

limits in that standard would be incorporated into the permit. The Mexican standards resemble Canadian source standards in that they set maximum permissible emission levels for various pollutants per unit measure of raw material or production. Canadian standards are also based on concentrations of discharge per volume of gas or waste water.

When a standard has not been promulgated for a category, SEDESOL considers U.S. standards as a guide for its decision. In practice, SEDESOL generally requires "best available technology" for new sources, while being more lenient for existing sources that might find meeting such stringent levels prohibitively expensive.

Once a source has a permit, it must report certain information, including air stack test emissions data, every February. SEDESOL reviews the submitted data and, if a violation appears to have occurred, may inspect the source and close it temporarily, close it permanently or impose a fine. If changes are made to the source, the permit must be modified.

The four major aspects of Mexico's mobile source controls are tailpipe emission standards; vehicle inspection and maintenance programs; fuel content specifications and characteristics; and restrictions on driving. A regulation issued in 1988 established tailpipe emission standards for new cars. The new car standard required decreasing emissions, beginning in 1989. All cars that are manufactured in Mexico in 1991 and afterwards have required catalytic converters.

Certain issues relating to the effectiveness of these provisions remain unclear. These include the rigour of Mexico's test procedures for determining compliance with the emissions standards; whether cars must meet the standards for a specified "useful life"; whether there are warranty and recall provisions; and whether there are any restrictions on the sale of "aftermarket parts" that could affect emissions performance, if original equipment is replaced. Nevertheless, 22 cities in Mexico have vehicle inspection stations. SEDESOL reports that in some areas along the border emission inspection standards are more stringent than those in counterpart U.S. cities.

A more recent development was the granting of authority to SEDESOL to regulate the content of fuels. Measures include the introduction in 1990 of unleaded gasoline, leaded gasoline with seven times less lead and the oxygenation of all gasolines. In November 1991 the price of leaded gasoline was increased by 55 per cent and the price of unleaded by only 25 per cent in an effort to discourage the use of private automobiles and to promote the use of unleaded gas in vehicles with catalytic converters.

Other actions that have been or will be implemented in the near future include a reforestation program of over 10 million trees; the introduction of vapour recovery systems at gasoline stations; and a mandatory auto emission program.

E. AIR POLLUTION IN MEXICO CITY

Mexico City has undergone massive expansion and industrialization in the last 50 years. During this period its population has increased by a factor of six to more than 18 million. These conditions have produced air pollution problems common to many large urban centres.