WHAT IS CLAIMED IS:

1. A method for forming a seal in a wellbore comprising:

positioning an expandable metal sealing element in the wellbore; wherein the expandable metal sealing element comprises:

a composite material comprising an expandable metal and a reinforcement material; wherein the expandable metal forms a matrix and the reinforcement material is distributed within the matrix;

contacting the expandable metal sealing element with a fluid that reacts with the expandable metal to produce a metal hydroxide reaction product having a volume greater than the expandable metal; and

forming a seal with the reaction product.

2. The method of claim 1, wherein the expandable metal comprises a metal selected from the group consisting of magnesium, calcium, aluminum, and any combination thereof.

3. The method of claim 1, wherein the expandable metal comprises a metal alloy selected from the group consisting of magnesium-zinc, magnesium-aluminum, calcium-magnesium, aluminum-copper, and any combination thereof.

4. The method of claim 1, wherein the reinforcement material comprises a material selected from the group consisting of metals, ceramics, glass, plastics, and any combination thereof.

5. The method of claim 1, wherein the reinforcement material comprises a shape selected from the group consisting of a rod, a ball, a mesh, and any combination thereof.

6. The method of claim 1, wherein the expandable metal sealing element further comprises a bonding agent.

7. The method of claim 1, wherein the expandable metal sealing element further comprises a removable barrier coating.

8. The method of claim 1, wherein the expandable metal sealing element further comprises a feed-through.

9. The method of claim 1, wherein the expandable metal sealing element is disposed on a conduit.

10. The method of claim 9, wherein the conduit comprises a profile variance on its exterior surface; wherein the expandable metal sealing element is positioned over the profile variance.

11. The method of claim 1, wherein the expandable metal sealing element is a component of a swell packer.

12. The method of claim 11, wherein the swell packer further comprises a swellable non-metal sealing element.

13. The method of claim 1, wherein the expandable metal sealing element was produced by compaction of discrete pieces of the expandable metal with the reinforcement material in a mold.

14. An expandable metal sealing element for forming a seal, the expandable metal sealing element comprising:

a composite material comprising an expandable metal and a reinforcement material; wherein the expandable metal forms a matrix and the reinforcement material is distributed within the matrix; wherein the expandable metal is a reactive metal that reacts with a fluid to form a metal hydroxide reaction product; wherein the reaction product is configured to form the seal.

15. The expandable metal sealing element of claim 14, wherein the expandable metal comprises a metal selected from the group consisting of magnesium, calcium, aluminum, and any combination thereof.

16. The expandable metal sealing element of claim 14, wherein the reinforcement material comprises a material selected from the group consisting of metals, ceramics, glass, plastics, and any combination thereof.

17. The expandable metal sealing element of claim 14, wherein the expandable metal sealing element further comprises a bonding agent.

18. A system for forming a seal in a wellbore:

an expandable metal sealing element comprising:

a composite material comprising an expandable metal and a reinforcement material; wherein the expandable metal forms a matrix and the reinforcement material is distributed within the matrix; wherein the expandable metal is a reactive metal that reacts with a fluid to form a metal hydroxide reaction product; wherein the reaction product is configured to form the seal; and

a conduit with the expandable metal sealing element disposed thereon.

19. The system of claim 18, wherein the expandable metal sealing element is a component of a swell packer.

20. The system of claim 18, wherein the conduit comprises a profile variance on its exterior surface; wherein the expandable metal sealing element is positioned over the profile variance.