International Union of Air Pollution Prevention and Environmental Protection Associations

ARCTIC AIR POLLUTION DECLARATION

Approved at the 10th World Clean Air Congress, Espoo, Finland, 28 May - 2 June 1995

The International Union of Air Pollution Prevention and Environmental Protection Associations - a non-governmental, non-political organisation, consisting of professional or voluntary associations worldwide concerned with the maintenance of clean air, assembling at the 10th World Clean Air Congress at Espoo, on 28 May 1995, respectfully submits to the United Nations and all governments of the world for earnest consideration the following science-based declaration:

The International Union:

Noting the several global environmental threats relating to air pollution as identified at the United Nations Conference on Environment and Development in Rio 1992 in the context of economic development and hence, in particular, the requirement to improve the scientific basis for decision making by addressing the uncertainties; the promotion of sustainable development inter alia by controlling emissions to the atmosphere of greenhouse and other gases, and the prevention of both stratospheric ozone depletion and transboundary atmospheric pollution;

Also noting that neither the Rio Conference 1992 nor the Conference in Berlin 1995 achieved a clear and unambiguous commitment to the goal of stabilising emissions of carbon dioxide in the developed countries at their 1990 levels, let alone reducing them;

Noting that the sensitivity of the ecosystems in the harsh conditions of the Arctic to adverse atmospheric properties is much greater than in most other parts of the world, so that the impact of pollution is much greater there;

Furthermore noting that the Arctic sustains a considerable population and many valuable ecosystems with an importance for a region much larger than the Arctic;

Taking into account the following facts and expectations:

- Relative to the vulnerability of the Arctic ecosystems high concentrations of air pollutants and contaminants have been recorded. In particular during the winter large-scale advection of polluted air masses from Eurasian and North American

continents give rise in the most remote areas to increased concentrations of sulphur dioxide, sulphate aerosol, and a number of other pollutants.

- Several of these pollutants have direct effects on the vulnerable ecosystems. Some pollutants exert indirect effects by entering the Arctic food chain, thus threatening individual organisms and populations of organisms, and at the end of the food chain the indigenous population, relying on this food.

- Because of the small buffering capacity of the thin soil layers the Arctic regions of Fennoscandia and Northern Russia are especially vulnerable to acidification due to long-range transport of pollutants.

- Additionally emissions of sulphur dioxide and heavy metals from large point sources cause severe environmental impacts locally in some regions, accentuated by the contributions from long-range transport.

- Studies of tropospheric ozone and precursors, such as hydrocarbons and nitrogen oxides, demonstrate the importance of the Arctic region in the ozone formation on a hemispheric scale.

- Stratospheric ozone depletion has been observed to be enhanced in the Arctic spring, as has been observed in the Antarctic spring earlier.

- Both the increase of tropospheric ozone and the depletion of stratospheric ozone affect the radiation balance of the earth.

Along with the ever increasing concentrations of carbon dioxide and other greenhouse gases these developments are expected to give rise to a substantial climate change on a global scale towards the year 2050, assuming unchanged policy. Especially during the winter a dramatic increase of ground temperature of up to 6-8 degrees C is anticipated. Also an increase of precipitation in the Arctic is projected.

As a consequence of such climate change the ice pack is predicted to decrease, which in turn will affect terrestrial and aquatic productivity and change the permafrost regime thus causing the threat of a vast increase of methane emissions. In the event such changes would cause an extreme disruption of the Arctic ecosystem structure, and would have a detrimental impact globally.

In the light of the foregoing, the International Union:

strongly supports the Arctic Environmental Protection Strategy, adopted by Ministers of the Environment of the eight Arctic countries in Rovaniemi, Finland, on 14 June 1991 and again in Nuuk, Greenland on 16 September 1993, including: cooperation in scientific research to specify sources, pathways, sinks

and effects of pollution; assessment of potential environmental impacts of development activities; full implementation and consideration of further measures to control pollutants with adverse effects to the Arctic environment by pursuing these issues together in international environmental fora, the establishment of an Arctic Monitoring and Assessment Programme to monitor the levels of, and assess the effects of anthropogenic pollutants in all components of the Arctic environment;

notes that the Arctic Environmental Protection Strategy finds implicit support in Chapter 9 of Agenda 21 in the Programme Areas mentioned above, to which governments in the world are committed;

urges the governments in the world, especially those from whose territory emissions of pollutants have an impact on the Arctic region, in the light of the elapsing time on the one hand and the severe nature of the problems concerned, to speed up their programmes aimed at the promotion of sustainable development; and

furthermore requests from those governments that they shall not argue the lack of full scientific certainty as a reason for postponing the necessary actions to meet the pending threats but, to the contrary, give wide application to the Precautionary Principle as defined in article 15 of the Rio Declaration on Environment and Development in accordance with their presently agreed commitments;

and requests the leaders of the industrialised world to address the problem of Arctic pollution explicitly in the agenda for the forthcoming International Environment Conference in Tokyo 1997.