for such activities as machine cooling. Water volumes and pollution levels are generally low; consequently enforcement has been lax. As a result, companies have less motivation to make an investment in wastewater treatment equipment.

Maximum Permissible Limits: Daily Average

	Norm 10:	Norm 11:	Norm 17:
PH Levels	All norms specify limits of 6 to 9		
Oils/Fats	Both norms specify 30 mg/l		NA
Total Suspended Solids	40 mg/l	30 mg/l	20 mg/l
Biological Demand for Oxygen (BOD)	30 mg/l	NA	NA
Chemical Demand for Oxygen	100 mg/l	NA	NA
Total Phosphorous	5 mg/l	10 mg/l	NA
Amoniacal Nitrogen	NA	20 mg/l	NA
Lead	NA	0.6 mg/l	0.6 mg/l
Hexavelant Chromium	NA	NA	0.1 mg/l
Total Chromium	NA	NA	1.0 mg/l
Copper	NA	NA	0.5 mg/l
Nickel	NA	NA	2.0 mg/l
Zinc	NA	NA	1.0 mg/l
Iron	NA	NA	1.0 mg/l
Cadmium	NA	NA	0.1 mg/l
Cyanide	NA	NA	0.3 mg/l
Aluminium	NA	NA	2.0 mg/l
Barium	NA	NA	2.0 mg/l
Manganese	NA	NA	2.0 mg/l
Silver	NA	NA	0.2 mg/l

Sources:

1. The Mexican Investment Board, "*The Autoparts Industry*," (Mexico D.F.: Grupo Financiero Banamex, 1992)

2. Promociones Industriales Banamex, "*Mexico: The Autoparts Industry*," (Mexico D.F.: Promociones Industriales Banamex, 1991)

3. The Canadian Embassy, "*Market Study on the Mining Autoparts in Mexico*," (Mexico D.F.: Canadian Embassy, 1992)

4. INA, "*La Industria Automotriz en el Entorno Nacional*," (Mexico D.F.: INA, 1993)

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Environmental Engineering Projects

UniCorp is a holding organization for 25 companies active in the autoparts industry, owned by the Mexican conglomerate DESC. Sample products include: transmissions, pistons, gear boxes, and spark plugs. Each company has direct responsibility for their own environmental purchases; however, each project is approved by the environmental department at the corporate level (see above).

Plants are located throughout the country: Mexico D.F., Celaya, Queretaro, Chihuahua, and Aguascalientes. In general, current environmental equipment is considered rudimentary. Many plants simply flocculate water until sedimentation occurs. If treatment exists, most plants are only treating sanitary and service water discharges. Few of the companies are treating water discharges from the production process. In general, plants that are located outside of Mexico City are considerably more advanced in their wastewater treatment abilities than those located within the metropolitan area.

Given the similarity of products throughout the 28 companies, discharge problems can generally be characterized as high concentrations of the following sub-stances: phosphates, soluble oils, greases, and detergents. An important factor in equipment purchases is corporate policy: group members must search for total water solutions, over the long term incorporating wastewater treatment, recycling, and water reduction equipment into overall system.

Given their urban location, most of the plants are attempting to comply with SEDESOL norm 31, which regulates discharges to municipal drainage systems.

Each company has had an environmental budget approved for 1994; the budget provides approximate spending guidelines only.

Corporate personnel indicate that the strongest wastewater market (within the company) are those group members located in Mexico City. Purchases will likely focus on wastewater equipment for process waters. Provincial opportunities focus on system optimization.