C L A I M S

1. A water treatment control apparatus (13) configured to generate an indication to a water treatment facility (10) referring to conditions including a drought status and a water treatment cost at the water treatment facility (10), the indication indicating a type of water to be taken by the water treatment facility (10) between a plurality of types of water including river water from rivers, rainwater, and waste water used by a customer wherein:

the water treatment facility (10) includes a water purification facility (11) configured to treat water taken in accordance with the indication and to feed the treated water to the customer through a clean water line as clean water and a recycled water facility (12) configured to treat water taken in accordance with the indication and to feed the treated water to the customer through a gray water line as gray water; and

the indication includes a first indication to the water purification facility (11) and a second indication to the recycled water facility (12).

~~2. The water treatment control apparatus (13) according to Claim 1, wherein the water treatment facility (10) includes a water purification facility (11) configured to treat water taken in accordance with the indication and to feed the treated water to the customer through a clean water line as clean water, and~~

~~the water treatment control apparatus (13) generates the indication to the water purification facility (11).~~

~~3. The water treatment control apparatus (13) according to Claim 1, wherein the water treatment facility (10) includes a recycled water facility (12) configured to treat water taken in accordance with the indication and to feed the treated water to the customer through a gray water line as gray water, and~~

~~the water treatment control apparatus (13) generates the indication to the recycled water facility (12).~~

~~4. The water treatment control apparatus (13) according to Claim 1, wherein the water treatment facility (10) includes a water purification facility (11) configured to treat water taken in accordance with the indication and to feed the treated water to the customer through a clean water line as clean water and a recycled water facility (12) configured to treat water taken in accordance with the indication and to feed the treated water to the customer through a gray water line as gray water, and~~

~~the indication includes a first indication to the water purification facility (11) and a second indication to the recycled water facility (12).~~

2~~5~~. The water treatment control apparatus (13) according to Claim 1, wherein the conditions include qualities and quantities of the plurality of types of water.

~~6~~3. A water treatment system configured to control a water treatment facility (10) including a water purification facility (11) configured to treat taken water and to feed the treated water to a customer through a clean water line as clean water and a recycled water facility (12) configured to treat taken water and to feed the

treated water to the customer through a gray water line as gray water, the water treatment system comprising:

a monitoring control apparatus (80, 90, 100, 130, 150, 180) configured to acquire a first water demand for the clean water in a water supply area in which the customer is present based on a quantity of the clean water fed to the water supply area, to acquire a second water demand for the gray water in the water supply area based on a quantity of the gray water fed to the water supply area, to acquire qualities and quantities of a plurality of types of water including river water from a river, rainwater, and waste water used by the customer, and to determine quantities of the plurality of types of water to be treated in the water treatment facility (10) to reduce a water treatment cost at the water treatment facility (10) while meeting the first and second water demands referring to the qualities and quantities; and

a water treatment control apparatus (13) configured to generate a first indication, to the water purification facility (11), of a type of water to be taken by the water purification facility (11) referring to the quantities of treated water determined by the monitoring control apparatus (80, 90, 100, 130, 150, 180), and to generate a second indication, to the recycled water facility (12), of a type of water to be taken by the recycled water facility (12) referring to the quantities of treated water determined by the monitoring control apparatus (80, 90, 100, 130, 150, 180).

~~7~~4. The water treatment system according to Claim ~~6~~3, wherein the monitoring control apparatus (80, 90, 100, 130, 150, 180) is configured to acquire the first water demand based on a quantity of clean water supplied to the customer

through the clean water line and to acquire the second water demand based on a quantity of gray water supplied to the customer through the gray water line.

~~8~~5. The water treatment system according to Claim ~~6~~3, wherein the monitoring control apparatus (100, 130, 150, 180) is configured to generate first water unit price information on a change in a water unit price of the clean water and second water unit price information on a change in a water unit price of the gray water and to distribute the first and second water unit price information to a management terminal (103, 104, 105) configured to control operation of a facility possessed by the customer.

~~9~~6. The water treatment system according to Claim ~~8~~5, wherein the management terminal (104) is configured to supply the clean water or the gray water to the facility possessed by the customer in accordance with an instruction input by the customer depending on display of the first and second water unit price information.

~~10~~7. The water treatment system according to Claim ~~8~~5, wherein the management terminal (103, 104, 105) is configured to operate the facility possessed by the customer at a time of day when the water unit price of the clean water or the gray water used by the facility is inexpensive based on the received first and second water unit price information.

~~11~~8. The water treatment system according to Claim ~~10~~7, wherein the management terminal (104) is configured to supply the clean water or the gray water to the facility possessed by the customer in such a manner as to reduce a

charge for the clean water or the gray water used by the facility based on the first and second water unit price information.

~~12~~9. The water treatment system according to Claim ~~8~~5, wherein the management terminal (105) is configured to estimate water quality of waste water from the facility possessed by the customer and to selectively determine whether to feed the waste water to the water treatment facility (10) or to a sewage treatment plant (60) based on a result of the estimation.

~~13~~10. The water treatment system according to Claim ~~6~~3, wherein the monitoring control apparatus (130, 150, 180) is configured to determine quantities of the plurality of types of water treated in the water purification facility (11) and the recycled water facility (12) referring to weather information observed by a radar rain gauge (120, 140), and

the monitoring control apparatus (130, 150, 180) is further configured to store rainwater obtained within a given time from beginning of rainfall in one of a plurality of water reservoirs (110-1 to 110-3) configured to store rainwater and to allow a water reservoir (110-1) in which rainwater obtained after elapse of the given time is stored to discharge the rainwater to the water purification facility (11) and the recycled water facility (12) in such a manner as to realize the quantity of rainwater to be treated.

~~14~~11. The water treatment system according to Claim ~~13~~10, wherein the radar rain gauge (120, 140) comprises a

phased array meteorological radar (140) configured to observe a quantity of moisture in air.

~~15~~12. The water treatment system according to Claim ~~13~~10, wherein the monitoring control apparatus (130, 150) is configured to store the rainwater obtained within the given time from the beginning of rainfall in one of the plurality of water reservoirs (110-1 to 110-3) and to allow the water reservoir (110-2, 110-3) in which the rainwater obtained within the given time from the beginning of rainfall is stored to discharge the rainwater to a sewage treatment plant (60) based on an operation status of the sewage treatment plant (60).

~~16~~13. The water treatment system according to Claim ~~13~~10, wherein the monitoring control apparatus (180) is configured to store waste water used by the customer in one of the plurality of water reservoirs (170) upon determining that a high treatment load is imposed on the sewage treatment plant (60) and to allow the water reservoir (170) in which the waste water used by the customer is stored to discharge the waste water to the sewage treatment plant (60) upon determining that the treatment load on the sewage treatment plant (60) reduces.