

## PROJECT ABSTRACT

Project number:	CH-0171
Project name:	Antofagasta Desalination Plant
Country:	Chile
Sponsors:	OHL Group
Total project cost:	US\$46.8 million
Proposed A loan:	Up to US\$7 million
Proposed B loan:	Up to US\$13.9 million
Financing plan:	IDB (A+B): US\$20.9 million (approximately) Equity: US\$26.1 million (approximately) Total: US\$46.8 million
Department:	Private Sector Department
Status:	Approved
Date:	December 10, 2003

### Project Description

- Chile's Region II, including Antofagasta, the principal city, has extremely limited sources of water. Most of its land area is within the Atacama Desert, which has no measurable rainfall. Antofagasta's population is expected to grow about 40% from 2000 to 2020. Water for Antofagasta and other towns in the region must be brought in from the Andes Mountains via a 400 km. pipeline across the desert. The catchment area feeding this system has reached its limit, and cannot supply additional water. Additional water supply is needed to support natural population growth as well as the needs of the expanding mining industry, which comprises the region's primary economic base.
- In order to increase the water supply, Empresa de Servicios Sanitarios de Antofagasta, S.A. (ESSAN), the water service utility in Region II, elected to install a seawater desalination plant with private sector participation, and on October 17, 2000, pursuant to an international bidding process, awarded a 20-year BOT (Build-Operate-Transfer) concession to Desalant S.A., a project company established for the purpose and wholly-owned by the OHL Group from Spain (through its wholly-owned environmental/water subsidiary Inima, Servicios Europeos de Medioambiente S.A.).
- Obrascon Huarte Lain Group (OHL) is the sixth largest construction company in Spain. Its subsidiary Inima has 30 years experience in water process engineering, including plants for potable water and desalination, wastewater treatment, water demineralization, industrial effluent water treatment, and solid waste treatment among others. The company has contributed to 1/3 of the desalination installed capacity in Spain.

- The project consists of the design, construction, and operation of a desalination plant, including intake piping and an 11 km delivery line, in Antofagasta, Chile. The plant will be built in up to four modular stages in accordance with the growth in demand for water in the region. The first stage includes the processing machinery needed for the initial capacity of 13,000 m<sup>3</sup>/day. Each subsequent stage also will have a production capacity of 13,000 m<sup>3</sup>/day; at completion, total capacity will be 52,000 m<sup>3</sup>/day.
- The company has requested IDB's financial support to cover the first stage and first expansion of the project. Total cost for the first stage and first expansion will be approximately US\$46.8 million. The contemplated financing will be made through an IDB A/B loan of up to US\$20.9 million; the rest will be financed through direct sponsor equity contributions and internally generated cash flows.

### **Project Benefits**

- The developmental role of the project is significant in that the project will provide the city of Antofagasta and the region served by ESSAN with an additional and much-needed source of potable water to meet the needs of its growing population until 2020. This will also allow it to better utilize existing sources, in particular to satisfy the increasing needs of the mining sector, which constitutes the most important base industry of the region. The availability of the incremental water supplies made possible by the project will therefore enable the population and the economy of the region to continue to grow at their natural rate. The project will also serve as a demonstration of the application of reverse osmosis desalination technology on a large scale in this arid region.

### **IDB Participation**

- Support to the project is fully consistent with the Bank strategy for the country. The Bank, through the Multilateral Investment Fund, has provided technical cooperation funds to assist the Ministry of Public Works ("MOP") in developing the overall concession program, to aid in managing the program, and to assess and develop specific projects. In general, the Bank's strategy is to support the country's infrastructure privatization program.
- The participation of the IDB in this project provides strong additionality benefits due to the difficulty of funding water projects in Latin America. This project would be the first desalination plant in Latin America financed by a multilateral institution.