

to natural gas fuel at several institutional boilers also located in Fargo which offset economic growth. The emissions achieved in 1975 in Clay County show a growth of 3.7 percent over the existing 1970 emissions. The overall emissions achieved in 1975 for Region No. 130 as a whole show a 31.1 percent reduction from the existing 1970 emissions.

#### Region No. 172

Estimated sulfur dioxide emissions from point sources and area sources in Region No. 172 for calendar year 1970 are presented in summary form in Table 7 for the whole region and for the cities of Bismarck-Mandan (including nearby sources). Sulfur dioxide emission data for each county in Region No. 172 is attached in Appendix E. Table 7 also presents allowable emissions for 1970 and emissions achieved in 1975 for Region No. 172 as a whole and for the cities of Bismarck-Mandan (including nearby sources).

The application of the North Dakota regulations restricting sulfur dioxide emissions from fuel burning installations and restricting open burning to the existing 1970 emissions result in a 3.8 percent reduction of sulfur dioxide emissions in Region No. 172 as a whole and a 14.4 percent reduction in the cities of Bismarck-Mandan.

The emissions achieved in 1975 show a zero percent reduction in Region No. 172 as a whole and a 6.5 percent reduction in the cities of Bismarck-Mandan from the existing 1970 reductions. The zero percent reduction includes the closing of two older lignite coal fuel steam electric power plants in Region No. 172.

#### Summary

The application of North Dakota regulations restricting sulfur dioxide emissions and open burning, the closing of several lignite coal fuel steam electric power plants, the converting from lignite coal to natural gas fuel at several institutional boilers, and the application of the Federal Standards of Performance for New Stationary Sources promulgated by the Environmental Protection Agency should provide sufficient emission reductions necessary for the maintenance of air quality for sulfur oxides below the national secondary ambient air quality standards in both Region No. 130 and Region No. 172 in the State of North Dakota.

### 3.4 CONTROL STRATEGY: CARBON MONOXIDE, HYDROCARBONS, PHOTOCHEMICAL OXIDANTS, AND NITROGEN DIOXIDE

The two air quality control regions in North Dakota, Region No. 130 and Region No. 172, have both been classified Priority III with respect to carbon monoxide, photochemical oxidants, and nitrogen dioxide. The basis for these classifications was that there were no urban areas in either air quality control region whose 1970 "urban place" population, as defined by the U.S. Bureau of Census, exceeded 200,000.

The existing air quality for carbon monoxide, hydrocarbons, photochemical oxidants, and nitrogen dioxide is estimated to be less than

the national secondary ambient air quality standards in both air quality control regions. The application of the Federal motor vehicle emission standards promulgated pursuant to Section 202 of the Clean Air Act of 1970 should provide sufficient emission reductions necessary for the maintenance of air quality for carbon monoxide, hydrocarbons, photochemical oxidants, and nitrogen dioxide below the national secondary ambient air quality standards. Emissions of these four pollutants will be further reduced by the application of the State regulations restricting open burning, (Regulation No. 23-25, R23-25-04), emissions of organic compounds (Regulation No. 23-25, R23-25-07), and emissions from motor vehicles and other internal combustion engines (Regulation No. 23-25, R23-25-08) and by the application of the Federal Standards of Performance for New Stationary Sources promulgated by the Environmental Protection Agency.

Emission data on carbon monoxide, hydrocarbons, and nitrogen oxides in summary form for both air quality control regions in the State is attached in Appendix E to the Implementation Plan.

### ~~3.5 FUTURE CONTROL STRATEGY NEEDS~~

~~The State Department of Health will periodically study and evaluate the effectiveness and adequacy of the control strategies developed in this plan for (1) particulate matter, (2) sulfur oxides, and (3) carbon monoxide, hydrocarbons, photochemical oxidants and nitrogen dioxide. The Department will obtain more detailed emission inventory data for all six pollutants and more detailed, representative, and actual air quality data for all six pollutants. Based on evaluations of this data, the control strategies will be revised as needed. Particular attention will be given to obtaining actual ambient air quality data on the pollutants emitted by motor vehicles and strengthening the control strategy for carbon monoxide, hydrocarbons, photochemical oxidants, and nitrogen dioxide as necessary.~~