What is claimed is:

1. A dried water treatment composition exhibiting reduced chlorine loss during storage, comprising:

calcium hypochlorite coated with a coating material comprising magnesium sulfate with an average hydrate number of about 4, said calcium hypochlorite being at least 70 wt. % anhydrous calcium hypochlorite;

wherein said dried composition contains about 47 wt % to about 58 wt % available chlorine based on the total weight of said dried composition, and

wherein said dried composition contains from about 9 wt % to about 11 wt % of hydrated water based on the total weight of said dried composition, and wherein said coating comprises from about 24 wt % to about 31 wt % of the total weight of said dried composition, and

wherein said dried composition exhibits both reduced chlorine loss during storage and reduced oxidizing properties thereby qualifying as a non-Division 5.1 oxidizer or as a NFPA Class 1 or NFPA Class 2 oxidizer and;

wherein said coating material further comprises one or more additional ingredients selected from the group consisting of water clarifiers, scale inhibitors, dispersants, water softeners, corrosion inhibitors, algaecides, fungicides, binders, and combinations thereof, and wherein said additional ingredients are present in an amount ranging from 0.1 to 5 wt %, based on the total weight of the composition.

2. The water treatment composition of claim 1, wherein said calcium hypochlorite are particles having a diameter ranging from about 40 to about 5000 microns.

3. The water treatment composition of claim 2, wherein said calcium hypochlorite are particles having a diameter ranging from about 200 to about 5000 microns.

4. The water treatment composition of claim 1, wherein said composition contains about 10 wt % of hydrated water based on the total weight of said composition.

5. The water treatment composition of claim 1, wherein said additional ingredients are selected from the group consisting of copper sulfate, zinc sulfate, aluminum sulfate, sodium citrate, sodium borate, sodium tripolyphosphate (STPP), sodium hexametaphosphate

(SHMP), 1,3-dichloro-5,5-dimethylhydantoin (DCDMH), 1,3-dibromo-5,5-dimethylhydrantoin (DBDMH), 1-bromo-3-chloro-5,5-dimethylhydantoin (BCDMH), 1,3-d-chloro-5-ethyl-5-methylhydantoin (DCEMH), 1,3-dibromo-5-ethyl-5-methyl hydantoin (DBEMH), 1-bromo-3-chloro-5-methyl-5-ethylhydrantoin (BCEMH), trichloro-, dichloro- and monochlorotriazine, sodium dichloro-s-triazinetrione dichloride, their hydrated form, and combinations thereof.

6. The water treatment composition of claim 1, wherein said calcium hypochlorite is substantially all anhydrous calcium hypochlorite.

7. The water treatment composition of claim 1, wherein said composition is formed into a tablet or briquette.

8. The water treatment composition of claim 1, wherein said coating material is magnesium sulfate tetrahydrate.

9. A dried water treatment composition exhibiting reduced chlorine loss during storage, comprising:

(a) an inner core layer comprising calcium hypochlorite, said calcium hypochlorite being at least 70 wt. % anhydrous calcium hypochlorite;

(b) one or more interlayers positioned on top of said inner core layer, said interlayer comprising one or more hydrated or anhydrous inorganic salts, hydrated or anhydrous organic salts, hydrated or anhydrous polymeric salts, alkaline metal hydroxides, alkaline earth hydroxides, and combinations thereof, said interlayer comprising from about 1 wt % to about 5 wt % of the total weight of said dried composition; and

(c) one or more outer layers positioned on top of said interlayer(s), said outer layers being magnesium sulfate with an average hydrate number of about 4; said outer layer comprising from about 24 wt % to about 31 wt % of the total weight of said dried composition;

wherein said dried composition contains about 47 wt % to about 58 wt % available chlorine based on the total weight of said dried composition;

wherein said composition contains from about 9 wt % to about 11 wt % of hydrated water based on the total weight of said dried composition;

and wherein said dried composition exhibits both reduced chlorine loss during storage and reduced oxidizing properties thereby qualifying as a non Division 5.1 oxidizer or as a NFPA Class 1 or NFPA Class 2 oxidizer;

and wherein said one or more outer layers further comprise one or more additional ingredients selected from the group consisting of water clarifiers, scale inhibitors, dispersants, water softeners, corrosion inhibitors, algaecides, fungicides, binders, and combinations thereof, and wherein said additional ingredients are present in an amount ranging from 0.1 to 5 wt %, based on the total weight of the composition.

