

SEWAGE TREATMENT DEVICE AND SEWAGE TREATMENT METHOD

ABSTRACT

A sewage treatment device (300) includes: a water treatment device (301) which performs treatment on sewage (105) to obtain treated water (106); a dewatering treatment device (302) which performs volume reduction treatment of reducing an amount of excess sludge (100) generated in the treatment; and a sludge treatment device (200) which reduces an amount of the excess sludge (100) generated in the treatment and/or an amount of concentrated excess sludge (110) generated in the volume reduction treatment. The sludge treatment device (200) includes: an excess sludge tank (1) which stores the excess sludge (100) and/or the concentrated excess sludge (110) as stored sludge; an ozone gas generator (12) which generates ozone gas (104); a mixing unit which mixes a low-viscosity solution (101) and the stored sludge supplied from the excess sludge tank (1), to generate mixed sludge (102); an ejector (9) which generates ozone-treated sludge (103) by injecting the ozone gas (104) into the mixed sludge (102) flowing out from the mixing unit; and an ozone-treated sludge tank (13) which stores the ozone-treated sludge (103) flowing out from the ejector (9). The low-viscosity solution (101) is a solution having a lower viscosity than the stored sludge.

Fig. 1