Spots Facility (BHSF) and the Norwegian Barents Secretariat and is scheduled for implementation in Summer 2006.
- A seminar on MCW management will be held by the Danish EPA in St. Petersburg in September 2006.

Mercury Reduction in the Chlor-Alkali Industry in the Russian Federation

- This new ACAP initiative also directly responds to the UNEP Governing Council (GC23) Partnership initiative to reduce sources of mercury in the environment.
- A "mercury audit" has been completed at the three chlor-alkali facilities in Russia (Volgograd "Caustic", Sterlitamak "Caustic" and Kirovo-Chepetsk Chemical Combine).
- A workshop was held in Volgograd to share international experiences and best practices.
- Volgograd "Caustic" participated in a technical exchange program with chlor-alkali facilities in Germany, Spain and Italy.
- A Cleaner Production training program at Volgograd "Caustic" is underway.
- Next step: Implementation of two to five priority mercury-reduction technical projects at Volgograd "Caustic".
- Report results of this first mercury partnership project in Russia at the UNEP Governing Council meeting in Nairobi in February 2007

Phase 2 – Other Projects under Consideration

- Demonstration project to determine the effectiveness of sorbent technology to reduce mercury emissions from coal-fired power plants
- Mercury release reduction project at a zinc smelter in Chelyabinsk .

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Note: Mercury emissions from coal-fired plants in China may be an important contributor to mercury pollution in the Arctic. It was suggested, at the recent ACAP Steering Committee meeting, to consider addressing this source of mercury contamination.

BROMINATED FLAME RETARDANTS (BFRS) (CHAIR: NORWAY)

The BFR Project Steering Group is assembling information from participating countries on inventory, production, and import/export of BFR chemicals and BFR-containing products.

A detailed BFR Fact Sheet has been developed in cooperation with AMAP and has been posted to both the ACAP and AMAP websites.
The Phase I report will be finalized in 2006 and it will contain recommendations for Phase II.

Phase II will include evaluation of alternative compounds and alternative technologies, improved management strategies and actions, and BFR-reduction strategies.

New ACAP Initiatives Managed and Implemented by Permanent Participants

Community-based model for PCB mitigation in the Arctic – Managed by Gwich'in Council International (GCI)

On-site inspection for obsolete electrical equipment has been completed in four villages in Alaska

Twenty one obsolete electrical transformers have been identified and four of these transformers have already been analyzed for PCBs. It was agreed to remove these transformers from the villages.

Plans have already been made for five obsolete transformers to be packed in polyethylene drums and flown to an approved processing facility for disposal and recycling of the housings. This will be completed in Spring/Summer 2006.

Identification and Management of Local Sources of PCBs and Obsolete Pesticides in the Russian Arctic Indigenous Communities – Managed by the Russian Association of Indigenous People of the North (RAIPON)

In June 2005, activities started in two of the three selected indigenous villages in the Nenets Autonomous Region as follows:

Representatives of the local population were trained to identify sources of PCBs and obsolete pesticides.

Samples were collected from the local landfills to test for PCBs and pesticides. Measurable amounts of these contaminants were detected.

New food storage containers were provided to local communities to replace POPs-contaminated containers used in some households

Over 700 kg of obsolete and prohibited pesticides have been located in the villages and isolated to prevent access and exposure to the residents.

A special training course on safe food consumption for schools and community education programs is being developed.

Emerging Issues

A brief summary of the emerging environmental concerns associated with the increasing amounts of electronic waste ("e-waste"), such as computers, cellular phones, and televisions, was presented at the last ACAP Steering Committee Meeting in Copenhagen. This "e-waste" contains heavy metals, BFRs and other hazardous compounds. ACAP will collect additional information on quantities and types of "e-waste" being generated and will consult with AMAP on information that may be available, as it relates to potential Arctic contamination.

Financing the Work of ACAP

All expenses for the work of the ACAP Secretariat and Chair are provided by the country that chairs ACAP. Funds were first provided by Norway as the Chair and followed by the United States. ACAP Steering Committee Meetings are held semi-annually and are hosted on a rotating basis by the participating countries. The meeting costs are primarily provided by the host country with some support from the ACAP Chair.

The costs to implement ACAP Projects are provided as voluntary contributions by interested donor-countries and include in-kind contributions. The costs to implement each of the projects vary by the nature of the demonstration activity and the phase of the project. The number of donor-countries and the amounts of contributions also varies for each project. To date, all required funds to carry out Inventory or Source Characterization and Feasibility Studies of each approved project have been sufficient. It is anticipated that some of the costs for Pilot Demonstration Projects could be provided, as necessary, by the new Project Support Instrument (PSI).

Status of the Project Support Instrument

NEFCO, the fund manager for the Project Support Instrument (PSI), is in the process of seeking fund donations, with a target of €3 million, to initiate the pilot stage of the PSI. Initial pledges have been received from Iceland, Norway and the Saami Council, in the amount of €185,000. Other potential donors are awaiting a commitment of funds to the PSI from the Russian Federation. The Russian Delegation to the ACAP Steering Committee meeting expressed Russia's positive interest to participate in the financing of the PSI.

Comment [h1]: "Seeking donations of €3 million" conveys an incorrect impression that each contribution is expected to be of that order, whereas the PSI pilot phase target, as reported at the ACAP Meeting, is envisaged to be total that. Thus this proposal would be preferable.

Coordination with the Barents Hot Spots Facility

NEFCO also manages the Barents Hot Spots Facility, a fund created under the Barents Euro-Arctic Council to address the 43 Arctic environmental hot spots identified by AMAP and NEFCO. ACAP has worked closely with the Barents Euro-Arctic Council's Working Group on Environment to identify 12 hot spots of mutual interest. NEFCO informed ACAP that funds have been allocated from the Barents Hot Spots Facility to address some of these hot spots of mutual interest.

Recommended Actions

At the last SAO Meeting in Khanty-Mansyisk, ACAP recommended six actions that would be required for successful completion of the PCB and Obsolete Pesticides projects in the Russian Federation. The SAOs noted these recommendations with no objections.

Three of these six recommended actions are particularly needed this year. We request the Russian Senior Arctic Official to work with the ACAP Chair to approach key Russian ministries to discuss and address the following three recommendations:

1. Rostechnadzor (Federal Agency on Environmental, Technological and Nuclear Supervision) should identify and address problems related to Regional acceptance of toxic and hazardous wastes (PCBs and obsolete pesticides) from other regions of Russia for treatment and destruction.

2. The key federal and regional environmental ministries and agencies should provide technical support for preparation of the necessary environmental assessments, permits and certifications for placement and operation of storage and destruction facilities for PCBs and obsolete pesticides.

3. Request RF Rostechnadzor:
   - To develop a schedule for phasing out the use of PCB-containing equipment.
   - To develop a schedule for destruction of PCBs and obsolete pesticides stockpiles.
   - To ensure that regional/territorial authorities, including regional offices of Rostechnadzor, receive and agree to implement the above schedules.

Requested Actions for SAOs

At the last SAO Meeting in Khanty Mansyisk, the SAOs requested that the ACAP Chair prepare a Discussion Paper to support the ACAP request to change the status of ACAP to a permanent working group.

The draft minutes of this SAO Meeting stated that: “The SAOs expressed their positive attitude to changing the status into the permanent WG”.

The Senior Arctic Officials have been provided with the requested Discussion Paper which outlines the history, terms of reference, and measurable environmental successes of the ACAP program.

Recommendations:

- Establish ACAP as a permanent Working Group.
- Change the name of the Working Group to the **Arctic Council Action Program** to Eliminate Pollution of the Arctic**.**