10. The water treatment composition of claim 9, wherein said calcium hypochlorite are particles having a diameter ranging from about 40 to about 5000 microns.

11. The water treatment composition of claim 10, wherein said calcium hypochlorite are particles having a diameter ranging from about 200 to about 5000 microns.

12. The water treatment composition of claim 9, wherein said composition contains about 10 wt % of hydrated water based on the total weight of said composition.

13. The water treatment composition of claim 9, wherein said outer layer further comprises one or more additional agents selected from the group consisting of copper sulfate, zinc sulfate, aluminum sulfate, sodium citrate, sodium borate, sodium tripolyphosphate (STPP), sodium hexametaphosphate (SHMP), 1,3-dichloro-5,5-dimethylhydantoin (DCDMH), 1,3-dibromo-5,5-dimethylhydantoin (DBDMH), 1-bromo-3-chloro-5,5-dimethylhydantoin (BCDMH), 1,3-dichloro-5-ethyl-5-methylhydantoin (DCEMH), 1,3-dibromo-5-ethyl-5-methylhydantoin (DBEMH), 1-bromo-3-chloro-5-methyl-5-ethylhydrantoin (BCEMH), trichloro-, dichloro- and monochlorotriazine, sodium dichloro-striazinetrione dichloride, their hydrated form, and combinations thereof, and wherein said additional ingredients are present in an amount ranging from 0.1 to 5 wt %, based on the total weight of the coated composition.

14. The water treatment composition of claim 9, wherein said calcium hypochlorite is substantially all anhydrous calcium hypochlorite.

15. The water treatment composition of claim 9, wherein said interlayer is a salt selected

from the group consisting of sodium chloride, sodium sulfate, sodium borate, sodium silicate, lithium hydroxide, calcium hydroxide, and combinations thereof.

16. The water treatment composition of claim 9, wherein said composition is formed into a tablet or briquette.

17. The water treatment composition of claim 9, wherein said outer layer is magnesium sulfate tetrahydrate.

18. A dried water treatment composition exhibiting reduced chlorine loss during storage, comprising:

calcium hypochlorite coated with magnesium sulfate tetrahydrate, said calcium hypochlorite being at least 70 wt. % anhydrous calcium hypochlorite;

wherein said dried composition contains about 47 wt % to about 58 wt % available chlorine based on the total weight of said dried composition, and

wherein said dried composition contains from about 9 wt % to about 11 wt % of hydrated water based on the total weight of said dried composition, and

wherein said coating comprises from about 24 wt % to about 31 wt % of the total weight of said dried composition, and wherein said dried composition exhibits both reduced chlorine loss during storage and reduced oxidizing properties thereby qualifying as a non-Division 5.1 oxidizer or as a NFPA Class 1 or NFPA Class 2 oxidizer; and

wherein said coating material further comprises one or more additional ingredients selected from the group consisting of water clarifiers, scale inhibitors, dispersants, water softeners, corrosion inhibitors, algaecides, fungicides, binders, and combinations thereof, and wherein said additional ingredients are present in an amount ranging from 0.1 to 5 wt %, based on the total weight of the composition.

19. The water treatment composition of claim 18, wherein said calcium hypochlorite are particles having a diameter ranging from about 40 to about 5000 microns.

20. The water treatment composition of claim 19, wherein said calcium hypochlorite are particles having a diameter ranging from about 200 to about 5000 microns.

21. The water treatment composition of claim 18, wherein said additional ingredients are

selected from the group consisting of copper sulfate, zinc sulfate, aluminum sulfate, sodium citrate, sodium borate, sodium tripolyphosphate (STPP), sodium hexametaphosphate (SHMP), 1,3-dichloro-S,S-dimethylhydantoin (DCDMH), 1,3-dibromo-S,S-dimethylhydrantoin (DBDMH), 1-bromo-3-chloro-S,S-dimethylhydantoin (BCDMH), 1,3-dichloro-5-ethyl-S-methylhydantoin (DCEMH), 1,3-dibromo-5-ethyl-S-methylhydantoin (DBEMH), 1-bromo-3-chloro-5-methyl-5-ethylhydrantoin (BCEMH), trichloro-, dichloro- and monochlorotriazine, sodium dichloro-s-triazinetrione dichloride, their hydrated form, and combinations thereof.

22. The water treatment composition of claim 18, wherein said calcium hypochlorite is substantially all anhydrous calcium hypochlorite.

