



Arctic Council SAO Plenary meeting 8-9 March 2017,
Juneau, Alaska, U.S.A.

Meeting code: ACSAOUS204

Document Title

Arctic Contaminants Action Program (ACAP) Work Plan; Draft

Agenda item number

3.6.4

Submitted by

Arctic Contaminants Action Program (ACAP) Working Group

Document filename

ACSAOUS204_JUNEAU_2017_3-6-4_ACAP_Draft_Work_Plan_2017-19

EDOCS #

#4130

Number of pages, not including this cover sheet

11

Arctic Contaminants Action Program (ACAP) Work Plan

Introduction

ACAP recognizes that cooperative actions contribute significantly to the overall international effort to reduce environmental damage on a global level. ACAP will therefore develop concrete project proposals within this mandate taking into account the needs of Arctic indigenous communities by incorporating traditional and local knowledge when appropriate. The projects identified in this work plan include those that have already received approval by ACAP and those that are currently under development for future ACAP review and consideration. Additional project proposals may be developed within the scope of this work plan during this time period (2017-2019).

Further, ACAP would like to expand the scope of work for the SLCF EG to include projects on energy efficiency and air quality due to the synergies and overlapping national expertise between these two issues and the existing SLCF group composition. In addition, ACAP has noted the increasing number of project proposals from Russia that address pollutants in a cross cutting manner. For example, a recent project on reducing pollution released in to the water through use of BAT/BEP techniques does to fit clearly in one particular EG over another. ACAP would like to encourage continued multidisciplinary, multi pollutant projects and is noting its intention to scope out such activities in the 2017-2019.

Implementation of projects is subject to secure financing. ACAP also advances approved projects for funding to the Arctic Council Project Support Instrument and other funding sources when appropriate.

List of individual projects and activities

Activities on Short Lived Climate Pollutants

Project Title/activity: Black Carbon Case Studies

Lead(s): Arctic States and PPs – U.S.

WG partners – EPPR, ACS. Other Partners: Observers

Rationale and overall objective: The U.S., in cooperation with the ACAP Secretariat and ACS, will continue to acquire new cases studies and improve the design and user-friendliness of the platform, hosted on the ACAP webpage. The objective of the project is to provide a one-stop-shop for public information on black carbon work being undertaken in the Arctic. The project leads are also working with EPPR to utilize Arctic Environmental Response management Application (ERMA) to enhance the interactive map elements of the platform.

This work is being carried out through internal AC State, ACS and WG contributions of staff time and resources.

Main activities and interim milestones: Development of 40 case studies and technical interface for displaying information.

Timeline/completion date: on-going

Kiruna Vision Element(s) Element(s): A Healthy Arctic Environment

Finnish Chairmanship Priorities, if applicable: [Environmental protection/ Connectivity/ Meteorological cooperation/Education]

Project Title/activity: Black Carbon and Methane Emissions in the Russian Arctic – Mapping and Mitigation including Mitigation of Black Carbon and Methane emissions from APG flaring

Lead(s): Arctic States and PPs – Russia;

WG partners – Expert Group on Black Carbon and Methane. Other Partners: Observers – NEFCO (Nordic Environment Finance Corporation); Others – Vygon Consulting, Carbon Limits, Gazprom Neft, and BerezkaGas Company

Rationale and overall objective: The objective of this project is to improve knowledge, and contribute to reduced emissions of black carbon and methane from the oil and gas sector. The project aims to create a basis for concrete mitigation measures at the operations of two Russian Federation companies operating in Yamalo-Nenets-Pechora Sea, and Khanty-Mansiysk, respectively, and improved policies through better knowledge of emission sources, abatement costs, and the mitigation technologies.

Main activities and interim milestones: This project will include: an emissions inventory of sources, mitigating emissions from flaring sites, reporting and mitigating emissions from the oil and gas sector, reviewing policies and regulations, building capacity and information dissemination. The project is being developed with substantial contributions from the Russian private sector and has also benefitted in its development from the Swedish EPA Trust Fund, managed by NEFCO. Results from the project may be linked to the work of the AC EGBCM, and the work of the CCAC.

