

## Control programs designed to reduce deposition

Title IV of the Clean Air Act Amendments of 1990 established the Acid Deposition Control Program. Title IV is intended to reduce the adverse effects of acidic deposition, primarily through reductions in SO<sub>2</sub> and NO<sub>x</sub> emissions. The CAAA mandates a reduction in annual SO<sub>2</sub> emissions of 10 million tons from 1980 levels. These emissions are to be achieved through a two-phase process. Phase 1 began in 1995 and involves 263 units for 110 electric utility facilities listed in the law. An additional 182 units voluntarily entered into Phase 1, bringing the total units involved under Phase 1 to 445. Phase II, which began in the year 2000, tightened the annual emissions limits imposed on these large, higher emitting plants and also set restrictions on smaller, cleaner plants fired by coal, oil, and gas, encompassing over 2,000 units in all. The program affects existing utility units serving generators with an output capacity of greater than 25 megawatts and all new utility units. EPA reports in their 2000 Status and Trends publication that sources in the acid deposition control program emitted 11.2 million tons in 2000, down from 16 million tons in 1990. Emissions of SO<sub>2</sub> dropped 1 million tons between 1999 and 2000. The CAAA also mandates a reduction in annual NO<sub>x</sub> emissions of 2.0 million tons from the 1980 levels by the year 2000. Most of this reduction will be achieved through the installation of low NO<sub>x</sub> combustion technologies for coal-fired boilers. EPA also reports that NO<sub>x</sub> emissions have decreased steadily from 6 tons in 1997 to just over 5 tons in 2000.

The US EPA has taken a number of recent actions to reduce mercury pollution, include issuing stringent regulations for industries that significantly contribute to mercury pollution. These actions, once fully implemented, will reduce nationwide mercury emissions caused by human activities by about 50 percent over 1990 levels. Also, the industrial demand for mercury dropped over 75% from 1988 to 1997. Steps taken to reduce mercury pollution include a federal ban on mercury additives in paint and pesticides; industry efforts to reduce mercury in batteries; increased state regulation of mercury emissions and mercury in products; and state-mandated recycling / disposal programs.