

ARCTIC COUNCIL

Arctic Contaminants Action Program

ACAP
PROGRESS REPORT
TO SENIOR ARCTIC OFFICIALS
(2007-2009)

April 2009
Tromsø, Norway

INTEGRATED HAZARDOUS WASTE MANAGEMENT STRATEGY (IHWMS) (CHAIR: RUSSIA)

Project Steering Group (PSG) mandated by Salekhard Declaration in 2008, chaired by Russia and co-chaired by USA and Norway has developed a draft Project Management Plan (PMP) and Terms of Reference (TOR). Draft proposals for pilot demonstration projects from the other ACAP project steering groups are being developed further in parallel with PMP and TOR. This will bring synergy in both the individual projects and the overarching IHWMS. Successful implementation of this project is of great importance for the development of environmentally-sound management of hazardous wastes, including those addressed under ACAP PCBs, obsolete pesticides, dioxins/furans and mercury projects. This strategy will support the final destruction of hazardous wastes.

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

Since 2006, 2375 metric tons of obsolete pesticides have been inventoried and placed into safe storage. The total amount of pesticides safely stored under this project is 3951 metric tons in 9 regions directly impacting the Arctic. Most of these pesticides have been repackaged. ACAP project is currently being implemented in Altai and Krasnoyarsk Krai to complete safe storage activities in the regions. Four regions remain to complete the inventory and safe storage phase under this project. In addition, 1500 metric tons of unidentified pesticide mixtures have been located in Sakha (Yakutia). This project leveraged large co-funding by the priority regions. Rostov-on-Don used ACAP inventory and safe storage model for their pesticide management for 500 metric tons.

The donor countries are currently assessing an incineration facility in Siberia that could potentially be used to destroy obsolete pesticides and other hazardous waste in an environmentally-sound manner, as required for the successful completion of the project.

This ACAP project is also interacting with two bilateral pesticide projects in Russia.

Denmark and Russia have bilaterally collected up to 800 metric tons of obsolete pesticides in the two regions of Pskov and Vologda. An economic model for the management of obsolete pesticides was developed and public participation and awareness were conducted with regional NGO's.

Finland and Russia have bilaterally conducted a project in Karelia, where 12 metric tons of obsolete pesticides were destroyed in an environmentally-sound manner at a facility in Finland. Completion of this project eliminated one of the environmental hot spots of the Barents Region.

REDUCTION/ELIMINATION OF RELEASES OF DIOXINS IN THE RUSSIAN FEDERATION WITH FOCUS ON THE ARCTIC AND NORTHERN REGIONS IMPACTING THE ARCTIC (CHAIR: SWEDEN)

Since 2006 the project has been in operating according to its phase II plan (feasibility study).

Facilities selected for further investigations within phase II were:

- * Murmansk municipal solid waste incineration plant (Murmansk oblast)
- * Kotlas pulp and paper facility, Koryazhma (Arkhangelsk oblast)

- * Vorkutinskiy cement plant (Komi republic)
- * Syktyvkar Timber Mill (Komi republic)

The project was presented at the 27th International Symposium on Halogenated Persistent Organic Pollutants - DIOXIN 2007 held in Tokyo, September 2007. A final report (ACAP Project «Reduction/Elimination of dioxin and furan emissions in the Russian Federation with Focus on the Arctic and Northern Regions Impacting the Arctic», Phase II report) on most phase II activities was approved by the project steering group in late 2008. The report is posted on the ACAP website and it contains proposals for phase III activities and these are now discussed with possible funding and lending organizations. One of the proposed object has been identified by NEFCO and based on this, phase III activities are expected to be launched in the near future."

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

The first two phases of the mercury project included regional and national mercury emission inventories of the Arctic (published in 2005). In addition a report on possible measures for follow up has been published (2006). The inventories verified high amounts of mercury emission from the Arctic States, and especially coal combustion and metallurgic production are large contributors to mercury emissions. A third sector of concern is the management of mercury containing waste.

The third phase on implementation of a demonstration project and preparatory work on Mercury Containing Waste in the Northwest Region of the Russian Federation is ongoing. As part of the work a draft baseline study was presented in March 2008 at a workshop in Moscow where all relevant stakeholders including federal and regional authorities, international and regional mercury managers gathered together with experts and the PSG. The draft baseline study presents the fluxes of mercury containing waste including luminescent lamps in NW Russia. The report also includes an evaluation of two mercury hot spots in the region of Murmansk and Nenets Autonomous Okrug as described in the AMAP/NEFCO hot spot report recommending the Murmansk hot spot to be eliminated from the hot spot list. In addition, an action plan is proposing different scenarios for improvement of the existing system for collection, treatment, storage transport of mercury containing waste. Based on the Russian regional needs and interest, Terms of References and a business plan for a demonstration project on management of mercury containing waste will be implemented in a selected Arctic region.

