

Progress report to Senior Arctic Officials. Haparanda 14-15 November , 2012.

2012

Arctic Contaminants Action Program (ACAP)

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1. Introduction. Response to Arctic Council priorities and potential new projects under consideration

The ACAP Working Group implements its Work Plan 2011-2013 adopted by the Ministers addressing the appropriate elements in the Nuuk Declaration. In Nuuk the Ministers, *inter alia*, established a Short-Lived Climate Forcer Contaminants project steering group that will undertake circumpolar demonstration projects to reduce black carbon and other SLCF emissions, and encouraged countries to continue work to reduce emissions and enhance the implementation of International Conventions and Protocols.

The ACAP working group therefore addresses on-going environmental challenges such as contamination from hazardous chemicals and waste and is responding to new and emerging threats to the Arctic, such as short-lived climate forcers (SLCFs).

2. Summary of progress on ACAP projects

Short-lived Climate Forcer Contaminants Project Steering Group (PSG)

Several projects are under preparation.

- For the US-led Reduction of Black Carbon from Diesel Sources in the Russian Arctic Project, the US EPA and US DOE are working together to send a research engineer to Russia for 2 months this fall to meet with organizations working on and to research diesel black carbon reduction, emissions data and sources. The US is also in the process of developing agreements and criteria to work with partners on this project. The US has also been in the process of finalizing specific pilot projects and developing additional agreements with partners to help carry out this project in Russia.
- The US and NEFCO signed an agreement for the US to participate in the Arctic Council (AC) Project Support Fund (PSI) in June 2012 and has already allocated USD 1.0 million to the PSI to address BC mitigation from diesel sources in the Russian arctic. Work is underway to identify potential projects (including the "Quick Start" projects) for approval as Arctic Council projects and/or other appropriate approvals.
- ACAP WG has considered a new project on "Reduction of Black Carbon Emissions from Residential Wood Combustion" submitted by Norway and Finland. The project was circulated to the ACAP WG in September 2012 and is anticipated to be approved once ACAP has finalized its new project approval procedures. Canada, Denmark, Finland, Norway, Sweden and USA have nominated experts to the project and will provide information on emission data and relevant measures to reduce black carbon emissions from residential wood combustion. The project phase 1 will collect and compile country specific recommendations on possible measures to reduce black carbon emissions from residential wood combustion. The results from phase 1 are expected in 2014 and will lead on to phase 2, which is foreseen to implement a demonstration pilot project based on the recommendations from phase 1. Norway has allocated funding for the project and plans to conduct a workshop in Oslo to share and discuss possible measures to reduce black carbon emissions from residential wood combustion in the Arctic countries.

- ACAP is considering developing case studies on experiences reducing black carbon in arctic circumstances as a deliverable for the May Ministerial meeting.

Other relevant information related to implementation of SLCFC projects in the Arctic

- Sweden-NEFCO have created an SLCF Trust Fund in the amount of SEK 1.6 million to contribute to funding of Russian projects administered by NEFCO that reduce SLCF emissions, including black carbon, that transports to and deposits in the Arctic. Projects identified by the Arctic Council's ACAP project steering group on SLCF are to be prioritized. The SLCF PSG/ACAP is in the process of identifying potential projects.
- NEFCO "Quick Start" Projects. Several projects are under preparation and subject to criteria applied and owner /stakeholder engagement the projects will be prepared for relevant financing.

Evaluation of Dioxins and Furans in the Russian Federation

The Project has completed the first two phases and is now preparing for first pilot projects in Phase III. The project has so far identified three possible pilot projects in NW Russia to implement demonstration projects for reduction of emission of dioxins and furans.

The PSG agreed on a plan on the Vorkutinskiy cement plant for reduction of dioxins and dust emissions and a Cleaner Production training programme. NEFCO also assigned a consultant for a pre-feasibility study, aimed at assessing the prerequisites for possible dioxin reduction solutions complementary to the actions currently planned by the operator.

In parallel, the PSG Dioxin will continue to identify other pilots for Phase III and also consider additional Phase II activities.

Arctic Council Mercury Project Steering Group

The Mercury PSG is considering several mercury projects at various stages of formulation. In line with the Work Plan, the PSG is also developing a strategy document which will be shared with ACAP upon completion.

The following project areas have been agreed for consideration:

- Coal Fired Power Plant Sorbent Technology for Mercury Control
Work in this area would follow up on an ongoing bilateral US-Russian project which is carrying out testing at the 300 MW Cherespetskaya thermal power plant using Kuznetsk coal widely used in Russia. Preliminary results, which are roughly consistent with experience using US coals, indicate that the use of sorbents can result in capture of up to 90 percent of the mercury emitted. The bilateral project is now finalizing results of leach testing and is expected to be completed in 2013. The PSG will develop a proposal for an ACAP project focused on disseminating and replicating results of this demonstration.
- Controlling Releases of Mercury at a Russian Non-ferrous/Zinc Smelter.
At present, a proposal is being refined. Discussions are ongoing with the Russian Ministry and discussions are planned with the Chelyabinsk Zinc Plant to understand the current mercury balance and opportunity for project collaboration. Next Steps: Subject to outcome of talks with the Russian authorities, NEFCO will report to the PSG about possibility at the proposed Chelyabinsk facility and communications with the facility on progress and possible co-funding for the pilot project.

