While history has shown that photochemical modelling of the stratosphere is an uncertain science, there is little question that continual rises in CFC concentrations in the atmosphere constitute a risk which cannot be ignored. The question lies in what type of control action should be taken - and how much is appropriate.

2. Control Aspects

A number of countries have taken or are taking actions to control the use of CFC's. Since alternatives do exist for CFC's as propellants in aerosol sprays, most domestic regulatory action has been taken in this area. Canada's regulations under the Environmental Contaminants Act have reduced aerosol use of CFC's by 87% and overall CFC use by 45%. The European Economic Community currently has a policy which has reduced the use of CFC's in aerosols by 36%. It has been estimated that 30-35% of the global use of CFC's is still for aerosol propellant purposes. Regulatory action should be capable of reducing this to 5% or so of the total CFC use.

Canada produces/uses approximately 2% of the world production of CFC's. Presently between 80 and 90% of the world's CFC's are produced by OECD countries, whose annual consumption is approximately 1.0 kg per capita per year. Canadian consumption is well below this level at 0.6-0.7 kg per capita per year. This is largely a result of the regulatory action which Canada has already taken.

3. Canadian Research/Monitoring Contributions

Monitoring and research with respect to the ozone layer is of necessity a global task which is coordinated by the World Meteorological Organization (WMO), the United Nations Environment Programme (UNEP) and the International Ozone Commission (IOC) of the International Council of Scientific Unions (ICSU). Canada operates ground-based ozone monitoring stations at Toronto, Edmonton, Churchill, Goose Bay and Resolute Bay. Weekly ozonesonde soundings are taken at the above locations (with the exception of Toronto). This is a substantial contribution to the Global Ozone Observing Network coordinated by the World Meteorologial Organization, totalling some 94 stations of which 21 regularly take ozonesonde soundings. Canada operates the World Ozone Data Centre for WMO, archiving and publishing ozone data from around the world.

These ground-based measurements, while now being augmented by satellite measurements, constitute a historical and basic data set which is essential for determining trends in the status of the

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