

ABSTRACT

SYSTEM FOR DECONTAMINATING LIQUID WASTE CONTAINING MICROORGANISM AND/OR VIRUS

Provided is a decontamination system capable of continuously inactivating, by heating, a small volume of liquid waste containing a microorganism and/or a virus. A system 100 for decontaminating liquid waste containing a microorganism and/or a virus includes: a liquid waste receiving vessel 1; a boiler 20; a heat exchanger 10 that heats liquid waste supplied from the liquid waste receiving vessel 1 by exchanging heat with steam from the boiler 20; a liquid waste supply system on-off valve 5 and a pump 6 for supplying the liquid waste from the liquid waste receiving vessel 1 to the heat exchanger 10; and a controller 90 that controls the liquid waste receiving vessel 1, the boiler 20, the heat exchanger 10, the liquid waste supply system on-off valve 5, and the pump 6 to continuously inactivate the liquid waste, in which the heat exchanger 10 includes: a heater 11 that has a coiled tube heat exchanger and heats the liquid waste to a predetermined first temperature or more by exchanging heat with the steam; and a retention unit 13 that has a coiled tube heat exchanger and maintains the liquid waste at the first temperature or more for a predetermined period of time while exchanging heat with the steam after the liquid waste is heated to the first temperature or more by the heater.

[FIG .1]