- **Mercury Reduction in Industrial Gold Mining Operations in Russia**
A concept paper for a proposal has been shaped by USEPA to share experiences in reducing emissions of mercury from gold processing and production facilities among ACAP member countries that mine gold. A better understanding of mercury reducing approaches will be accomplished throughout the Arctic Region, and the model pilot activity can serve as an immediate example to follow. The training activities will provide hands-on assistance.
- **Mercury Management in the Artisanal and Small Scale Gold Mining Community**
Work in this area would achieve a better understanding of the ASGM situation in Russia, and could highlight opportunities to address the emissions. On a global scale emissions from this sector have been shown in the UNEP inventory process to constitute the second largest source of mercury emissions, following coal combustion.

Environmentally Sound Management of Stocks of Obsolete Pesticides in the Russian Federation

The project will complete phases I and II (inventory and safe storage activities) in 2012 in the priority regions, reaching 7 000 tonnes. Two projects are currently being finalised in Krasnoyarsk Krai:

- Pesticide inventory in Eastern Krasnoyarsky Krai will be completed in October, 2012
- Repacking, sampling and laboratory analysis of OPs in a warehouse around a forest nursery in Yeniseisk district and placing OPs in an Krasnoyarsk polygon "Serebristiy" for safe temporary storage

Implementation of Phase III (demonstration of environmentally sound destruction of obsolete pesticides) is dependent on the availability of environmentally sound destruction capacity. The Russian Federation has informed ACAP that hazardous waste destruction technology (Super-Critical Water-Oxidation SCWO) is currently under legal review in Russia. The documents are being reviewed by Rosprirodnadzor, and a positive conclusion of the State Ecological Expertise could be provided by the end of 2012.

The PSG continues to seek opportunities to complete the destruction demonstration Phase III and will deliver a report on Phases I and II as well as an outreach fact sheet to the Ministerial meeting in 2013 as set out in the ACAP Work Plan. The final version of the report will be made available for the SAO in early 2013.

Integrated Hazardous Waste Management Strategy (IHWMS) in Northern Regions of the Russian Federation

The project has not progressed according to the Terms of Reference agreed by the SAO. The PSG has not met since June 2010 and will not meet the objective set in the ACAP Work Plan to submit a report presenting a strategy for at least one region to the Ministerial meeting in 2013. The work will need to be restarted from the project plan circulated in July 2011.

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

The project Phase III: management and destruction demonstration of 250 tonnes of PCB has not progressed since 2007. ACAP Project has not been able to obtain an operational permit in the Russian Federation for the collection, treatment and destruction facility. The project is expected to progress after operationalisation of the PSI.

Project Steering Group Indigenous Peoples Contaminants Action Program (IPCAP)

Project Steering Group is developing Terms of Reference for a baseline study in accordance with the Terms of Reference. The baseline study, setting the priorities for future activities to reduce the contamination in the indigenous communities, is expected to be carried out in 2013.

The PSG is currently waiting for new co-chair nominations from both the Russian ministry of regional development, as well as RAIPON.

Continued Cooperation with NEFCO to facilitate PSI funding of ACAP projects

Preparatory PSI Committee (PPCOM) held its first meeting of the contributors in June, 2012, to have an informal exchange of views and discuss the operationalisation of the PSI. Since the last SAO meeting the U.S. Government has joined the PSI with USD 1 million earmarked for black carbon projects. The PSI will become operational when all countries will have deposited their contributions with the Fund Manager NEFCO. Work is underway in the Russian Federation regarding establishment of the Russian Execution Agency (REA) for PSI projects in Russia, tender closed on 5 October. The RF has established its intergovernmental commission for the PSI headed by the Ministry of Natural Resources and Environment (the RF Authorised Governmental Agency (AGA)) for selection of the REA.

In order to facilitate the development of the PSI strategic business plan, the Fund Manager has requested a status report on from ACAP on its projects and programme, including those which are considered “Arctic Council approved.” The WG has discussed the ACAP projects status and preparations needed to respond to the Fund Manager request. The WG is looking for agreement in what would qualify a project as an ACAP Arctic Council project, and the role of ACAP in its internal project approval process as well as the specifics of PSG communication on the project to the WG. Norway and US have prepared a proposal for intersessional decision making in order to facilitate the requested response on approved ACAP Arctic Council projects to the Fund Manager in time for the next PPCOM meeting, scheduled for 20-21 November, 2012.

The WG has decided that the Work Plan as approved by the Ministers indicates AC approval for ACAP to undertake activities and implement projects in these specific areas.