Timeline/completion date: 2020 (TBD)

Kiruna Vision Element(s) Element(s): A Healthy Arctic Environment/Arctic Knowledge

Finnish Chairmanship Priorities, if applicable: Environmental protection

Project Title/activity: Mitigation of Methane Emissions – Syktyvkar Dyrnos Landfill Project, Russian Federation

Lead(s): Arctic States and PPs – Russia

WG partners – Other Partners: Observers – NEFCO; Others – Barents Council Working Group on Environment, Ministry of Environment of Komi Republic, Syktyvkar City Administration.

Rationale and overall objective: The main objectives of the project are 1) final closure of the landfill and installation of a methane gas collection/utilization system and 2) construction of a new sanitary plot and sorting facility at the existing landfill. The project will take important steps towards reducing adverse environmental and health impacts in the area. It will be compliant with relevant Russian and EU environmental standards, and will contribute towards the exclusion of the Barents Environmental Hot Spot Ko-6.

Main activities and interim milestones: The Dyrnos Landfill project will include development of necessary documents and measures that enable: i) Final closure of the existing landfill and installation of a methane gas collection and utilization system ii) Construction and commissioning of a new land-fill and infrastructure; iii) Completing of waste sorting facility (including infrastructure, installation and commissioning of waste sorting line)

Timeline/completion date: TBD

Kiruna Vision Element(s) Element(s): [A Peaceful Arctic/The Arctic Home/A Prosperous Arctic/A Safe Arctic/A Healthy Arctic Environment/Arctic Knowledge/A Strong Arctic Council]

Finnish Chairmanship Priorities, if applicable: [Environmental protection/ Connectivity/ Meteorological cooperation/Education]

Project Title/activity: Phase out of ozone-depleting and fluorinated greenhouse gases: Fish and seafood processing factories, Murmansk Oblast, Russian Federation

Lead(s): Arctic States and PPs – Russian Federation

Other Partners: Observers – NEFCO; Others – International Centre for Scientific and Technical Information (ICSTI), UNIDO, Murmansk fishery and seafood enterprise(s)

Rationale and overall objective: The objectives of the project are: 1) establish the feasibility studies including inventories to phase out HFCs-HCFC (ODS) and management of end-of-life HFC/ODS refrigeration and freezing systems at the on- and off-shore fish and seafood processing and servicing enterprises and 2) develop project documentation and implement transfer and commissioning of ozone and climate safe technologies including capacity building measures. The project will support implementation of the Montreal Protocol and the UNFCCC Paris Agreement. Funding has not yet been secured for the project proposal, but may

be forwarded to PSI if approved by ACAP. This project is currently under review by the EG SCLP.

Main activities and interim milestones: TBD. The implementation is expected to take 36 months in 2 phases as follows. Phase 1: Preparation for implementation of the Project, 6 months; Phase 2. Main implementation, including commissioning and capacity building activities, 30 months.

Timeline/completion date: TBD

Kiruna Vision Element(s): [A Peaceful Arctic/The Arctic Home/A Prosperous Arctic/A Safe Arctic/A Healthy Arctic Environment/Arctic Knowledge/A Strong Arctic Council]

Finnish Chairmanship Priorities, if applicable: [Environmental protection/ Connectivity/ Meteorological cooperation/Education]

Project Title/activity: Pilot project for reducing CO₂ and SLCP (including black carbon, HFC) emissions on the rivers of the arctic zone of the Russian Federation

Lead(s): Arctic States and PPs – Russian Federation

Other Partners: Observers – NEFCO; Others – OOO “VOLGOTRANS”