23. The water treatment composition of claim 18, wherein said composition is formed into a tablet or briquette.

24. A dried water treatment composition exhibiting reduced chlorine loss during storage, comprising:

(a) an inner core layer comprising calcium hypochlorite, said calcium hypochlorite being at least 70 wt. % anhydrous calcium hypochlorite;

(b) one or more interlayers positioned on top of said inner core layer, said interlayer comprising one or more hydrated or anhydrous inorganic salts, hydrated or anhydrous organic salts, hydrated or anhydrous polymeric salts, alkaline metal hydroxides, alkaline earth hydroxides, and combinations thereof, said interlayer comprising from about 1% to about 5 wt % of the total weight of said dried composition; and

(c) an outer layer of magnesium sulfate tetrahydrate positioned on top of said interlayer(s); said outer layer comprising from about about 24 wt % to about 35 wt % of the total weight of said dried composition;

wherein said dried composition contains about 47 wt % to about 58 wt % available chlorine based on the total weight of said dried composition;

wherein said dried composition contains from about 9 wt % to about 11 wt % of hydrated water based on the total weight of said dried composition; and wherein said dried composition exhibits both reduced chlorine loss during storage and reduced oxidizing properties thereby qualifying as a non Division 5.1 oxidizer or as a NFPA Class 1 or NFPA Class 2 oxidizer; and

wherein said one or more outer layers further comprise one or more additional ingredients selected from the group consisting of water clarifiers, scale inhibitors, dispersants, water softeners, corrosion inhibitors, algaecides, fungicides, binders, and combinations thereof, and wherein said additional ingredients are present in an amount ranging from 0.1 to 5 wt %, based on the total weight of the composition.

25. The water treatment composition of claim 24, wherein said calcium hypochlorite are particles having a diameter ranging from about 40 to about 5000 microns.

26. The water treatment composition of claim 24, wherein said calcium hypochlorite are particles having a diameter ranging from about 200 to about 5000 microns.

27. The water treatment composition of claim 24, wherein said outer layer further comprises one or more additional agents selected from the group consisting of copper sulfate, zinc sulfate, aluminum sulfate, sodium citrate, sodium borate, sodium tripolyphosphate (STPP), sodium hexametaphosphate (SHMP), 1,3-dichloro-5,5-dimethylhydantoin (DCDMH), 1,3-dibromo-5,5-dimethylhydantoin (DBDMH), 1-bromo-3-chloro-5,5-dimethylhydantoin (BCDMH), 1,3-dichloro-5-ethyl-5-methylhydantoin (DCEMH), 1,3-dibromo-5-ethyl-5-methylhydantoin (DBEMH), 1-bromo-3-chloro-5-methyl-5-ethylhydrantoin (BCEMH), trichloro-, dichloro- and monochlorotriazine, sodium dichloro-striazinetrione dichloride, their hydrated form, and combinations thereof, and wherein said additional ingredients are present in an amount ranging from 0.1 to 5 wt %, based on the total weight of the coated composition.

28. The water treatment composition of claim 24, wherein said inorganic salt in said interlayer comprises alkali metal chlorides, alkali metal sulfates, alkali metal phosphates, alkali metal silicates, alkali metal borates, and combinations thereof.

29. The water treatment composition of claim 24, wherein interlayer is a salt selected from the group consisting of sodium chloride, sodium sulfate, sodium borate, sodium silicate, lithium hydroxide, calcium hydroxide, and combinations thereof.

30. The water treatment composition of claim 24, wherein said calcium hypochlorite is substantially all anhydrous calcium hypochlorite.

31. The water treatment composition of claim 24, wherein said composition is formed into a tablet or briquette.

32. A water treatment composition exhibiting reduced chlorine loss during storage, consisting essentially of:

calcium hypochlorite coated with magnesium sulfate hydrate with an average hydrate number of about 4, said calcium hypochlorite being at least 70 wt. % anhydrous calcium hypochlorite,

wherein said composition contains about 47 wt % to about 58 wt % available chlorine based on the total weight of said composition, and

wherein said composition contains about 9 wt % to about 11 wt % of hydrated water based on the total weight of said dried composition,

wherein said coating comprises from about 24 wt % to about 31 wt % of the total weight of said dried composition, and

wherein said dried composition exhibits both reduced chlorine loss during storage and reduced oxidizing properties thereby qualifying as a non-Division 5.1 oxidizer or as a NFPA Class 1 or NFPA Class 2 oxidizer.

