CLAIMS:

1. A hot water unit fluid supply control system comprising:

a switching device coupled to a hot water unit, a rainwater tank and a potable water source, the switching device configured to selectively switch between a first state, which allows fluid communication between the hot water unit and the rainwater tank, and a second state, which allows fluid communication between the hot water unit and the potable water source; and

a control unit configured to:

receive fluid characteristic information associated with fluid in the hot water unit from one or more sensors; and

cause the switching device to assume the first or second state based on a comparison of a fluid characteristic parameter of the fluid characteristic information with requirements of the hot water unit, wherein the control unit is configured to activate a pump of the rainwater tank to cause a pressure change in fluid supply from the rainwater tank and thereby cause the switching device to assume the first state and to deactivate a pump of the rainwater tank to cause the switching device to assume the second state.

2. The hot water unit control system of claim 1, wherein the requirements comprise a fluid characteristic threshold value and the control unit is configured to cause the switching device to assume the first state in response to determining that the fluid characteristic parameter is greater than the fluid characteristic threshold value and to assume the second state in response to determining that the fluid characteristic parameter is less than the fluid characteristic threshold value.

3. The hot water unit fluid supply control system of claim 1 or 2, wherein the switching device comprises an automatic hydraulic switch.

4. The hot water unit fluid supply control system of any one of the preceding claims, wherein the switching device comprises:

a first inlet coupled to a first conduit arranged to convey fluid from the potable water source to the switching device;

a second inlet coupled to a second conduit arranged to convey fluid from the rainwater tank to the switching device; and

an outlet coupled to a third conduit arranged to convey fluid from the switching device to the hot water unit.

5. The hot water unit fluid supply control system of any one of the preceding claims, wherein at least one of the one or more sensors is configured to detect fluid temperature in the hot water unit and wherein the fluid characteristic parameter comprises a temperature value.

6. The hot water unit fluid supply control system of any one of the preceding claims, wherein at least one of the one or more sensors is configured to detect flow rate of fluid exiting the hot water unit and wherein the fluid characteristic parameter comprises at least one of a flow rate value and a fluid volume value.

7. The hot water unit fluid supply control system of any one of the preceding claims, wherein at least one of the one or more sensors is configured to detect a measure of water quality of fluid in the hot water unit and wherein the fluid characteristic parameter comprises a water quality value.

8. The hot water unit fluid supply control system of any one of the preceding claims, wherein at least one of the one or more sensors is configured to detect operations information associated with an ultraviolet (UV) treatment unit and wherein the control unit is configured to cause the switching device to assume the first or second state based on a comparison of an operations parameter of the operations information with an operations threshold value.

9. The hot water unit fluid supply control system of claim 8, wherein the control unit is configured to cause the switching device to assume the first state in response to

determining that the operations parameter is greater than the operations threshold value and to assume the second state in response to determining that the operations parameter is less than the operations threshold value.

10. The hot water unit fluid supply control system of claim 8 or 9, wherein the UV treatment unit is disposed upstream of the hot water unit and downstream of the switching device such that fluid conveyed from the rainwater tank or potable water source passes through the UV treatment unit before being conveyed to the hot water unit.

11. A method of controlling fluid supply to a hot water unit, the method operable by a hot water unit control system comprising a switching device coupled to the hot water unit, a rainwater tank and a potable water source, wherein the switching device is configured to selectively switch between a first state, which allows fluid communication between the hot water unit and the rainwater tank, and a second state, which allows fluid communication between the hot water unit and the potable water source, and a control unit, the method comprising:

receiving, by the control unit, fluid characteristic information associated with fluid in the hot water unit from one or more sensors; and

causing, by the control unit, the switching device to assume the first state or the second state based on a comparison of a fluid characteristic parameter of the fluid characteristic information with requirements of the hot water unit, wherein the control unit is configured to activate a pump of the rainwater tank to cause a pressure change in fluid supply from the rainwater tank and thereby cause the switching device to assume the first state and to deactivate a pump of the rainwater tank to cause the switching device to assume the second state.

12. The method of claim 11, wherein the requirements comprise a fluid characteristic threshold value and wherein causing the switching device to assume the first state or the second state comprises causing the switching device to assume the first state in response to determining that the fluid characteristic parameter of the fluid

characteristic information is greater than the fluid characteristic threshold value and causing the switching device to assume the second state in response to determining that a parameter of the fluid characteristic information is less than the fluid characteristic threshold value.

13. The method of claim 11 or 12, wherein causing the switching device to assume the first state comprises activating a pump of the rainwater tank.

14. The method of any one of claims 11 to 13, wherein causing the switching device to assume the second state comprises deactivating a pump of the rainwater tank.

15. The method of any one of claims 11 to 14, wherein at least one of the one or more sensors is configured to detect fluid temperature in the hot water unit and wherein the parameter of the fluid characteristic information comprises a temperature value.

16. The method of any one of claims 11 to 15, wherein at least one of the one or more sensors is configured to detect flow rate of fluid exiting the hot water unit and wherein the parameter of the fluid characteristic information comprises at least one of a flow rate value and a fluid volume value.

17. The method of any one of claims 11 to 16, wherein at least one of the one or more sensors is configured to detect a measure of water quality of fluid in the hot water unit and wherein the fluid characteristic parameter comprises a water quality value.

18. The method of any one of claims 11 to 17, wherein at least one of the one or more sensors is configured to detect operations information associated with a UV treatment unit and the method further comprises causing the switching device to assume the first or second state based on a comparison of an operations parameter of the operations information with an operations threshold value.

19. A method of controlling fluid supply to a hot water unit, the method operable by a hot water unit control system comprising a switching device coupled to a hot water unit, a rainwater tank and a potable water source, wherein the switching device is configured to selectively switch between a first state, which allows fluid communication between the hot water unit and the rainwater tank, and a second state, which allows fluid communication between the hot water unit and the potable water source, and a control unit, the method comprising:

receiving, by the control unit, operations information associated with an ultraviolet (UV) treatment unit in fluid communication with the hot water unit from one or more sensors; and

causing, by the control unit, the switching device to assume the first state or the second state based on a comparison of an operations parameter of the operations information with requirements of the hot water unit, wherein the control unit is configured to activate a pump of the rainwater tank to cause a pressure change in fluid supply from the rainwater tank and thereby cause the switching device to assume the first state and to deactivate a pump of the rainwater tank to cause the switching device to assume the second state.

20. A hot water unit fluid supply control system comprising:

a switching device coupled to a hot water unit, a rainwater tank and a potable water source associated with an installation, the switching device configured to selectively switch between a first state, which allows fluid communication between the hot water unit and the rainwater tank, and a second state, which allows fluid communication between the hot water unit and the potable water source; and

a control unit configured to perform the method of any one of claims 11 to 19.