

C HISTORICAL EMISSION TRENDS

C.1 INTRODUCTION

The primary objective in developing historical emission trends is to recreate the emission situation of several decades ago so that such data can be used in atmospheric models to provide an insight into sulphur deposition rates for those periods. These rates can then be compared to current deposition rates for an indication of the rate of degradation of the environment with time.

Factors other than strict fluctuations in the magnitude of acid precipitation precursor emissions, however, have also played a role in changes in deposition rates with time and these should not be overlooked. For example, concurrent with increases in SO_2 and NO_x emissions over the past 40 years has been a substantial increase (by a factor of five) in the stack height for utility sources. Also, SO_2 emissions from coal burning have changed in most regions from a wintertime peak to a summertime peak in emission rate. The importance of such factors has not been well determined at this time.