CLAIMS

1. A water treatment module comprising:

a water treatment medium disposed within a pressurised container; and

a cover for the pressurised container, the cover comprising:

a backwash mechanism for back washing of the water treatment medium, wherein the backwash mechanism is disposed within the cover, and wherein the backwash mechanism comprises a piston disposed within a piston channel; and

an actuator mechanically coupled to the piston, the actuator being operable to effect linear translational movement of the piston within the piston channel between a first position corresponding to a treatment operational state and a second position corresponding to a backwash operational state.

2. The water treatment module of claim 1, wherein:

in the treatment operational state, there is a first flow path for flow of water from a cover inlet through the water treatment medium in a first direction to a cover outlet;

in the backwash operational state, there is a second flow path for flow of water from the cover inlet through the water treatment medium in a second direction to a backwash outlet; and

wherein the first flow path and the second flow path are defined, at least in part, by a channel network formed within the cover.

3. The water treatment module of claim 2, wherein the cover inlet, the cover outlet and the backwash outlet comprise respective apertures disposed in side faces of the cover.

4. The water treatment module of claim 3, wherein the cover inlet aperture is disposed in a first side face of the cover, the cover outlet aperture is disposed in a second side face of the cover, the first side face being opposite the second side face, and wherein the cover outlet aperture is disposed in the second side face in a

position for registration with a second cover inlet aperture of a second water treatment module.

5. The water treatment module of claim 4, wherein the second water treatment module is a water treatment module in accordance with claim 1.

6. The water treatment module of claim 5, wherein the cover further comprises a first treatment medium aperture and a second treatment medium aperture; and wherein the piston comprises a first reduced-diameter portion and a second reduced-diameter portion, the first reduced-diameter portion and the second reduced-diameter portion each having an external diameter which is less than an internal diameter of the piston channel; and wherein the piston is configured to be disposed in the first position in which a volume of the piston channel surrounding the second reduced-diameter portion is in fluid communication with the cover inlet aperture and in fluid communication with the first treatment medium aperture, and a volume of the piston channel surrounding the first reduced-diameter portion is in fluid communication with the second treatment medium aperture and the cover outlet aperture.

7. The water treatment module of claim 6, wherein the piston is configured to be disposed in the second position in which the volume of the piston channel surrounding the second reduced-diameter portion is in fluid communication with the cover inlet aperture and in fluid communication with the second treatment medium aperture and the first treatment medium aperture is in fluid communication with the backwash outlet.

8. The water treatment module of any preceding claim wherein the pressurised container comprises a length of extruded pipe.

9. The water treatment module of claim 8, wherein the length of extruded pipe is composed, at least in part, from aluminium.

10. The water treatment module of any preceding claim, wherein the cover comprises a bottom cover for the water treatment module.

11. A cover for a water treatment module, the water treatment module comprising a water treatment medium disposed within a pressurised container, the cover comprising:

a backwash mechanism for back washing of the water treatment medium, wherein the backwash mechanism is disposed within the cover, and wherein the backwash mechanism comprises a piston disposed within a piston channel; and

an actuator mechanically coupled to the piston, the actuator being operable to effect linear translational movement of the piston within the piston channel between a first position corresponding to a treatment operational state and a second position corresponding to a backwash operational state.

12. A method of treating water using the water treatment module of any of claims 1 to 10 or using the cover for a water treatment module of claim 11.