

for waste waters, which recycle 103 cubic meters per second. The heaviest industrial users of water are the sugar, paper and cellulose, chemical and petroleum industries. These industries have been approached by SEDUE to persuade them to treat and recycle their waste waters.

The process of treating residual waters consists of: 1) pretreatment to eliminate heavy solids; 2) primary treatment to separate oils, solids in suspension, colloids and to control pH; 3) secondary treatment to eliminate harmful biological materials through the use of microorganisms; 4) tertiary treatment to eliminate organic materials, non-biological materials in suspension and salts; and 5) special treatments, for the elimination of muds, for example. The highest demand for equipment and instruments is in the areas of primary and secondary treatment. Equipment with best sales potential are aerators, pumps, scrapers and accessories, filter presses, screw conveyers, chlorinating equipment, absorption towers, band conveyers, screens, water clarifiers, cooling towers, demineralizers, flocculators, ionic interchangers, samplers, leak detectors, analyzers, spectrometers, colorimeters, polarimeters, refractometers, measuring equipment and laboratory equipment.

### 4.3 LAND POLLUTION

The daily production of garbage throughout the country is of 52,000 tons, of which 75% is collected, while the remainder lies scattered on streets, roads, empty land, etc. Of the total urban residues collected, 65% are deposited in open air, while only 35% is taken to landfills.

Industrial waste has been identified as one of the worst culprits in the contamination crisis. SEDUE is beginning to monitor and regulate industrial hazardous waste and municipal waste disposal. Since March 1989, all industrial waste producers are required to fill the Hazardous Waste Declaration consisting of a 15 point questionnaire on what wastes the company generates and how it intends to dispose of them. The most polluting industries identified to date are petrochemical, pharmaceutical and chemical plants, foundries and smelters, cement and all industries using solvents, automobile, electronic, furniture, paint and other industries that treat metals. It is estimated that 900,000 tons of industrial hazardous waste is produced annually. Every day in Mexico City, 15,000 tons of domestic waste and 20,000 tons of industrial waste are produced, of which 5,000 tons are considered "highly dangerous". Of these, only one percent is properly treated or destroyed, the rest finding its way into the urban drainage system, clandestine dumps or industry backyards.

There are five ways of handling hazardous waste: using "clean technologies", recycling, treatment, incineration and landfills. In order to fight land pollution, SEDUE is encouraging the use of "clean technologies" to reduce the generation of pollutants through the use of new processes, technologies and raw materials and/or the optimization of existing plants. Waste recycling plants include six public plants processing 35 million liters of solvents a year in addition to 15 million liters processed by privately owned recycling plants, nine plants recycling 60 million liters a year of used oil, and other plants processing heavy metals and other hazardous wastes. Some companies, such as Química Omega, offer to buy industrial waste, which it then treats according to SEDUE guidelines. What the company can extract, it resells to other industries. The government publishes a list of companies selling off industrial waste products and a list of those eager to buy them.

Remaining hazardous wastes are either physically, chemically or biologically treated and stabilized, incinerated or buried in controlled confinements, of which there are