

The Effect of Desulfurization Methods on Ambient Air Quality by Kurt E. Yeager,
Environmental Protection Agency, Washington, D.C. 20460

The environmental constraints on the use of coal and oil will be described with emphasis on sulfur oxide and particulate emissions and their relation to ambient air quality. These relationships will be developed for three major fossil fuel fired emitter categories; i.e. utility power plants, industrial combustion, and commercial/residential combustion.

Based on the relationships between emissions and ambient air quality, various strategies for the achievement of ambient air quality standards will be developed. These control strategies will consider the following alternatives for achieving the required levels of emission control, both individually and in combination: (1) effluent treatment, (2) fuel treatment, and (3) fuel switching. The analyses will consider the degree of air quality improvement, in terms of population achieving the ambient air quality standards, relative to the cost and time necessary to implement the control strategy.