What is claimed is:

1. A fluid treatment system comprising:

a pressurized fluid inlet;

a pressurized fluid outlet; and

a pressurized fluid treatment zone in fluid communication with the pressurized fluid inlet and the pressurized fluid outlet, the pressurized fluid treatment zone comprising a cylindrical unitary housing having at least one longitudinal axis and within which is disposed:

a unitary housing having a fluid separation section configured to remove solids contained in fluid being treated in the fluid treatment system;

a fluid radiation section disposed within the unitary housing and in fluid communication with the fluid separation section to define a developed fluid flow therethrough; and

a connecting section shroud disposed within the unitary housing and between the fluid separation section and the fluid radiation section, the shroud being configured to provide for a longitudinally-extending outlet structure configured to provide water from the fluid separation section to the fluid radiation section in a direction substantially transverse to a longitudinal axis of the fluid radiation section,

wherein the longitudinally-extending outlet structure has a major dimension in a direction of the one longitudinal axis that is greater than a minor dimension thereof, and

wherein the fluid separation section and the fluid radiation section are disposed so as to have substantially parallel but off-set longitudinal axes along a direction of fluid flow through the fluid separation section.

2. The fluid treatment system defined in claim 1, wherein the fluid separation section is in fluid communication with the fluid inlet, and the fluid radiation section is in fluid communication with the fluid outlet.

3. The fluid treatment system defined in claim 1, wherein the fluid separation section comprises at least one candle filter.

4. The fluid treatment system defined in claim 3, wherein the shroud comprises an elongate filter housing having (i) an filter inlet in fluid communication with the fluid inlet and (ii) a filter outlet in fluid communication with the fluid radiation section, the filter outlet comprising the longitudinally-extending outlet.

5. The fluid treatment system defined in claim 4, wherein the filter housing comprises a substantially cylindrical portion.

6. The fluid treatment system defined in claim 4, wherein the elongate filter housing is fluid permeable between the filter inlet and the filter outlet to allow for fluid to pass laterally from one of (i) an interior to an exterior of the filter housing and (ii) from an exterior to an interior of the filter housing.

7. The fluid treatment system defined in claim 4, wherein the filter housing comprises a filter element on substantially an entire inner surface of the filter housing.

8. The fluid treatment system defined in claim 1, wherein the fluid separation section comprises a plurality of separation elements arranged in a separation element array.

9. The fluid treatment system defined in claim 8, wherein each separation element is configured to receive a flow of fluid.

10. The fluid treatment system defined in claim 8, wherein each separation element is configured to receive an independent flow of fluid with respect to an adjacent separation element.

11. The fluid treatment system defined in claim 8, wherein each separation element is elongate.

12. The fluid treatment system defined in claim 11, wherein each separation element comprises a longitudinal axis that is substantially parallel with respect to a longitudinal axis of at least two adjacent separation elements.

13. The fluid treatment system defined in claim 11, wherein each separation element comprises a longitudinal axis that is substantially equidistant from longitudinal axis of three adjacent separation elements.

14. The fluid treatment system defined in claim 11, wherein each separation element comprises a longitudinal axis that is substantially equidistant from longitudinal axis of four adjacent separation elements.

15. The fluid treatment system defined in claim 11, wherein each separation element comprises a longitudinal axis that is substantially equidistant from longitudinal axis of five adjacent separation elements.

16. The fluid treatment system defined in claim 1, wherein the fluid radiation section comprises at least one elongate radiation source assembly.

17. The fluid treatment system defined in claim 16, wherein the at least one elongate radiation source comprises an ultraviolet radiation source.

18. The fluid treatment system defined in claim 16, wherein the elongate radiation source assembly comprises a longitudinal axis that is configured to be transverse to the direction of fluid flow through the fluid radiation section.

19. The fluid treatment system defined in claim 1, wherein the fluid separation section and the fluid radiation section are disposed serially along a direction of fluid flow through the fluid treatment zone.

20. A fluid treatment system comprising:

a pressurized fluid inlet;

a pressurized fluid outlet;

a closed fluid treatment zone in fluid communication with the pressurized fluid inlet and the pressurized fluid outlet, the fluid treatment zone comprising a unitary housing, the housing comprising (a) a first chamber in fluid communication with the fluid inlet and within which is disposed at least one fluid separation section configured

to remove solids contained in fluid being treated in the fluid treatment system, and (b) a second chamber in fluid communication with the fluid outlet and the first chamber, the second chamber having disposed therein at least one radiation source assembly to define a developed fluid flow therethrough; and

a connecting section shroud disposed within the unitary housing and between the fluid separation section and the radiation source assembly, the shroud being configured to provide for longitudinally-extending outlet structure configured to provide water from the fluid separation section to the radiation source assembly in a direction substantially transverse to a longitudinal axis of the radiation source assembly,

wherein the first chamber and the second chamber are disposed so as to have substantially parallel but off-set longitudinal axes with respect to one another, and

wherein the longitudinally-extending outlet structure has a major dimension in a direction of said longitudinal axes that is greater than a minor dimension thereof.

21. A fluid treatment system comprising:

a pressurized fluid inlet;

a pressurized fluid outlet;

a pressurized fluid treatment zone in fluid communication with the pressurized fluid inlet and the pressurized fluid outlet, the pressurized fluid treatment zone comprising a unitary housing within which is disposed a fluid separation section configured to remove solids contained in fluid being treated in the fluid treatment system and a fluid radiation section in fluid communication with one another; and

a connecting section shroud disposed between the fluid separation section and the fluid radiation section, the shroud being configured to provide for longitudinally-extending outlet structure configured to provide water from the fluid separation section to the fluid radiation section in a direction substantially transverse to a longitudinal axis of the fluid radiation section,

wherein the fluid separation section comprises a plurality of separation elements arranged in a separation element array,

wherein the fluid separation section and the fluid radiation section are disposed so as to have substantially parallel but off-set longitudinal axes along a direction of fluid flow through the fluid separation section, and

wherein the longitudinally-extending outlet structure has a major dimension in a direction of said longitudinal axes that is greater than a minor dimension thereof.

22. The fluid treatment system defined in claim 21, wherein each separation element is configured to receive a flow of fluid.

23. The fluid treatment system defined in claim 21, wherein each separation element is configured to receive an independent flow of fluid with respect to an adjacent separation element.

24. The fluid treatment system defined in claim 21, wherein each separation element is elongate.

25. The fluid treatment system defined in claim 24, wherein each separation element comprises a longitudinal axis that is substantially parallel with respect to a longitudinal axis of at least two adjacent separation elements.

26. The fluid treatment system defined in claim 24, wherein each separation element comprises a longitudinal axis that is substantially equidistant from longitudinal axis of three adjacent separation elements.

27. The fluid treatment system defined in claim 24, wherein each separation element comprises a longitudinal axis that is substantially equidistant from longitudinal axis of four adjacent separation elements.

28. The fluid treatment system defined in claim 24, wherein each separation element comprises a longitudinal axis that is substantially equidistant from longitudinal axis of five adjacent separation elements.