



## Alegria Wastewater Treatment Plant

*Rio de Janeiro, Brazil*



Processing wastewater for Rio de Janeiro, a city of more than 11 million people, is a persistent economic and engineering challenge. But Rio thinks big, and in seven mammoth plants around Guanamara Bay, the Brazilian city is tackling the challenge of wastewater volume and ecological responsibility.

Xypex has been a partner with engineers responsible for development of Rio's Alegria water treatment plant, the biggest of the seven plants that serve the city—an operation of 35,000 square metres that processes five cubic feet of waste per second before the treated water runs into Guanamara Bay. The Alegria WWTP serves about 1.5 million people and treats up to 57 million gallons per day of municipal wastewater.

The importance of Xypex products in this operation is the part they play in protecting the neighboring environment from harmful wastewater chemicals that might otherwise leach through unprotected concrete into the surrounding landscape. Added to the concrete that surrounds the plant, foundations and pumping stations, Xypex not only helps to make impermeable barriers to contain wastewater, but to protect the structure itself from aggressive and degrading chemicals. Xypex **Concentrate** and **Modified** were spray-applied to all foundations walls and slabs of this wastewater treatment plant to waterproof and protect it.

In the field, in more than eighty countries, Xypex works with engineers to provide the best of research in projects like Alegria, accepting the ongoing challenges that come with international concern for handling waste, for storing and providing clean water for a demanding world.