Study on the effective asset management in prospect of sustainable sewage works

Whole term: 2005.7~2006.3

(Purpose)
With the enormous investment in sewerage facilities which have been continued so far, the issues of the increase in the facilities requiring rehabilitation and reconstruction are getting focused on. Meanwhile financing conditions are extremely sever and so-called the problem of the year 2007, which means the big amount of retirement of skillful professionals of the baby boomers, is supposed to shadow the sewage works also. Thus, the circumstances around sewage works seem very unfavorable in future. It is recognized crucial to supply sewerage services by utilizing the sewerage facilities with great efficiency and transparency, applying asset management methods to sewerage. This study aims for the analysis of characteristics of sewage works from the viewpoint of asset management, operation/maintenance work analysis for example, in order to establish the basic guide for systematic management of sewerage asset.

(Result)
Figure 1 shows the flows of duties in operation/maintenance of sewerage and the issues to discuss in each process. In the transition to the processes of investigation/diagnosis, designing, construction or recording, the judgment should be made based on the examination of the necessity or propriety. The point in this judgment is that “who” explains it “how intelligibly” on the basis of “what kind of standard”. “What kind of standard” means the service level to be maintained in sewage works in other words and explaining “how intelligibly” is needed to fulfill the duty of “accountability”. Notice should be taken of the fact that the final inappropriate judgment of taking no countermeasures could bring the increase in potential risk. Since the sewerage functions as a complex system, the determination of the service level and the appraisal of the potential risk are difficult and performing the duty of accountability is not easy, either. Establishing this flow network substantially is important for sewage works to supply intelligible services to all users and to let users understand the significance of sewage works. Considering that the sewage works should transit to a new phase of applying the concept of asset management from the present phase of prioritizing facility construction, this study aims for the sewage works where the public involvement activities would be conducted to let inhabitants and other stakeholders understand characteristics and contents of sewerage services and to manage the facilities with sustainability obtaining necessary funding.
Future Plans

Researches will be conducted on the “assessment of potential risk” and the “determination of service level” in order to accomplish the sustainable management of sewerage.

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key words | assessment, management, potential risk, service-level, accountability