

B.2 PRESENT EMISSIONS

B.2.1 United States

Estimated emissions of SO₂ and NO_x for calendar year 1980 are presented here. These estimates rely upon source inventories such as the National Emissions Data System (NEDS), published references for quantities and characteristics of fuels consumed, additional published references for industrial production data, and air pollutant emission factors, such as those available from Compilation of Air Pollutant Emission Factors, EPA publication AP-42. All of these sources of information were used to produce an overall emissions inventory that represents the best practical available emissions estimates. The emission inventory methodology is described in additional detail in Appendix 2.

Estimated emissions by State for major source categories are presented in Tables B.2.1, B.2.2 and B.2.3. These emissions estimates can be further disaggregated into more detailed source categories than shown here. For the sake of brevity, more detailed data are not included in this report. The estimated emissions for 1980 were derived through a more refined methodology than that used to estimate historical trends in emissions. As a result the estimated historical emissions are not totally consistent with the 1980 emissions estimates. The 1980 emissions estimates were all calculated on an annual calendar year basis. Temporal refinement of the data to provide seasonal or monthly emissions estimates was not completed during Phase III.

Emissions estimates for electric utilities were derived largely from available data for individual facilities. These data were compiled from U.S. Department of Energy data files by E.H. Pechan and Associates, Inc. These results were cross-checked with individual facility data in NEDS. For SO₂, NEDS emissions estimates have been adjusted, if necessary, to be consistent with the estimates presented in this report. As a result, more detailed geographical summaries for individual facilities, counties, or Air Quality Control Regions are available from NEDS. For NO_x, similar information will be available following future cross-checking of NEDS and E.H. Pechan data to be completed later in 1982.

The non-utility combustion category includes fuel consumed by industrial, commercial and residential consumers in stationary sources. The industrial combustion estimates are based on fuel use data available only at the State level. Commercial and residential estimates were obtained largely from NEDS, where estimates down to the county level are available.

The transportation category includes emissions from highway motor vehicles and off-highway mobile sources such as aircraft, railroads, vessels and miscellaneous off-highway vehicles. All of these data were derived from NEDS, where estimates down to the county level are available.