



Abstract

Improving the Safety of Tap Water in Gyeonggi-do

Recently, some cases that chironomus larvae were found in the tap water of households occurred in Incheon Metropolitan City, and the cause of this incident was found to be due to insufficient operations management of the water treatment facility. With the incident, the public's distrust of tap water continues to get stronger. The purpose of this study is to analyze problems of operations management of water treatment and supply facilities and suggest improvement plans in order to supply safe tap water to citizens in Gyeonggi-do. This study consists of three parts.

This study first suggests the new directions of the location policy of wastewater discharge facilities for the conservation of Paldang Reservoir which is the source of drinking water for the metropolitan area. Currently, individual sewage treatment facilities, small livestock houses and factories are scattered around Paldang Reservoir, threatening the water quality there. Then, it analyzes problems in the operations management of the water treatment and supply facilities in Gyeonggi-do and suggests plans to improve them. Because wastewater discharged from sewage treatment facilities, livestock houses and factories contain trace hazardous compounds, it is necessary to introduce an advanced water treatment process that can treat them. In addition, the water pipes over 20 years old, which account for about 20% of total water pipes in Gyeonggi-do, need to be replaced.

Keyword

Gyeonggi-Do, tap water, water conservation, water treatment and supply facilities