3. Deliverables for the 2013 Ministerial

According to the approved ACAP work plan 2011-2013¹, there are several deliverables ACAP is expected to submit to the 2013 Ministerial meeting:

- 1) The ACAP project on developing an Integrated Hazardous Waste Management Strategy in the Northern Regions of the Russian Federation will be carried out focusing on development of the hazardous waste management system in a few pilot regions. Pilot regions for the Integrated Hazardous Waste Management Strategy implementation are in a determination process. The project will not be able to deliver a report presenting a framework or components of the strategy to the ministerial meeting in as indicated in the ACAP Work Plan 2011-2013 (item 3), due to lack of progress.
- 2) The ACAP assessment of environmental performance of Russian hazardous waste destruction facilities together with Russian experts and Ministry of Natural Resources and Ecology of the destruction capacity, is dependent on availability of destruction facilities in Russia. Currently Russian Federation has no approved technologies for environmentally sound destruction of obsolete pesticides or PCBs, and it is therefore not possible for ACAP to carry out an assessment of facilities in time for the ministerial meeting (Work Plan items 3 and 4).
- 3) The dioxin and furan PSG will update the fact sheet on dioxin and furan emissions from 2005 and publish a Summary Report on the work and findings made in Phase I and Phase II (incl. the list of prioritized emission sources) as well as a Work Plan for Phase III. When relevant, the plans for further work in Phase III also will be linked to the work on exclusion of identified Hot Spots from the Barents

¹ Senior Arctic Officials (SAO) Report to Ministers, Nuuk, Greenland, May 2011, pp 11 and pp 29-30.

Environmental Hot Spots List. Deliverables will be submitted to the Ministerial meeting in 2013 (Work Plan item 7).

- 4) The ACAP WG has started its work on preparing demonstration projects on reducing emissions of short lived climate forcers and contaminants in the Arctic (Work Plan item 4). So far USA, Norway/Finland and NEFCO have projects in the pipeline for approval as ACAP Arctic Council projects in the context of AC approved area of SLCF addressing the reduction of black carbon emissions from diesel, from residential heating by wood fired stoves, and energy and resource efficiency/cleaner production initiatives. ACAP will report back to the SAOs about the expected deliveries from these projects for the 2013 Ministerial when the project proposals are adopted and ACAP WG knows more about the timelines for the projects implementation and on the progress of the project initiatives..
- 5) The ACAP obsolete pesticides PSG will produce a report on completion of pesticide inventory (Phase I), and safe storage activities (Phase II) in 13 priority regions of Northern Russia (Work Plan item 5). In addition, an outreach fact sheet on management of obsolete pesticides will be published in English and Russian to highlight the findings in the project and raise awareness of the public on threats related to obsolete pesticides.

4. Working Group administration and next meeting(s)

ACAP has sent a proposal to the AC Task Force on Institutional Issues (TFII) and the AC secretariat about a transfer of the ACAP secretariat duties to the permanent Arctic Council secretariat.

ACAP has continued to update its Operating Guidelines. At the recent WG meeting many items were agreed upon, although a few open issues related to ACAP project approval process, objectives of the Working Group as well as listing the duties of the Project Steering Group Chairs remain to be dealt with intersessionally or at the next meeting. SAO approval for the Operating Guidelines will not be sought until the remaining open questions have been clarified, hopefully at the next WG meeting .

The next ACAP WG meeting will take place tentatively in Russia, February 11-12, 2013.

5. Collaboration with other working groups / other organizations

ACAP WG follows closely the AACA process and contributes to it where possible.

The working group cooperated closely with Barents-Euro Arctic Council's Working Group for the Environment and NEFCO on clean up of hot spots in the Barents Arctic territory.

The ACAP PSG on Short Lived Climate Forcers and Contaminants (SLCFC PSG) has continued cooperation with the AMAP expert group on SLCF and the AC Task Force on SLCF on the exchange of information on projects and other activities.

The WG continues cooperation with NEFCO to finance and facilitate implementation of ACAP projects and mobilize the Project Support Instrument (PSI). The ACAP September 2012 Meeting, responding to NEFCO's request, to prepare an update on the status of ACAP projects, especially with regards to their eligibility as AC project, discussed the status of its projects with regards to the Arctic Council approval. The WG decided that the Work Plan as approved by the Ministers indicates AC approval for ACAP to undertake activities and implement projects in these specific areas. ACAP is in the process of clarifying which of its specific projects, within the general AC mandate, that could be considered "Arctic Council approved" in general and is working to provide this clarification in accordance with expected guidance from the SAOs (the request 19 September from NEFCO to AC-Chair for clarity on Arctic Council Projects). To clarify its own future work and for possible benefit of others, such as PSI, ACAP will develop a Table of Projects that are considered ACAP AC Projects. The table is will be reviewed by the project steering groups (PSGs) to ensure accuracy before completion and ACAP has asked its PSGs to put forward more detailed project proposals for those projects that they think would be submitted for possible PSI funding in the 2012-14 timeframe. This list will be made available on the ACAP website.