Rationale and overall objective: The project aims to introduce green shipping that includes the objectives of 1) mitigating adverse effects of shipping on the environment of the Arctic region. 2) Design, construct, commission and operate of up to three new generation hybrid vessels which meet the latest emission standards and operation on the rivers of the Arctic Zone of the Russian Federation. The project will take into account recycling of the ships in the future. The best available technologies (BAT) are to be used for the project including measures regarding ballast water and wastewater treatment; introduction of ODS-HFC alternative technologies, Selective Catalytic Reduction (SCR) systems and Dust Particulate Filter to reduce releases of pollutants such as NO_x, SLCP (HFC, Black carbon) ODS (ozone depleting substances) management and particulate air pollutants. The intervention will also develop infrastructure for the operation of the hybrid vessels and cover discharges (sanitary water, waste); and safety improvements (e.g. double hull). The system and operations are also to help minimize freight charges through reduction of the vessel cost, and operating expenses for shipping and infrastructure and stimulate ship owners to produce new generation vessels for use in Arctic rivers. 3) Capacity Building.

Main activities and interim milestones: Activities as follows: Phase 1. Scoping of the Study; 2) Feasibility Studies including the reduction of environmental impact from vessels (2000 to 6000 register tons) in the territory of the Russian Federation above 60°N and above the Arctic Circle and produce the feasibility studies including overview of the existing regulatory practices and systems of standards, direct and indirect tools of administrative and economic

measures and the techno-economic and financial feasibility studies for investments. Phase 2 will address the design and of the vessels and infrastructure including testing and insurance related clearances. Phase 3: Construct, commission and operate the vessels and port infrasture that is to service the ships and build up the capacity. Phase 4 Information dessimination

Timeline/completion date: TBD

Kiruna Vision Element(s): [A Peaceful Arctic/The Arctic Home/A Prosperous Arctic/A Safe Arctic/A Healthy Arctic Environment/Arctic Knowledge/A Strong Arctic Council]

Finnish Chairmanship Priorities, if applicable: [Environmental protection/ Connectivity/ Meteorological cooperation/Education]

Activities on Hazardous Waste

Project Title/activity: Demonstration of environmentally sound destruction of obsolete pesticides (Phase III)

Lead(s): Arctic States and PPs – Finland, Russia

Other Partners: Observers – NEFCO;

Rationale and overall objective: In 2015, super-critical water oxidation (SCWO) technology passed Rosprirodnadzor’s environmental expertise, and a Krasnoyarsk based waste management company invested in a facility. ACAP approved the project “Use of SCWO for environmentally sound destruction of obsolete pesticides” in February 2016. With financing from PSI, a preliminary technical assessment has been completed by an international hazardous waste expert, and a test program of the SCWO facility is being developed. The test program is anticipated to be completed in 2017. Next steps for this project will depend on the results of the SCWO review and availability of other destruction technologies for the Russian Federation, the demonstration project to destroy stockpiles of obsolete pesticides, and potentially, PCBs, at this facility. An international information exchange workshop on obsolete pesticides inventory and destruction technologies will be organized to take place in the Russian Federation in 2017. The project results support the Russian National Implementation Plan of the Stockholm Convention, and the international requirements defined in Stockholm Convention Article 6, and relevant Basel Convention guidelines, and EU directives.

Main activities and interim milestones:

Timeline/completion date:

Kiruna Vision Element(s): [A Peaceful Arctic/The Arctic Home/A Prosperous Arctic/A Safe Arctic/A Healthy Arctic Environment/Arctic Knowledge/A Strong Arctic Council]

Finnish Chairmanship Priorities, if applicable: [Environmental protection/ Connectivity/
Meteorological cooperation/Education]

Project Title/activity: Demonstration of management and destruction of 250 tons of PCB in transformers: Phase III

Lead(s): Arctic States and PPs – Russia;

WG partners – Other Partners: Observers – NEFCO; Others – Russian Railways, UNIDO, St. Petersburg Vodocanal, State University of Oil and Gas, Russian Energy Agency

Rationale and overall objective: This project will liaise with a GEF funded project “Environmentally Sound Management and Disposal of PCB at the Russian Railroad network and other PCBs owners (Phase 1)” implemented by UNIDO and Russian Railways. The PSI Committee approved funding for a Feasibility Study following the development of the Terms of Reference (ToR) in cooperation with the EG Hazardous Waste. The ToR for the feasibility study is under preparation, pending necessary inputs from Russian Railways and UNIDO.

