

Survey Study on Basic Information for Toxic Chemicals in Sewerage

Whole term

1999.12 - 2000.3

(Purpose)

Backed by the “Law concerning Reporting, etc. of Releases to the Environment of Specific Chemical Substances and Promoting Improvements in their Management (hereinafter referred to as the PRTR Law)” which was issued in July 1999, the concern for micro chemicals is socially increased such as system introduction of PRTR (Pollutant Release & Transfer Register) which controls emission of toxic chemical compounds to environment.

In this law, based on the scientific knowledge circumstances about control of chemical compounds which affect the environments, production of chemical compounds and handling of data, under the understanding of employers and citizens, it is intended to promote voluntary improvement of control of chemical compounds and their handling, by employers. By taking actions on provision of properties information of chemical compounds and their handling, this intends to prevent troubles in environment preservation in advance.

This survey study is to discuss the measures on PRTR system in sewerage enterprises, collecting and organizing physical and chemical properties of chemical compounds and basic information on their control systems.

(Results)

1. Organization of the PRTR Law

Objectives and contents of the PRTR Law were organized and the association with sewerage enterprises was summarized.

2. Collection and arrangement of information about chemical compounds

Control rules, physical/chemical properties of the substances in PRTR Law were collected and organized. Control regulations are quoted, such as the Sewerage Law, the Water Pollution Control Law, the Air Pollution Control Law, the Offensive Odor Control Law, the Fertilizer Control Law, the Waste Disposal and Public Cleansing Law and the Law Concerning Special Measures against Dioxins are quoted. Thus, focused substances in these laws were organized. The data of materials were collected from databases in the area and abroad.

3. Discussion about calculation method of inflow load and emission

The control method of chemical compounds was organized, the calculation method of the notification value of PRTR was organized and the cases in overseas which had already adopted PRTR system were surveyed.

4. Survey on the situation of toxic chemical compounds in sewer

In order to collect data which was used for calculation exhaust coefficient in the sewage treatment process, existing measurement cases of microchemicals were surveyed. From this result, it became clear that many materials were found in influent and effluent. However, materials in dehydration sludge, atmosphere and ash were very few.

Independent research

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Key words

Microchemistry material, PRTR system