

o Pesticides and Herbicides

Pesticides and herbicides are a chemically diverse group of compounds widely used in agriculture, forestry and other activities which require pest and weed control; thus ensuring their wide distribution. DDT, for example, continues to show up in environmental samples even though it has not been manufactured for many years. The use of pesticides and herbicides is now more carefully controlled but their total use is bound to increase in the future. Atmospheric transport to distant regions is almost certain to occur. There is, therefore, a need to monitor and follow the trends of their atmospheric concentrations.

o Phthalate Esters

Large quantities of phthalate esters are produced in North America primarily in the plastic's industry. Samples from the environment invariably contain phthalates; however, it is not clear whether these truly reflect environmental levels or are the result of poor sampling protocol or laboratory contamination. Because of their volatility, widespread use and potential health problems, some attention must be directed to understanding their distribution in the environment.

The organic compounds discussed above require special sampling and analysis techniques. Detailed information on our present capabilities for collecting and analyzing trace organics and the extent of our knowledge concerning their atmospheric behavior are presented in MOI Report No. 2F-I.

9.3 Heavy Metals

In recent years, heavy metals in the environment have been recognized as a significant potential hazard because of their ability to