

ファジィ機能診断を活用した合併処理浄化槽での 新たな維持管理方式の試み

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概 要

著者らが下水処理場用に構築した活性汚泥法ファジィ機能診断システムを活用し、新たな合併処理浄化槽の維持管理方式の模索を試みた。調査対象には、長時間曝気法と接触曝気法を採用している12箇所の合併処理浄化槽を選抜した。診断結果から、本システムは合併処理浄化槽にも適用可能であると判断されたが、合併処理浄化槽の多種多様な処理方式への応用を検討する必要があると示唆された。また、本システムは、リモートデータリンクを活用した新たな維持管理方式にも発展が可能であり、浄化槽の広域的な監視や維持管理への適用並びに教育用ツールとしての有用性を展望した。

Applicability of Fuzzy Diagnosis System to Operation and Maintenance of Domestic Wastewater Treatment System(Gappei-shori johkasou)

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Abstract

A novel method for operation and maintenance of domestic wastewater treatment system (gappei-shori johkasou) has been tried using fuzzy diagnosis system, developed for sewage treatment plants. Twelve gappei-shori johkasous, being adopted extended or contact aeration process, were selected as survey targets. Judging from the diagnosis results, this system is applicable to the operation and maintenance for this type of johkasou. However, a necessity of renewal for a wide use of this system was suggested, since various kinds of johkasous have been developed. This system is possible to be developed in the novel operation and maintenance by using remote data link, and moreover will be prospected to be available for supervision of several johkasous in the wide area and to be an educational tool for the operators. Consequently, applicability of this fuzzy diagnosis system to gappei-shori johkasou has been shown and a novel method for its operation and maintenance has been proposed.