

Research Concerning Asset Management of Sewerage

Whole term

2006.5~2007.3

(Purpose)

With the progress of establishment of sewerage, there will occur a problem in that sewerage facilities may be caved road surface on their deterioration, and sewerage facilities which have to be reconstructed or renewed will increase. Furthermore, financial standing of the Government and local governments is so tough, and such a problem of acquiring human resources having various useful know-how as represented by the year 2007 problem is being revealed. Thus, the environment surrounding a sewage works is expected to get even tougher in the future. Having a hard look at 10 years to 20 years to come when obsolete facilities will rapidly increase, we have to understand that sewage treatment facilities are assets and think it important how efficiently we should carry out the works in a manner comprehensible to users.

In the “Study Preparatory Committee Concerning Efficient Asset Management with a Hard Look at the Future of Sewerage” (Ministry of Land, Infrastructure and Transport) which was held last year, it was a main point of discussions “how the permanent management of new investment and an existing stock should be balanced to carry out the works smoothly” and “how properly financial standing should be reflected to corporate accounting to secure necessary financial resources.”

Sewage Department, City and Regional Development Bureau, Ministry of Land, Infrastructure and Transport established a “Stock Management Study Committee in Sewage Works” in November 2006, and this committee is studying how the management of sewerage facilities should be.

Under such circumstances we requested various experts in the fields of risk management, assets valuation, publicity, etc. to make a keynote speech at lectures (Table 1), and an exchange of opinions as to how sewerage management should be was held in the “Assets Management Study Meeting” consisting of Sewage Department, City and Regional Development Bureau, Ministry of Land, Infrastructure and Transport, National Institute for Land and Infrastructure Management, Tokyo Metropolitan Government, Yokohama City, Nagoya City, Osaka City, Japan Sewage Works Agency, Japan Institute of Wastewater Engineering Technology, and we tried to collect findings necessary to construct a sustainable sewage works in this research.

Table 1 Lectures in Asset Management Study Meeting

To be held	Lecture
1st	Asset Management from Accounting’s Point of View: Kwarada, Professor, University of Hyogo
2nd	Performance Indicator (PI): Nagai, Manager, Planning and Coordination Division, Bureau of Sewerage, Tokyo Metropolitan Government
3rd	Estimation of Degree of Damage Using a Mathematical Technique and Application Thereof to Maintenance Management: Furukawa, Professor, Yamaguchi University

(Result)

Representative findings obtained at the lectures and exchanges of opinions are as follows.

- (1) Discussion point in asset management from an accounting’s point of view: Accounting standard should be made so as to meet the realities of the actual spot (technology) instead of “accounting standard, first.”
- (2) Discussion point concerning a performance indicator: Performance indicator (PI) should indicate not only an indicator of performance but also context information (CI) at the same time.

- (3) Discussion point of presuming the degree of damage using a mathematical technique and applying it to maintenance and management: If there is accumulated data conveniently available, judgment of the degree of danger, etc. is possible by a mathematical technique, so that it is necessary to accumulate data from now on.

Meanwhile, the findings obtained in the lectures and exchange of opinions were reflected in the “Committee for Study of Stock Management in Sewage Works” and helped to systematize asset management.

(Problems to be solved)

How should we acquire data from the findings obtained? How should we evaluate a risk based on a little data? How should we bring the necessity of a sewage works to the attention of residents? These were made clear as the problems to be solved in the future.

(Schedule)

We will evaluate potential risks, and study how a service level should be and the like, and we will make use of achievements obtained there from for the “Guidelines for Stock Management in Sewage Works” (which is expected to be drawn up by the Ministry of Land, Infrastructure and Transport).

Peculiar research

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Key words

Asset management, stock management, risk management, performance indicator