

ABSTRACT**METHOD FOR TREATING A WASTEWATER EFFLUENT IN A SEQUENCING BATCH REACTOR (SBR) HAVING A CONSTANT LEVEL AND CONTROLLED RECOVERY**

The invention relates to an installation for treating a wastewater effluent in a constant-level sequencing batch reactor (SBR), said SBR comprising:

- a chamber (11) that is able to contain a mixture (12) of wastewater and sludge comprising different levels, each level being defined by a concentration and/or a density of sludge,
- a sludge bed (13) situated at the bottom of the chamber (11),
- a device for supplying the SBR with a volume of effluent to be treated close to the bottom of the chamber (11), in the sludge bed (13), preferably via a distribution network (21) covering the bottom of the chamber,
- means (200) for recovering a clarified fraction of the contents (12) of the chamber (11),

the SBR (10) being able to implement a treatment method comprising a biological treatment reaction sequence (102) comprising at least a step (105) of aerating the contents of the chamber (11), during which the level of the surface (24) of the mixture (12) rises, a decanting step (106), during which sludge is deposited on the bottom of the chamber (11) and the contents of the chamber (11) are clarified close to the surface (24) thereof, a step (107) of recovering the clarified fraction (22) of the contents of the chamber (11), said recovery step (107) and supply step (101) taking place simultaneously, so as to keep the level of the contents of the chamber (11) substantially constant during the recovery step (107) and supply step (101),

the installation also comprising control means (210) and recovery means (200).

Figure for the abstract: Fig. 2