**CLAIMS:**

We claim:

1. An immersed membrane cassette comprising,

a frame; and,

a plurality of modules, each module having an upper header, a lower header and a plurality of hollow fiber membranes extending vertically when in use and mounted between the upper header and the lower header, each module having a permeate port in a top of the upper header of the respective module, wherein the plurality of modules are selectively mounted on the frame,

wherein the immersed membrane cassette has a gap between adjacent ones of the modules of 20 mm or less and a tank intensity over 650 $m^2/m^2$.

2. The cassette of claim 1, wherein the tank intensity is in the range of 750-900 $m^2/m^2$ for use in treating wastewater or over 900 $m^2/m^2$ for use in filtering drinking water or tertiary filtration.

3. The cassette of claim 1 or 2, wherein the gap between adjacent ones of the modules is 15 mm or less.

4. In combination, the cassette of any of claims 1 to 3 and a clarifier or screen located upstream of the cassette.

5. The combination of claim 4 having the screen, wherein the screen has openings with a maximum dimension measured through the geometric center in the range of 1-4.5 mm.

6. The combination of claim 5, wherein the screen is part of an internally fed rotating drum screen.

7. An activated sludge wastewater treatment process comprising the steps of,

filtering mixed liquor through the cassette of claim 1; and,

screening influent wastewater, recirculated activated sludge and/or recirculated mixed liquor to provide an average trash concentration in the mixed liquor around the cassette of <2 mg/L.

8. The process of claim 7, wherein the step of screening is performed with a screen having openings with a maximum dimension measured through the geometric center in the range of 1-4.5 mm.

9. The process of claim 7 or 8, wherein the tank intensity is in the range of 750-900 $m^2/m^2$.

10. The process of any of claims 7 to 9, wherein the cassette has a gap between adjacent ones of the modules of 15 mm or less, or in the range of 8-12 mm.

11. The cassette of any of claims 1 to 3, further comprising a permeate collection pipe fluidly connected to the permeate port of each module.

12. The cassette of claim 11, wherein the permeate port of each module is selectively connected to the permeate collection pipe through a vertical motion.

13. The cassette of claim 11 or 12, wherein the permeate collection pipe is a structural hollow section of the frame.

14. The cassette of any of claims 11 to 13, comprising rails mounted to the frame for sliding the modules into the frame.

15. The cassette of any of claims 11 to 14, comprising a cradle adapted to lift an end of one of the modules relative to the frame.

16. The cassette of any of claims 11 to 15, wherein the permeate collection pipe is fluidly connected to the permeate port of each module by a piston seal.

17. The cassette of any of claims 11 to 16, wherein the permeate collection pipe is a horizontal structural member on a peripheral edge of the frame.