Historical Emission Trends on Regional Scale: To examine emission trends on a regional basis in the United States, a data file has been constructed which also uses historical fuel use figures to calculate emissions of SO_2 and NO_x from various categories of sources. The basic file contains emissions at the individual state level for the following source categories:

Electric Utilities
Industrial
Commercial/Residential
Pipelines
Highway Vehicles
  Gasoline-Powered
  Diesel-Powered
Miscellaneous
Railroads
Vessels
Misc. Off-Highway Mobile
Chemicals
Primary Metals
Mineral Products
Petroleum Refineries
Others

The current file contains data for 33 eastern states plus the District of Columbia. Years on record for the file are 1950, 1960, 1965, 1970, 1975, and 1978. (Reference: Pacific Environmental Services, Inc.)

For the electric utility sector, all power plants greater than 25 megawatts have been identified and located in the appropriate county within each state for each year of record. Emissions of SO_2 and NO_x have been determined for each year for all such power plants. Consequently, it is possible to identify power plant emissions on a county-by-county level for each year of record for all 33 states. The file identifies each power plant by name, size, county location, and SO_2 and NO_x emissions from coal, oil, and natural gas consumption. The file also contains fuel use information and has some limited data on stack height.

To distribute the non-power plant emissions to a county level, work is underway using historical census data to assign the statewide emissions to the county level. The technique to be used is to apportion the emissions to the county base on a historical population basis.

As an example of the information from this file, a sample state and county are outlined in Table B.1.2: