CLAIMS:

1. A downhole expandable apparatus for restricting ingress of solids in a wellbore, comprising:

a base pipe, wherein the base pipe comprises at least one aperture in a wall thereof;

a fluid permeable expandable foam material mounted on the base pipe configurable between a non-expanded and an expanded configuration, wherein the at least one aperture is positioned on a section of the base pipe that is under the expandable foam material mounted on the base pipe; and

a retractable sleeve moveable between a first configuration in which the retractable sleeve retains the expandable foam material in the non-expanded configuration, and a second configuration in which the retractable sleeve is retracted to provide a free portion of some or all of the expandable foam material, permitted to radially expand towards the expanded configuration and into engagement with a surface in the wellbore.

2. A downhole expandable apparatus according to claim 1, configured for the production and/or injection of a fluid into a wellbore.

3. A downhole expandable apparatus according to claim 1 or 2, comprising a flow channel extending axially along the length of the apparatus.

4. A downhole expandable apparatus according to any preceding claim, wherein the base pipe comprises a plurality of apertures in a wall thereof, and the plurality of apertures are substantially evenly spaced along the base pipe.

5. A downhole expandable apparatus according to any preceding claim, wherein the aperture, or the plurality of apertures, comprises a valve therein.

6. A downhole expandable apparatus according to any preceding claim, comprising a flow port for the introduction and/or removal of a fluid from the wellbore.

7. A downhole expandable apparatus according to any preceding claim, wherein the retractable sleeve prevents or restricts a flow of fluid through the apertures in the base pipe.

8. A downhole expandable apparatus according to any preceding claim, wherein fluid flow through the expandable foam material is prevented or restricted when the expandable foam material is in the non-expanded configuration.

9. A downhole expandable apparatus according to any preceding claim, wherein the expandable foam material is mounted on the base pipe so as to fully circumscribe the base pipe.

10. A downhole expandable apparatus according to any preceding claim, wherein the expandable foam material is configured to the non-expanded configuration by compression under the retractable sleeve.

11. A downhole expandable apparatus according to any preceding claim, wherein the expandable foam material comprises an open-cell foam material.

12. A downhole expandable apparatus according to any preceding claim, wherein the expandable foam material has a varying coarseness.

13. A downhole expandable apparatus according to claim 12, wherein the expandable foam material has a graduated coarseness from a relatively coarse portion of expandable foam material, to a relatively fine portion of expandable foam material.

14. A downhole expandable apparatus according to any preceding claim, wherein the expandable foam material is provided in a single layer.

15. A downhole expandable apparatus according to any preceding claim, wherein the retractable sleeve is axially moveable between the first configuration and the second configuration.

16. A downhole expandable apparatus according to any preceding claim, wherein the retractable sleeve is detachable from the expandable apparatus.

17. A downhole expandable apparatus according to any preceding claim, configured to be installed in a wellbore as a retrofit apparatus.

18. A downhole expandable apparatus according to any of claims 1 to 17, configured to be installed as part of a completion string.

19. A downhole expandable apparatus according to any preceding claim, comprising a pump located downhole of the expandable foam material.

20. A method for restricting ingress of solids in a wellbore, comprising:

positioning the apparatus of any one of claims 1 to 19 in a wellbore;

retracting the retractable sleeve of the apparatus to provide a free portion of fluid permeable expandable foam material, mounted on the downhole expandable apparatus, to radially expand towards an expanded configuration and into engagement with a surface in the wellbore.

21. A method for repairing/plugging a defect in a sand screen or tubular, comprising:

positioning a downhole expandable apparatus in a wellbore adjacent a defect, the expandable apparatus comprising a base pipe, wherein the base pipe comprises at least one aperture in the wall thereof ,and a fluid permeable expandable foam material mounted thereon, wherein the at least one aperture is positioned on a section of the base pipe that is under the expandable foam material mounted on the base pipe, the expandable foam material being retained in a non-expanded configuration by a retractable sleeve;

retracting the retractable sleeve of the downhole expandable apparatus to configure a portion of some or all of the expandable foam material to an expanded configuration, in which the expandable foam material is expanded so as to contact the defect.

22. A method for stabilising a subsurface formation, comprising:

positioning the apparatus of any one of claims 1 to 18 in a wellbore adjacent a subsurface formation;

retracting the retractable sleeve of the downhole apparatus to configure a portion of the expandable foam material to an expanded configuration, in which the expandable foam material is expanded so as to contact the subsurface formation.