according to special effluent content or critical location of discharge. For example, many companies with highly toxic discharges operating in polluted areas have negotiated special arrangements with SEDESOL.

PFPA is the department of SEDESOL that is responsible for the enforcement of all ecological norms. While the department does not hold direct jurisdiction over water resources, it does have overriding power in environmental issues. PFPA can visit and demand an environmental impact assessment from any Mexican company. Such an assessment includes air emission, solid waste, water discharge, and health and safety issue analysis. If a company does not comply with federal standards, several options exist: permanent plant closure, temporary plant closure, and fines.

SARH

SARH is the federal department that is responsible for the administration of agricultural and water resources. The department maintains authority over the use and exploitation of water. Two departments within SARH impact industrial wastewater: The National Water Commission (CNA) and The Mexican Institute for Water Technology (IMTA).

CNA is responsible for the regulation of all national water resources (rivers, canals, lakes and oceans). As such, the organization monitors industries and municipalities that retrieve or discharge water to or from national water bodies. Consequently, the commission has enforcement responsibilities for any industry that discharges water to public bodies. In contrast, municipalities have the authority to enforce discharges to municipal water networks and drainage systems.

Companies that obtain water from sources designated as national water also fall under the jurisdiction of the CNA. Fees for water retrieval from these sources must be paid.

In order to regulate water resources, the CNA has developed two important laws: The *Ley de Aguas Nacional* (The National Law of Water), and The *Ley Federal de Derechos en Materia de Agua* (The Federal Law of Rights in Terms of Water). The National Law of Water has few specific implications in terms of wastewater. In contrast, the Federal Law of Rights in Terms of Water sets the prices companies must pay for effluent discharge to federal water bodies.

Under the law, each municipality in Mexico has been classified in one of four zones according to water availability, pollution levels, and water consumption. In some cases an entire state has been designated as one particular zone. For example, the states of Aguascalientes, Baja California, Nuevo Leon, Baja California Sur, Coahuila, Mexico D.F., and Guanajuato are classified as zone one. Water and water-discharge costs vary by zone, with zones 1 and 4 the most and the least expensive, respectively. Costs may fluctuate by as much as 440%.

A series of calculations are used to determine the cost of water discharges to national bodies. Total charges are based upon the toxicity of the discharge (as measured by the chemical oxygen demand and total suspended solids) and the total volume of discharged wastewater. Again, calculations are based upon the geographical zone of operation. Please consult the table on the following page for further details.

In general, the cost of water discharge in zone 1 is approximately 4 times as expensive as it is in zone 2. Companies operating in the metropolitan area of Mexico City, the cities of Puebla, Veracruz, or Guadalajara, or the states listed above, have a much greater economic incentive to purchase wastewater equipment.

For the purpose of this law, any company discharging from land directly into the ocean is considered to operate in zone 1. However, any facility discharging from a marine platform is considered to be in zone 4.

Companies located in zone 1 are required to pay a minimum of NP1.30 for each cubic metre of water they consume. In reality, the cost of water can range significantly higher, as it is generally calculated as 75% of the cost of potable water in the nearest municipality. In turn, companies located in zone 2, 3, or 4 pay a minimum of NP 0.90, NP 0.32, and NP 0.24 per cubic metre respectively.

Several incentives can be found within the context of the law designed to encourage pollution control. For example: water users returning water to the original place of extraction, without any alteration in pollution levels or water temperature, are freed from paying for the used water; the cost of wastewater control and treatment equipment can be offset against the costs of water discharges; and