CLAIMS

1. A sterilization method of obtaining water with 100 ng/L or less N-nitrosodimethylamine (NDMA) from a precursor-containing water that has a NDMA production potential from 100 ng/L to 100,000 ng/L~~for a water system~~, wherein a stabilized composition comprising a bromine-based oxidizing agent and a sulfamic acid compound, or a stabilized composition comprising a chlorine-based oxidizing agent and a sulfamic acid compound, is added to ~~a~~ the precursor-containing water that contains a nitrosamine compound precursor, wherein the nitrosamine compound precursor is capable of reacting with chloramine to produce ~~N-nitrosodimethylamine (~~NDMA~~)~~, and the precursor-containing water and the stabilized composition are in continuous contact for not longer than 5 hours; and

wherein the stabilized composition is added so that an effective halogen concentration (effective chlorine equivalent concentration) in the precursor-containing water is not more than 3 mgCl/L.

2. The sterilization method for a water system according to Claim 1, wherein

the nitrosamine compound precursor includes at least one compound from among dimethylamine, trimethylamine, N,N-dimethylisopropylamine, N,N-dimethylbenzylamine, ranitidine, tetramethylthiuram disulfide, dimethyldithiocarbamate, polydiallyldimethylammonium chloride, and polymers containing an amino group.

~~3. The sterilization method for a water system according to Claim 1 or 2, wherein a concentration of the nitrosamine compound precursor in the precursor-containing water, expressed as a nitrosamine compound production potential, is at least 100 ng/L.~~

~~4~~3. The sterilization method for a water system according to any one of Claims 1 to ~~3~~2,

wherein

the nitrosamine compound precursor includes at least one of dimethylamine, trimethylamine and N,N-dimethylbenzylamine, and a concentration of the nitrosamine compound precursor in the precursor-containing water is at least 100 μg/L.

~~5~~4. The sterilization method for a water system according to any one of Claims 1 to ~~4~~3, wherein

the bromine-based oxidizing agent is bromine, bromine chloride, or a reaction product of a bromine compound and a chlorine-based oxidizing agent.

~~6~~5. The sterilization method for a water system according to any one of Claims 1 to ~~5~~4, wherein

the chlorine-based oxidizing agent is hypochlorous acid or a salt thereof.

~~7~~6. The sterilization method for a water system according to any one of Claims 1 to 5~~6~~, wherein

following addition of the stabilized composition to the precursor-containing water, at least one treatment among a separation membrane treatment and an oxidative degradation treatment is conducted.

~~8~~7. The sterilization method for a water system according to Claim ~~7~~6, wherein

a separation membrane used in the separation membrane treatment is a reverse osmosis membrane.

~~9~~8. A method of removing a nitrosamine compound from a water system, wherein a stabilized composition comprising a bromine-based oxidizing agent and a sulfamic acid compound, or a stabilized composition comprising a chlorine-based oxidizing agent and a

sulfamic acid compound, is added to a precursor-containing water that contains a nitrosamine compound precursor, and a reverse osmosis membrane treatment and an oxidative degradation treatment are subsequently conducted in that order to obtain water with 100 ng/L or less N-nitrosodimethylamine (NDMA),

wherein the precursor-containing water has a NDMA production potential from 100 ng/L to 100,000 ng/L;

wherein the nitrosamine compound precursor is capable of reacting with chloramine to produce ~~N-nitrosodimethylamine (~~NDMA~~)~~, and the precursor-containing water and the stabilized composition are in continuous contact for not longer than 5 hours; and

wherein the stabilized composition is added so that an effective halogen concentration (effective chlorine equivalent concentration) in the precursor-containing water is not more than 3 mgCl/L.

~~10~~9. A drinking water production method, wherein a stabilized composition, comprising a bromine-based oxidizing agent and a sulfamic acid compound, or a stabilized composition comprising a chlorine-based oxidizing agent and a sulfamic acid compound, is added to a precursor-containing water that contains a nitrosamine compound precursor, and a reverse osmosis membrane treatment is subsequently conducted to produce the drinking water with 100 ng/L or less N-nitrosodimethylamine (NDMA),

wherein the precursor-containing water has a NDMA production potential from 100 ng/L to 100,000 ng/L;~~,~~

wherein the nitrosamine compound precursor is capable of reacting with chloramine to produce ~~N-nitrosodimethylamine (~~NDMA~~)~~, and the precursor-containing water and the stabilized composition are in continuous contact for not longer than 5 hours; and

wherein the stabilized composition is added so that an effective halogen concentration (effective chlorine equivalent concentration) in the precursor-containing water is not more than 3 mgCl/L.

10~~11~~. The drinking water production method according to Claim 9~~10~~, wherein the precursor-containing water is a secondary treated sewage.