

- (1) We recommend that the following be adopted as the basis for regulations under the *Canadian Environmental Protection Act* (CEPA) and be promoted prior to amending the Montreal Protocol:
  - a) a minimum 85% reduction in the production and consumption of all CFCs by 1995, with a complete phaseout by 1997; and
  - b) a complete phaseout in the production and consumption of carbon tetrachloride and methyl chloroform by 1995, except for their use as a feedstock for CFC or halon substitutes and as organic laboratory solvents.
- (2) We recommend that regulations be invoked under CEPA requiring a 95% reduction in halon production and consumption by 1993, and a complete elimination by the year 2000, except for those "essential uses" where no reasonably performing substitute is available.

CFCs became widely used in a variety of industrial processes, given their non-toxic and non-flammable nature. Problems arise in substituting other chemicals for these applications. Substitutes already developed can be classified as HCFCs (hydrochloro-fluorocarbons), chemicals that contribute less to global warming and ozone depletion, and HFCs (hydrofluorocarbons), chemicals that contribute to global warming but not to ozone depletion. HCFCs are projected by industry to capture up to 30% of the CFC market by 2000, with HFCs capturing another 9% by that time. Neither group is totally harmless, but using them as temporary bridging chemicals could reduce the continuing damage to the atmosphere by 80 to 90%. We cannot afford to wait for the perfect substitute, but we must choose substitutes carefully. We must assess their benefits in reducing both ozone depletion and global warming, and ensure that the least harmful substitute is used in a particular application.

- (4) We recommend that:
  - a) neither HCFCs nor HFCs be used in any aerosols;
  - b) HCFCs and HFCs only be used in other products as replacements for CFCs where safe alternatives are not available;
  - c) only those HCFCs and HFCs with the least ozone depletion and global warming potential be used in products or processes requiring such substances;
  - d) in future, HCFCs and HFCs not be substituted for CFCs at any time in amounts greater than 30% and 9%, respectively, of present CFC use, and by 2010 the production and consumption of HCFCs and HFCs be discontinued.