

Main Category	Water Treatment and Water Quality Management
Sub Category	Water Treatment
<p>Water treatment is the process of treating raw water, such as river water, and making it suitable for human consumption including for drinking purposes. There are different kinds of treatment methods and the order in which they are conducted vary. The operation of treatment facilities is also very important in water treatment, and it is necessary to understand and predict water quality at any given time and perform appropriate treatment.</p> <p>Japan's first pressurized water supply system began in Yokohama City in the Meiji era (1887), and at that time, ordinary sedimentation and slow filtration were the most common methods for water treatment. With the development of research and technology, flocculants and inclined plates began to be used for sedimentation, and rapid filtration and membrane filtration for filtration. In addition, many of the water treatment plants today have introduced an advanced water treatment process, which combines ozone and activated carbon (adsorption) treatment to decompose and remove substances that can cause musty odors in water supply. As a result of the development of these technologies, water supply in Japan not only enjoys a 98% service coverage ratio (according to the Ministry of Health, Labor and Welfare's basic statistics on water supply in 2009), but also supplies tap water of excellent quality. According to the Ministry of Land, Infrastructure, Transport and Tourism's "Current Status of Japan's Water Resources for FY2008," there are only nine countries in the world, including Japan, where tap water can be drunk directly from the faucet as it is (this number increases to 21 countries if included the countries where tap water can be drunk directly but caution is required in doing so), which shows the high quality of tap water in Japan.</p> <p>In this section, we will explain Japan's water treatment process, which is indispensable for producing water of excellent quality, by describing some of the country's representative water treatment plants as examples.</p>	