

## Public-Private Partnership for Urban Water Supply in Macao

### **Macao**

Macao, including the Macao peninsula and islands of Taipa and Coloane, is a city located at the Delta of Pearl River adjacent to Zhuhai city and is about 60 Kilometer away from Hong Kong. Macao is a Special Administration Region of China since the 20<sup>th</sup> of December 1999, The population of Macao is 437,000.

Macao is a historical city where oriental and occidental culture crossed and merged for over 400 years. Macao now is a tourist city, old culture residuals and buildings, special food and exciting entertainment activities attracting more than 10 millions tourists visit Macao every year.

### **Civic and Municipal Affairs Bureau**

Civic and Municipal Affairs Bureau (IACM in short hereafter) is the government department in charge of most municipal and civic affairs including environmental protection, green zone preservation, municipal waste manipulation, local cultural activities organization, food hygiene inspection, animal and plant quarantine and also urban water supply monitoring.

### **The exclusive contract**

Urban water supply was privatized since thirties of last century. From mid-eighty of last century, it is run by *Macao Water* (the company in short hereafter).

The activities of the company are defined by a 15 years exclusive contract which is the second contract with the government and was started from 1999.

### **The role of government**

The monitoring of the compliance of the contract is divided into two areas. In Public Administration area, a government representative is commissioned to the company by the **Secretary for Transport and Public Works** to monitor the compliance of the exclusive contract and affairs related to public administration. In Municipal management area, according to the administrative statutes of Macao Special Administration Region, say, "Regulamento Administrativo n.º 32/2001 de 18/12/2001", **Civic and Municipal Affairs Bureau** is committee to monitor the water quality of the urban water supply and related technical matters. The company reports to President of IACM monthly on the situation of local water catchment, condition of local reservoirs, quantity of raw water acquired from adjacent area, the quantity of water produced and consumed, number of new meter installed etc. **The Laboratory of IACM** is the technical department in monitoring the quality of water. The company has to send reports to the Laboratory IACM monthly, it includes water analytical reports and other technical affairs. Laboratory IACM, together with the laboratory of the company, collect about 2000 water samples per year from urban water system and analyze individually on over 50 different parameters to ensure the quality of the water meeting with the requirements laid in the administrative statutes "Regulamento Administrativo n.º 46/96M de 19/08/1996".

### **The result of compliance of the exclusive contract**

The public-private partnership between Macao government and the company has lasted for 17 years (15 years in the first contract from 1985 and 2 years in the second contract). The result of the compliance of the exclusive contract can be observed by the follow facts:

- The maximum demand growths from 77,000 cubic meter/day (1985) to 178,000 cubic meter/day (2001).
- The treatment capacity growths from 85,000 cubic meter/day (1985) to 225,000 cubic meter/day (2001).
- Storage capacity growths from 17,000 cubic meter (1985) to 63,000 cubic meter (2001).
- 85% existed pipelines (1982) have been replaced.
- Total pipelines length growths from 127KM (1985) to 356 KM (2001).
- The quality of water is continuously improving and is now met with the criteria set by the Macao government.

- The company invested totally over MOP666 millions (1 USD = 8 MOP).
- The project is in BOT bias.
- The charge of 1 cubic meter is MOP4.39 (2001).
- The net profit after tax of the company grows from MOP10 millions (1985) to 49 millions (2000) and 44 millions (2001).

Conclusion:

The Public-Private Partnership Macao Government and Macao Water is proved very successful. From mid-eighties of last century, the water quality, the service provided is continuously improving. According to the exclusive contract, the company invested large amount of resource to modernize the equipment and facilities in water treatment, to modernize the laboratory facilities for better water quality control, to replace the city piping network and install a up to date computer remote control system to control the overall city water supply system. All these leading to a very positive return from the public. We can conclude that Public-Private Partnership is a good way to solve the Municipal problems.