

**WASTEWATER TREATMENT METHOD, SYSTEM AND
POLLUTANT DECOMPOSITION ACTIVITY MEASURING METHOD**

ABSTRACT

There is provided a method which eliminates a decrease in activity of an activated sludge treatment microorganism group, which greatly increases treatment ability of the microorganism group, to enhance treatment efficiency and to reduce the amount of excess sludge. The wastewater treatment method of the present invention includes, when raw water (1a) is subjected to an activated sludge treatment, performing a first sludge returning step (Va) (a step of returning sludge, which was previously aerated and stirred in a first excess sludge tank or sludge retention tank (12a) equipped with an aerator and a stirrer, to a treatment tank, a sequencing batch reactor or an anaerobic tank; and/or a step of returning sludge, which was previously aerated and stirred in a second excess sludge tank or thickened sludge retention tank (13a) equipped with an aerator and a stirrer, to a treatment tank, a sequencing batch reactor or an anaerobic tank), and maintaining the number of genus *Bacillus* bacteria in the treatment tank, the sequencing batch reactor or the anaerobic tank, to which the sludge has been returned, at 2.0×10^5 to 22.5×10^5 cfu/mL.

Figure 4