
Stock management for sewer pipes

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1. Stock management for sewer pipes

Sewer systems in Japan were first constructed in Yokohama and Tokyo around 1880. The sewer system accounts for about 75% of the total sewerage construction cost including collection and treatment systems. The length of existing sewers in Japan is now more than 430,000 km thanks to sewerage development. The life of civil engineering structures is generally 50 years, and in the near future, sewer pipes constructed during the period of economic growth around 1965 will reach the end of their service lifetime at the same time. Reconstruction and rehabilitation projects have just begun, so a way must be found to maintain deteriorated sewer pipes in sound condition under harsh economic conditions. Stock management (SM) has attracted attention in this regard.

2. Results of research by the NILIM

To introduce SM, it is necessary to clarify the present soundness of sewer pipes in order to appropriately

predict their future deterioration, and based on the results of the prediction; propose a rational project plan based on a prediction of medium to long term project volume. The NILIM has proposed a sewer pipes soundness prediction formula and established a project standardization method in order to promote the introduction of the SM.

3. Handbook on the Sewer Pipes Stock Management Method (draft)

The Study Committee for the Sewer pipes Stock Management Method, which was established by the Sewerage and Wastewater Management Department of the Ministry of Land, Infrastructure, Transport and Tourism, announced the Handbook on the Sewers Stock Management Method (draft) on September 30, 2011, as an instruction manual for SM method introduction. This handbook, which reflects the results of research by the NILIM, is counted on to promote the introduction of SM in cities with little knowledge or data necessary for SM.