

## Promotion of widespread collaboration by Osaka City Waterworks Bureau

### Promotion of wide area coordination in the Osaka City Waterworks Bureau

#### (1) Technical coordination with neighboring municipalities

The bureau has been promoting discussions on concrete technical coordination with neighboring waterworks entities since fiscal 2005, and, providing technical support matched to the needs of partner municipalities based on inter-municipal agreements since fiscal 2006.

- 1) Accepting outsourcing of analysis tasks etc.  
Pipe network analysis
- 2) Support for creation of long-term planning, concepts etc.  
Support for creation of facility construction planning, waterworks visions etc.
- 3) Support for creation of manuals etc.  
Support for creation of facility design and construction management manuals, specifications, facility maintenance and management manuals etc.
- 4) Technical support for construction design and construction monitoring  
Technical support for waterworks facility design and construction monitoring (water purification plants, water distribution stations, piping facilities, equipment, etc.)
- 5) Facility operation and maintenance management  
Comprehensive acceptance of outsourcing relating to the operation management of water purification plants and maintenance management of waterworks facilities making use of the third party outsourcing acceptance system
- 6) Mutual coordination during disasters  
Construction of mutual support systems for emergency recovery and emergency water supply during disasters, mutual support systems for necessary goods during disasters, implementation of joint disaster training, etc.
- 7) Mutual coordination of human resources training  
Personnel from neighboring waterworks entities take part in technical training implemented at the Osaka City Waterworks Bureau
- 8) Human resources exchanges (acceptance of trainees etc.)  
Acceptance of personnel from neighboring waterworks entities for long-term dispatch
- 9) Organization of communications network for use in emergencies  
Organization of emergency communications network to contribute to mutual support for water supply in the event of disasters
- 10) Liaison with Osaka City and Neighboring Municipal Assemblies  
Promotion of liaison methods at Osaka City and Neighboring Municipal Assemblies (waterworks departments) to be held in Osaka City and neighboring municipalities (10 municipalities excluding Amagasaki City)

#### (2) Inspection and research system in wider area

Since 2008, the mutual coordination of technical tasks has been promoted with the Hanshin Waterworks Project Group to contribute to mutual business management that features effective and efficient sustainability and development, while joint research has been undertaken using optimum cutting-edge processing technology testing facilities (new testing facilities) to contribute to the development of waterworks technology in Japan.

## Succession to Waterworks Technology

Osaka City is supported by waterworks technology accumulated over its Waterworks Bureau's history of 120 years since its foundation, and has a past record of introducing to the industry and putting into practice the fruits of countless research and study activities that have been continued up to this day.

To ensure sustained and effective waterworks services, including a stable supply of safe, high-quality water, to meet the demands of the times at a high standard level, the maintenance and development of waterworks technologies is important. Therefore, the Osaka City Waterworks Bureau needs to undertake steady succession to waterworks technologies by establishing a practical research and study structure for the development of waterworks technologies and an efficient technical training structure and promoting technical exchanges both inside and outside Japan.

At the present time, the Waterworks Bureau is studying technologies to continue leading Japan's waterworks industry under a comprehensive and advanced testing environment, including the Technical Research Committee of the Waterworks Bureau and a water purification R&D program, by using its Optimum Cutting-edge Processing Technology Testing Facilities that were completed in 2009 while in wider cooperation with industry-government-academy. The Waterworks Bureau organizes Experiential-type Training Facilities for relevant fields including large bore pipe construction and water purification technologies to hand over cultivated precious technologies from generation to generation effectively. With these initiatives, the Bureau has been exchanging technologies with waterworks entities within, also domestic and abroad for the succession of waterworks technologies.



Optimum cutting-edge processing technology testing facilities

	Purpose / Remarks
<b>Enrichment of the research and study structure</b>	
Osaka City Water Bureau Technical Research Committee	Improvement of waterworks technology and study and consideration of items relating to development (Launched in 1970. Themes to date: Advanced water purification, acquisition of ISO9001 accreditation etc.)
Osaka City Waterworks Water Purification Technology R&D Program	Contributions to the ensuring of highly-reliable purified water quality with the aim of adjusting advanced water purification processing and further enhancing water purification technology geared to optimization (Formulated in June 2001)
Osaka City Water Bureau Technical Development Joint Research Review Board	Joint implementation of research, study, and tests relating to waterworks technology with personnel from outside the Bureau (Launched in July 2001) Establishment of efficient Practical Training Structure
<b>Establishment of efficient Practical Training Structure</b>	
Specialist Engineer Training at the Bureau (New, Basic, Application)	Training technical staff and improving technical standards by implementing specialization-specific technical training matched to actual work
<b>Promotion of Technical Exchanges</b>	
Technical consultations	Presentation of various expert opinions and technical achievements accumulated so far to contribute to improvement of the technical skills of personnel Launched in 1950 (Held 199 times as of July 2015)
Waterworks business research	Implementation of waterworks business management and technical research with the aim of promoting and improving practical work guidance and abilities of bureau personnel (Issued in 1949)
Participation in international conferences and workshops including IWA international meetings	Technical exchanges between personnel and skill improvement

## Experiential-type Training Facilities

Trainees can learn the total operational know-how of waterworks, ranging from water intake stages to water supply stages at the Experiential-type Training Facilities as comprehensive education and training facilities. The Facilities originally started with a seminar building, water supply facility building, and water distribution facility building, and included a water purification facility building, and mechanical and electrical building in 2012, where practical training is given. The Experiential-type Training Facilities as facilities where trainees can receive practical training in each field of waterworks technology, and they have been used as a place of human resource training not only for Osaka City's officials but also for people responsible for waterworks bureau in other Japanese cities and overseas.

### Experiential-type Training Facilities



Seminar building



Water supply facility building



Water distribution facility building



Mechanical and electrical building



Water purification facility building



### Guidance for Technical Training and Facility Leasing toward Waterworks Entities

#### Osaka City Waterworks Bureau's Website

Inquiries about technical trainees: <http://www.city.osaka.lg.jp/suido/page/0000125043.html>

Leasing of Experiential-type Training Facilities: <http://www.city.osaka.lg.jp/suido/page/0000266607.html>