

Study on CSO measures in Europe and the United States

Whole term

1997.6 ~ 1999.3

(Purpose)

The research was conducted in order to investigate CSO (Combined Sewer Overflow) control systems, design approaches, risk management of CSO in France and the United States, and implementation of countermeasures for CSO control on the basis of the U.S. EPA CSO control policy.

(Contents)

[Europe]

1) Watershed management

In France, watershed management systems are developed in each of main six rivers, and Water Development Agency was established for comprehensive water management. Moreover, the objectives of water management were established through river basin basic plans. We have no specific organization or program which can integrate projects of each department and comprehensively for accomplishing the projects and objectives in Japan, though we have the targets for water management (e.g., environmental standards).

2) Finance

Water Development Agency in France offers subsidy financed by pollution-tax to the projects about pollution control. They also actively introduce PFI, and the operation and maintenance are effectively promoted. In Japan, public sectors basically apply private consignment for operation and management, but never actively utilize investment and direct management by private-sectors.

3) Reservoirs

In France, stormwater reservoirs are constructed with the purpose of pollution load reduction to receiving waters. Combination of facilities for countermeasures against both flood and pollution are required to receive financial assistance. There are not many examples of reservoirs being used for both of them in our country.

[United States]

1) Policy of U.S. EPA

This policy can be divided into quick-impact nine minimum controls (NMC - Nine Minimum Control) and long-term CSO control plans (LTCP - Long Term CSO Control Plan) on the basis of Clean Water Act. Both include implementation programs with a limited term.

NMC(simple control policy)

U.S. EPA imposes feasible nine minimum control methods, which do not require any significant technical research or construction of large facilities, upon each entity. Such a stepwise setting of goals is needed to promote implementation of projects in Japan.

LTCP(long-term control plan)

It becomes a conclusive achievement responding to the request of Clean Water Act. Many control measures and their cost effectiveness must be evaluated in consideration of the actual status of CSO based on regional characteristics. It is important for us to take approaches to comply with the Clean Water Act by selecting various countermeasures based on further investigations.

Independent study

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Keywords

CSO, basin water management, NMC, LTCP