

ABSTRACT

**LIQUID WASTE TREATMENT DEVICE AND LIQUID WASTE TREATMENT
METHOD**

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Water quality in a reactor tank of UASB process is kept
in a state in which reaction activity of microorganism
is high. A waste water treatment device 1 has a reactor
tank 10 that is supplied with water to be treated from
10 a bottom 100 of the reactor tank 10 and discharges the
water to be treated as treated water from an upper portion
of the reactor tank 10 after the water to be treated is
brought into contact with the microorganism; and a pH
control tank 18 that pH-adjusts a part of the treated
15 water flowing out of the reactor tank 10. The pH control
tank 18 is connected to a side surface of the reactor
tank 10 through a return pipe 181b or 181c. The part of
the treated water discharged from the reactor tank 10
is pH-adjusted so that its pH is in a pH range in which
20 reaction activity of microorganism agglomerates becomes
high. The pH-adjusted treated water is injected to a
position that is separate from a supply portion 100 of
the water to be treated in a flow direction of the water
to be treated in a bed 19 in the reactor tank 10.

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Figure 3