

I Situation of water supply and sewerage in Beijing

1 . General situation of water supply business

● Beijing, the driest city in the world:

Lack of water (300m³ per capita); 1/8 of average of China per capita; 1/30 of world average per capita.

● Source of water supply in Beijing:

Running water use surface water (60%) & ground water; surface water (domestic use) from Miyun Dam.

● Water supply management in Beijing:

11 plants inside city; 6 in the suburbs. Facilities in the suburbs also owned by municipality.

● Water supply capacity in Beijing:

3,398,400m³/day for use by 13.849 million people (domestic & industrial water); capacity inside city plants 3,000,000m³

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2. General situation of sewerage

- Discharge of waste water: 2,500,000ton/day
- Waste water treatment facilities in Beijing:
 - Sewerage pipe network: Total 4100km; diffusion rate 60%.
 - Sewerage plants: 4 plants; capacity 1,280,000ton/day; year of 2001 sewerage rate 42%.
 - Secondary water supply system: Secondary water supply capacity 470,000 ton at Kaopaidian Plant.

II Criterion of development of water supply & sewerage in Beijing

1. Beijing Olympic Campaign requires the improvement of water supply and sewerage

● Water supply management:

Recovery of running water capacity of Guanding Dam to meet world standard quality for drinking water.

● Sewerage management:

Central city sewerage (2,800,000ton/day); rate 90%; recycle waste water rate 50% by 2008.

Satellite city sewerage rate is 90%; 80% of central city have concentrate wastewater treatment plant; improve sludge disposal system by 2007.

II Criterion of development of water supply & sewerage in Beijing

2. Water supply development plan

- Plan to supply water from south to north
- Plan to recover Guanding Dam water source
- Increase of water supply capacity:

Build the 10th Dam; expand Tiancunshan Dam; complete Xinanqu Saving Dam; newly build up 680,000m³ water supply capacity inside city.

- Promote frugal use of water

II Criterion of development of water supply & sewerage in Beijing

3. Standard of sewerage management in Beijing

- Implement total control of pollutants

- Promotion sewerage system in the city:

Construct Qinghe, Wujiacun, Xiaohongmen, and Lugouqiao sewerage works; construct sludge digestion facilities at each place; newly build up sewerage capacity 1,710,000 ton/day; total investment 4,600,000,000 yuan.

- Construction sewage pipe network:

Newly build up pipe line 3531.2 km; investment 5,650,000,000 yuan.

- Wastewater recycle facilities:

Newly build secondary wastewater treatment plant 9; secondary water supply capacity 576,000ton/day, sewage recycle rate 50% by 2008.

北京市区污水排除与处理系统规划示意图



III. PPP case study of water supply and sewerage in Beijing

1. Beijing the 10th Dam Project



Basic situation:

Construction water treatment plant 500,000m³/day; water collection plant, water supply pipe 76km.



Contract methods:

- a. BOT
- b. Construction 3 years, management 20 years, after the term facilities be transferred to Beijing free of charge
- c. International bid, selected foreign company
- d. Government implement administration law, give the successful bidder management right
- e. Government not give security, the successful bidder sign the agreement with concerned government section and other concerned companies.

III. PPP case study of water supply and sewerage in Beijing

2. Sewerage plant project in Beijing Jinjikaifa (economic development) area

- Basic situation:

Construct one sewage treatment plant capacity of 100,000 ton/day

- Contract method:

Build up joint venture, invest for construction and management, term 20 years, after the term the facilities transferred to Jinjikaifa area.

Total investment 200,000,000 yuan, Jinzhou Company (U.S.) provide money and technical aid, Jinjikaifa area provide land.

IV. Future of PPP

Future of PPP on environmental infrastructure construction project in Beijing

- Join WTO; promote usage of PPP in UEI
- More promotion on equity treatment for foreign companies and policies for foreign investment
- Higher target for environmental situation required, because of Olympic games and improvement of living standards
- Economic development of middle/small cities provide wider market for PPP
- Breakthrough the lack of construction money in the government
- Establishment and improvement of concession management system

*Thank you for listening.
Any questions appreciated.*

If you need more details on environmental infrastructure projects in Beijing City, please access the following mail address:

www.bjmac.gov.cn

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