CLAIMS

1. An electrolysis system comprising:

a seawater line drawing seawater from the sea and introducing the seawater into a plant;

a nitrogen treatment tank into which nitrogen-containing waste water discharged from the plant is introduced;

an electrolysis apparatus that generates electrolyzed water which contains hypochlorous acid so as to electrolyze the seawater, wherein the seawater is introduced from the seawater line or is draw from the sea;

an injection line through which the electrolyzed water is injected into the seawater line;

a branch line which is branched from the injection line and is used for injecting the electrolyzed water into the nitrogen treatment tank;

a control device that adjusts a flow rate of the electrolyzed water which is introduced into the nitrogen treatment tank through the branch line, based on the amount of hypochlorous acid of the electrolyzed water which is generated by the electrolysis apparatus;

a circulation flow passage which is branched on the upstream side of a branch portion of the injection line, which introduces the electrolyzed water discharged from the downstream side of the electrolysis apparatus to the upstream side of the electrolysis apparatus, wherein the electrolyzed water is circulated in the circulation flow passage;

a waste water line which is removed waste water discharged from the nitrogen treatment tank; and

a return line which is used for bringing the waste water which flows in the waste

water line back to a line between the plant and the nitrogen treatment tank;

wherein the control device controls the nitrogen-containing waste water to stay in the nitrogen treatment tank for a period when the amount of hypochlorous acid in the electrolyzed water of the injection line reaches a predetermined amount.