Main activities and interim milestones: This PCB FT project will be carried out in a stepped manner: 1) The first step will be an independent evaluation of the UNIDO-GEF proposal and prepare a feasibility and bankable document; 2) The second step will be an implementation of the PCB Project. The details of the project will be established within the course of the independent evaluation.

Timeline/completion date: 2019 TBD

Kiruna Vision Element(s): [A Peaceful Arctic/The Arctic Home/A Prosperous Arctic/A Safe Arctic/A Healthy Arctic Environment/Arctic Knowledge/A Strong Arctic Council]

Finnish Chairmanship Priorities, if applicable: [Environmental protection/ Connectivity/
Meteorological cooperation/Education]

Title/activity: Rapid Environmental Assessment

Lead(s): Arctic States and PPs – Finland, Russian Federation;

WG partners – Other Partners: Observers – Others – [insert]

Rationale and overall objective: Depending on the results of the Rapid Environmental Assessment (REA), a tool developed for the UN Food and Agriculture Organization (FAO) that will assess the risk to local populations and the environment, on three pesticides contaminated sites, a clean-up project will be developed to demonstrate environmentally sound clean-up of an old pesticide storage/burial site in northern Russia, including destruction of the hazardous waste. Project implementation is dependent on identifying and contracting the consultants to implement the project. The project will contribute to Russia’s

implementation of the Stockholm Convention and the work of the Basel Convention Regional Centre. A progress report is anticipated to be submitted to the Ministerial meeting in 2019.

Main activities and interim milestones:

Timeline/completion date:

Kiruna Vision Element(s): [A Peaceful Arctic/The Arctic Home/A Prosperous Arctic/A Safe Arctic/A Healthy Arctic Environment/Arctic Knowledge/A Strong Arctic Council]

Finnish Chairmanship Priorities, if applicable: [Environmental protection/ Connectivity/ Meteorological cooperation/Education]

Project Title/activity: Assessment and mitigations of risks from a municipal solid waste landfill in permafrost area

Lead(s): Arctic States and PPs – Russian Federation;

Other Partners: Observers – [insert]; Others – Krasnoyarsk Krai, Dudinka City Administration, Federal State Institution “Center of the Environmental Industrial Policy”

Rationale and overall objective: Dudinka city landfill is located in the permafrost area 500 m from Yenisey river in Krasnoyarsk Krai. The project aims to assess adverse environmental impacts of the landfill on the Arctic environment and develop remediation technology in the remote Arctic permafrost zone. The project will need to further developed by the Expert Group and approved by ACAP.

Main activities and interim milestones: [TBD]

Timeline/completion date: 2019

Kiruna Vision Element(s): [A Peaceful Arctic/The Arctic Home/A Prosperous Arctic/A Safe Arctic/A Healthy Arctic Environment/Arctic Knowledge/A Strong Arctic Council]

Activities on POPs and Mercury

Project Title/activity: Promotion of decrease of Barents region pollution by introduction of best available technologies (BAT)

Lead(s): Arctic States and PPs – Russian Federation, Sweden;

Other Partners: Observers – NEFCO; Others – Barents Euro-Arctic Council Working Group on Environment, BAT Bureau, All Russian Research Institute for Nature Protection (VNII/Ecologia), Russian Cleaner Production and Sustainable Development Centre (RCPSDC)

Rationale and overall objective: The project goal is to prevent and decrease pollution of the Arctic and Barents regions based on the Best Available Technologies (BAT) knowledge delivery

to the enterprises and universities and facilitating the environmental investments in the area. The endeavor will be based on capacity building, feasibility studies, and additional interventions required, in cooperation with industry (including its branch organizations), the academia and research/design bureaus, to implement BAT at selected enterprises in the key industrial sectors through applicable cleaner production, resource efficiency measures and feasible environmental investments. Russia is the lead country for the project.

