Press – release

State Duma of the Russian Federation

Secretariat of the Arctic Monitoring and Assessment Programme (AMAP)

Russian Association of the Indigenous Peoples of the North, Siberia and Far East

Global Environment Facility

Persistent Toxic Substances, Food Security and Indigenous Peoples of the Russian North

(Dedicated to the finalization of the GEF project)

Moscow, 17 November 2004

1. Background information.

In 1997 – 1998, the Arctic Monitoring and Assessment Programme (AMAP) presented the reports on the state of pollution in the Arctic. These reports clearly documented that persistent toxic substances (PTS), primarily persistent organic pollutants (POPs), can be transported to, and accumulate in, the Arctic Region. Due to low solubility in water and high solubility in lipids, they can accumulate in fat rich Arctic food chains, reaching the highest levels in fat tissues of upper trophic level species. As the result, certain Arctic indigenous populations, whose traditional diet is based on consumption of these species, are subject to some of the highest exposure levels to PTS of any population groups on Earth.

These substances, being accumulated in a human body, cause such negative impacts on human health, as neurological, reproductive effects, immuno-suppression, cancer, etc. Due to ability of some of these substances to penetrate through placenta and accumulate in breast milk, human body is impacted by them during the fetal development and breast feeding, i.e. the most critical periods of its development.

Although the AMAP findings were mainly based on data from the Canadian Arctic and Greenland,, these were evidences that these effects are also relevant to the Russian North. However, it the time of the first AMAP assessment, the situation of the Russian Arctic indigenous peoples had not been studies sufficiently to allow clear understanding of the impact of contaminants on the their overall health status. This lack of information precluded reliable assessment of the Russian situation with respect to PTS exposure within the circumpolar context. It also prevented the development of adequate measures to reduce the risk to Russian northern populations associated with exposure to PTS. To eliminate these gaps, the Arctic Indigenous Peoples Organizations – Permanent Participants of the Arctic Council, being deeply concerned by the findings of the AMAP assessment regarding possible impacts of PTS on the health of their peoples, particularly through contamination of traditional food, in collaboration with the AMAP Secretariat, took an initiative to launch a special project. The aims of this project were not only to assess the situation with respect to PTS impacts on the health of indigenous peoples of the Russian North, but also to develop recommendations to federal and local authorities, indigenous peoples and to the international community on measures to reduce exposure of indigenous peoples of the Russian North to PTS.

This initiative received full support from the UNEP Global Environment Facility, the Arctic Council and all the Arctic Countries, international organizations, federal executive bodies of the Russian Federation, the Russian Parliament (the State Duma) and administration of the territories, at which the project was implemented (Murmansk Oblast, Nenets, Taymir and Chukchi Autonomous Okrugs).

2. Project activities.

The following issue have been studied within the framework of the project:

1. Long-range atmospheric PTS transport to the areas inhabited by the Russian Arctic indigenous peoples.
2. PTS transport with river flows.
3. Local pollution sources in the vicinity of the indigenous communities.
4. Contamination of the indigenous residencies and other contact pollution sources.

5. PTS levels in the environment and biological species used as traditional food sources.
6. Lifestyle and dietary habits.
7. PTS levels in human bodies.
8. Health effects associated with human exposure to PTS.

The conclusions and recommendations of the project are attached to this press-release.

3. The survey targets.

Taking into account that PTS cause the highest impacts on fetus and newborns development, particular attention was given to pregnant women and newborn children. In total, 237 mother-child pairs, which represent 13 indigenous peoples of the Russian North, were surveyed within the project framework. Besides, more than 1500 representatives of the general grown-up indigenous population have been also surveyed.

4. Basic results.

4.1. General conclusion.

In total, PTS impact on the indigenous peoples of the Russian North; particularly of HCB, HCH and, in some cases, DDT and PCB, is one of the highest compared to the other Arctic regions. The highest exposures and associated health risks are documented for the coastal areas of Chukotka, where the traditional diet of the indigenous population is largely based on marine mammals and fish.

4.2. Pollution sources.

A significant proportion of total global PTS in the Arctic environment is determined by their long-term transport. Among toxic substances determined in blood of the Arctic indigenous inhabitants, there are substances that have never been produced and used in USSR/Russia. At the same time, data and information on local PTS pollution sources available to federal and local environmental and human health authorities do not adequately reflect the actual situation in the Russian Arctic regions. The surveys arranged within the project framework indicate on environmental impacts from unknown local sources. Indoor and occupational sources of PTS, including contamination of dwellings, are likely to be a significant contributor to blood contamination among indigenous peoples of the Russian North.

4.3. Contamination of the environment and traditional food.

In general, PTS levels in the natural environment and biota of the Russian Arctic are at moderate levels compared to other Arctic regions. However, in a number of cases, home-made local food contains higher levels of PTS contamination than raw products obtained from the natural environment. It is assumed that food receives additional contamination during storage and processing in contaminated household environment.

4.4. Social and economic status and PTS health effects.

Environmental aspects of human health, particularly those associated with PTS exposure of indigenous peoples, are closely linked to the economic and social status of indigenous families. In this respect, a significant reduction in the effects of PTS on human health cannot be successfully achieved without improvement in the economic and social conditions of the Russian Arctic indigenous peoples.

4.5. Health effects associated with PTS exposure.

PTS concentrations in human body depend are age dependant. An important factor for women is a number of breast-fed children. Associations have been found between blood concentrations of some PTS and a number of non-specific reproductive and developmental health effects. There are evidences that PCB levels in blood are associated with impacts on newborn sex ratios. In contrast with mean statistics, female babies of indigenous mothers with elevated POP blood concentrations have higher risk of adverce outcomes of pregnancies when compared to male babies.

4.6. Follow-up.

It is envisaged that, based on consideration of the project results at the coordination meeting in the State Duma of the Russian Federation, a coordinated plan of actions of the executive bodies, health and environmental protection authorities and Association of the indigenous peoples of the North, Siberia and Far East of the Russian Federation will be developed. As a part of this work, special workshops will be arranged in all regions of the project implementation, which should become a starting point for taking practical measures at local level on improvement of the situation.

The outcomes of the project will be presented 24 November to the Arctic Council Ministerial Meeting. It is expected that the countries of the Arctic region will commit themselves to provide necessary assistance to the Russian Federation in taking appropriate rehabilitation follow-up measures.