

SUMMARY

As outlined in the Memorandum of Intent, the Atmospheric Modeling Work Group was charged with describing the transport of air pollutants from their sources to final deposition, especially deposition in sensitive ecological areas. The first phase of the work has been completed with the submission of this report. The overall purpose of the report is to describe the development of state-of-the-art, source-receptor relationships based on available model results and measured deposition values from monitoring networks. Though this exercise is in a preliminary stage, it is believed that the activities of the Group have produced the best available information to guide transboundary air pollution control strategies in both countries.

Several models have been developed in both Canada and the U.S. which could be used for long-range transport studies. The Group decided to use only models that met certain criteria. In general, the models had to be fully operational, numerically practical, flexible enough to include new data and other such factors. Features of the individual models are reviewed in this report.

The long-range transport models selected for intercomparison in this report have several important features. These models use emission and meteorological data, and meteorological,