Main activities and interim milestones: This project will be carried out for a selection of up to 7 key sectors, identified below, through a series of interventions. 1) Pulp and Paper Industry ; 2) Mining, Mineral and Metallurgical Industry; 3) Oil and Gas Industries, including Refineries; 4) Organic Chemical Process Industry; 5) Inorganic Chemical Process Industry; 6) Water and Wastewater treatment and management; 7) Heat and Power Combustion Plants including Combined Incineration (CHP). The project activities will include:

- Scoping and Feasibility studies
- Develop the continuously operating capacity for the BAT educational system in Russia
- Identify and promote, including through feasibility studies and with cooperation with financial institutions and enterprises the introduction of BAT
- Develop the recommendations industrial emissions mitigation through BAT
- Promote exclusion of the environmental Hot Spots from the Barents List, and the [300] Arctic relevant polluting enterprises
- Develop and conduct up to 7 BAT Sector Seminars
- Organize a final project BAT conference in Moscow
- Disseminate the Project results.

Timeline/completion date: 2019 TBD

Kiruna Vision Element(s): [A Peaceful Arctic/The Arctic Home/A Prosperous Arctic/A Safe Arctic/A Healthy Arctic Environment/Arctic Knowledge/A Strong Arctic Council]

Finnish Chairmanship Priorities, if applicable: [Environmental protection/ Connectivity/ Meteorological cooperation/Education]

Project Title/activity: Projects related to reduction of dioxins and furans

Lead(s): Arctic States and PPs – Norway, Russian Federation, Sweden, US;

Other Partners: Observers – [insert]NEFCO; Others – [insert]

Rationale and overall objective: ACAP will continue to undertake activities with the overall objective to reduce releases of dioxins and furans. Individual projects developed by the Expert Group on POPs and Mercury will be brought to ACAP for consideration. Based on the feasibility study and technical assessment report approved at the AC Ministerial in 2017, the

need for an action plan at the Vokutinskiy Cement Plant (VCP) will be considered. A desk top study to update previously examined dioxin emission sources will be undertaken. A project to broaden the emission inventory of potential dioxin emission sources will be developed for ACAP consideration. Introduction and use of best available technologies (BAT) remains a priority, in support of this, ACAP will consider activities that support implementation of control technologies. Finally, ACAP is ready to work with the Russian Federation to support activities that increase capacity to comply with requirements of international conventions such as Stockholm, Basel, and Rotterdam. Funding for approved ACAP projects will be sought from the PSI and other funding mechanisms as appropriate.

Main activities and interim milestones:

Timeline/completion date: TBD

Kiruna Vision Element(s): [A Peaceful Arctic/The Arctic Home/A Prosperous Arctic/A Safe Arctic/A Healthy Arctic Environment/Arctic Knowledge/A Strong Arctic Council]

Finnish Chairmanship Priorities, if applicable: [Environmental protection/ Connectivity/ Meteorological cooperation/Education]

Project Title/activity: Project related to reduction of mercury

Lead(s): Arctic States and PPs –Norway, Russia, Sweden, US;

Other Partners: Observers – NEFCO

Rationale and overall objective: Further work on mercury within ACAP needs to be examined vis-à-vis implementation of the Minamata Convention and priorities of the Russian Federation in this sector. The Non-Ferrous Metals/Zinc Smelter Emission Reduction project has been submitted to the PSI for funding, pending input from the Russian partner. A joint project with the ACAP Expert Group on Hazardous Waste, Development of mercury containing waste management system in the Arctic region of the Russian Federation, is being considered for further development. These, and other projects related to mercury reduction, will be brought to ACAP on a case by case basis for consideration.