A fact sheet on mercury has been prepared in cooperation with AMAP.

OTHER DEMONSTRATION PROJECTS:

COAL-FIRED POWER PLANT MERCURY CONTROL PROJECT (SWEDEN & USA)

Preparatory work is being conducted for a demonstration project using Best Available Technology (BAT) to reduce mercury releases in coal-fired power plant in Russia.

PROPOSED MULTI-POLLUTANT CONTROL PROJECT AT A RUSSIAN ZINC SMELTER (USA & NEFCO)

The proposed project would reduce mercury and other air emissions (including Particulate Matter (PM), sulphur oxides (SOx), and nitrogen oxides (NOx) and releases to land and water at one Russian zinc smelter). This can provide an effective demonstration to stimulate emissions controls at other Russian zinc smelters. Smelters have been identified by the ACAP Mercury Project Steering Group as one of five priority source emission

sectors in Russia. In this context, actions are being taken at the Pechenga Nickel smelter, which are expected to reduce emissions of dust including heavy-metals by 2010.

ACAP/UNEP GLOBAL MERCURY PARTNERSHIP WITH CHLOR-ALKALI INDUSTRY IN THE RUSSIAN FEDERATION TO REDUCE USE AND EMISSIONS OF MERCURY (USA & RUSSIA)

In 2008, this project has achieved reductions of over 2.5 tons of mercury releases and consumption.

The Volgograd “Caustic” successfully completed the assembly of the waste-water treatment system. This system will allow removal of an additional 900 kg of mercury per year. This facility is also in the process of installing a state-of-the-art mercury monitoring equipment which will allow 400 kg of annual reductions of air emissions of mercury.

Additional ongoing projects to reduce mercury use and consumption are implemented at Kirovo-Chepetsky Chemical Combine and PVC production facility, “Plastkard”.

PHASE-OUT OF PCBs IN RUSSIA (CHAIRS: RUSSIA, USA AND NEFCO) NEFCO-FUNDED PROJECT

This project is expected to become part of the Integrated Hazardous Waste Management Strategy (IHWMS). NEFCO will propose this to be one of the key projects under the Project Support Instrument (PSI). NEFCO also plans to cooperate with UNDP and Ministry of Natural Resources and Environment of the Russian Federation to develop project documents for a PCB management project to obtain additional financing through the Global Environment Facility (GEF).

REDUCTION/ELIMINATION OF SOURCES AND RELEASES OF BROMINATED FLAME RETARDANTS (CHAIR: NORWAY)

A final BFR inventory report has been prepared: “Final Report of Phase I of the ACAP Project on Brominated Flame Retardants (BFRs) Phase I: Inventory of sources and identification of BFR alternatives and management strategies”. The inventory indicates that problems exist in a number of countries and efforts will therefore need to focus on circumpolar activities.

As possible follow ups for ACAP or other relevant international forums, the report indicates the following: making available BFR-free products, eliminating or reducing the use of hazardous BFRs, minimizing releases of BFRs, adoption of appropriate waste management practices and communicating information to countries with poorly regulated or unregulated substantial production and/or use of BFRs.

The BFR Project Steering Group will continue as an information exchange forum for 2009-2010, while searching for a Phase II project.

INDIGENOUS PEOPLES COMMUNITY ACTION INITIATIVE (CHAIRS: RAIPON AND USA)

In 2006-2008 a total of five different training programs to address drums management were provided to community volunteers of Chukotka. In 2008, US conducted the Alaska Statewide “Abandoned Drum Cleanup Workshop”. This training included participants from indigenous communities of Russia and Canada, as well as community representatives from throughout Alaska. Participants earned a Technician Training

Certification.

In the Summer of 2008, the ACAP team recovered and relocated approximately 2000 abandoned drums and transported them to a storage facility in Lorino village. Within the Lorino village priority clean-up areas were identified, and drum conditions assessed. RAIPON worked with children explaining the nature of persistent toxic substances, how to recognize toxic and hazardous wastes and dietary habits.

ACAP received letters of request from AIA, GCI, ICC, RAIPON and SC to increase involvement of indigenous population and coordination of their interactions with ACAP projects participants.

Next steps will be implemented in the Summer 2009 and will include: sampling of drums contents, drums cleaning and compaction, removal and destruction of the liquids, which do not contain Persistent Organic Pollutants (POPs).

CLEANER PRODUCTION PROGRAM (RUSSIA, NORWAY & USA)

The ACAP Cleaner Production training was conducted at Novodvinsk and Kotlas pulp and paper facilities, and Volgograd "Caustic" chlor-alkaline production facility during 2006-2008.

OTHER ACTIONS:

ACAP has developed Operating Guidelines consistent with Part IV of the Arctic Council Rules of Procedure, which were approved by the SAO's at the Svolvær Meeting in 2008.

ACAP is in the process of preparing project description/guidelines for the project process.