Main activities and interim milestones:

Timeline/completion date: TBD

Kiruna Vision Element(s): [A Peaceful Arctic/The Arctic Home/A Prosperous Arctic/A Safe Arctic/A Healthy Arctic Environment/Arctic Knowledge/A Strong Arctic Council]

Finnish Chairmanship Priorities, if applicable: [Environmental protection/ Connectivity/ Meteorological cooperation/Education]

Activities of the Indigenous Peoples Contaminant Action Program (IPCAP)

Project Title/activity: Circumpolar Local Environmental Observer (CLEO) Network for Traditional and Local Knowledge

Lead(s): Arctic States and PPs – United States, Finland, Sweden, Norway, AIA;

WG partners – SDWG, CAFF Other Partners: PP:Saami Council Observers – NEFCO, Association of World Reindeer Herders; Others – Alaska Native Tribal Health Consortium, Saami Education Institute, International Centre for Reindeer Husbandry

Rationale and overall objective: Building on the successful completion of Phase I, expansion of the CLEO in North America, Phase II, expansion of the network to the Nordic region, is on track. The next steps for the project include establishing new observers, projects and hubs in the circumpolar region, raising the profile of the network, securing stable funding and coordinating with other WGs.

Main activities and interim milestones: Bringing new communities of observers and experts living and working on Arctic issues in to the CLEO Network; establish CLEO hubs Arctic States.

Timeline/completion date: Phase one completed in May 2017; Phase two to be completed in 2019; Phase three to be completed in 2021.

Kiruna Vision Element(s): [A Healthy Arctic Environment/Arctic Knowledge]

Finnish Chairmanship Priorities, if applicable: [Environmental protection/ Connectivity/ Meteorological cooperation/Education]

Project Title/activity: Community-Based Black Carbon and Public Health Assessment Project

Lead(s): Arctic States and PPs – AIA, United States, Sweden, Russia;

WG partners – Other Partners: Observers – NEFCO; Others – University of Alaska, Anchorage, University of Alaska, Fairbanks, Alaska Native Science Commission

Rationale and overall objective: This project will assess, on a pilot basis, local sources of black carbon emissions from a number of Alaskan, Russian and Saami villages. It will provide a broad characterization of associated public health risks; explore short and long-term mitigation options; assess and, where possible, strengthen local capacities to identify, mitigate and prevent black carbon pollution; draft a framework tool for community-based assessments of black carbon emissions and health risks; and educate local communities about black carbon emissions and risks.

Main activities and interim milestones: The scope of work developed by AIA and NEFCO includes a desk study, sample air monitoring and proof of the concept for the demonstration project. These results will provide useful information for a subsequent final investment decision (FID) for the next stages of the project.

Timeline/completion date: In March 2016, the PSI Committee approved a FID to finance the project's initial, desk study phase. A final report is expected as a Ministerial deliverable in 2019.

Kiruna Vision Element(s): A Healthy Arctic Environment]

Finnish Chairmanship Priorities, if applicable: [Environmental protection]

Communications and outreach

The ACAP webpage contains information on ACAP Expert Groups, projects, and meeting documents. ACAP reports benefit from being included in the Arctic Council Open Access Archive. In January 2017, ACAP approved a new visual identity, which will be used on all reports and outreach materials. ACAP has also undertaken the production of fact sheets to communicate project results to a wider audience. ACAP continues to develop its presence on Twitter @ACAP_arctic. The ACAP Executive Secretary participates in the Arctic Council Communications and Outreach group.

Administration

ACAP hold in-person WG meetings twice per year supplemented by teleconferences as required to discuss projects and priorities identified in the work plan, including new projects within the ACAP mandate. ACAP attends meetings of other AC WGs and task forces, and contributes to initiatives on cross-cutting issues. ACAP has a permanent secretariat, staffed by the ACAP Executive Secretary, housed within the ACS in Tromsø, Norway. Funding for approved ACAP projects is provided by state identified funds, the AC PSI, and other funding mechanisms as deemed appropriate. During the U.S. Chairmanship of the AC, Sweden chaired the ACAP WG with the United States assuming the role as vice-chair. Sweden will continue to chair ACAP WG for the 2017-2019 period, supported by Norway as vice-chair. ACAP's meeting schedule for the forthcoming two years have been provisionally agreed as follows: June 14 - 16, 2017; November 7 - 9, 2017; April 17 - 19, 2018; and, Nov 6 - 8, 2018.