33. The water treatment composition of claim 32, wherein said calcium hypochlorite is substantially all anhydrous calcium hypochlorite.

34. The water treatment composition of claim 32, wherein said calcium hypochlorite are particles having a diameter ranging from about 200 to about 5000 microns.

35. The water treatment composition of claim 32, wherein said magnesium sulfate hydrate is magnesium sulfate tetrahydrate.

36. The water treatment composition of claim 32, wherein said composition is in the form of a tablet or briquette.

WHAT IS CLAIMED IS:

1. A water treatment composition, comprising:

calcium hypochlorite coated with a coating comprising at least one hydrated or anhydrous salt;

wherein said composition contains about 20 wt% to about 80 wt% available chlorine based on the total weight of said composition, and

wherein said composition contains from about 1 wt% to about 50 wt% of hydrated water based on the total weight of said composition, and

wherein said coating comprises from about 1% to about 80 wt% of the total weight of said composition, and

wherein said composition is classified as a non Division 5.1 oxidizer or as a NFPA Class 1 or NFPA Class 2 oxidizer.

2. The water treatment composition of claim 1, wherein said calcium hypochlorite contains from about 0 wt% to about 12 wt% of water, based on the total weight of said calcium hypochlorite.

3. The water treatment composition of claim 1, wherein said calcium hypochlorite is a particle having a diameter ranging from about 40 to about 5000 microns.

4. The water treatment composition of claim 3, wherein said calcium hypochlorite is a particle having a diameter ranging from about 200 to about 5000 microns.

5. The water treatment composition of claim 1, wherein said salt is selected from the group consisting of hydrated or anhydrous inorganic salts, hydrated or anhydrous organic salts, hydrated or anhydrous polymeric salts, and combinations thereof.

6. The water treatment composition of claim 5, wherein said hydrated salt is selected from the group consisting of alkaline and alkaline earth metal salts of halides, alkaline and alkaline earth metal salts of sulfate, alkaline and alkaline earth metal salts of phosphate, alkaline and alkaline earth metal salts of silicate, alkaline and alkaline earth metal salts of borate, alkaline and alkaline earth metal hydroxides, and combinations thereof.

7. The water treatment composition of claim 5, wherein said hydrated salt is selected from the group consisting of sodium sulfates, lithium metaborate, sodium carbonate, sodium orthophosphate, sodium monohydrogen orthophosphate, sodium phosphate, sodium pyrophosphate, sodium tetraborate, sodium silicate, aluminum sulfate, sodium metasilicate, sodium aluminum sulfate, magnesium sulfate, aluminum potassium sulfate, zinc sulfate, copper sulfate, sodium citrate, poly(acrylic acid-maleic acid) sodium salt, and combinations thereof.

8. The water treatment composition of claim 1, wherein said coating further comprises one or more additional ingredients selected from the group consisting of water clarifiers, scale inhibitors, dispersants, water softeners, corrosion inhibitors, algaecides, fungicides, binders, and combinations thereof, and wherein said additional ingredients are present in an amount ranging from 0.1 to 5 wt%, based on the total weight of the coated composition.

9. The water treatment composition of claim 8, wherein said additional ingredients are selected from the group consisting of copper sulfate, zinc sulfate, aluminum sulfate, sodium citrate, sodium borate, sodium tripolyphosphate (STPP), sodium hexametaphosphate (SHMP), 1,3-dichloro-5,5-dimethylhydantoin (DCDMH), 1,3-dibromo-5,5dimethylhydrantoin (DBDMH), 1-bromo-3-chloro-5,5-dimethylhydantoin (BCDMH), 1,3-dichloro-5-ethyl-5-methylhydantoin (DCEMH), 1,3-dibromo-5-ethyl-5-methylhydantoin (DBEMH), 1-bromo-3-chloro-5-methyl-5-ethylhydrantoin (BCEMH), trichloro-, dichloro- and monochlorotriazine, sodium dichloro-s-triazinetrione dichloride, their hydrated form, and combinations thereof.

10. The water treatment composition of claim 1, wherein said composition contains about 30 wt% to about 60 wt% available chlorine, based on the total weight of said composition.

11. The water treatment composition of claim 1, wherein said composition contains from about 4 wt% to about 30 wt% of hydrated water based on the total weight of said composition.

12. The water treatment composition of claim 1, wherein said composition is formed into a tablet or briquette.

13. The water treatment composition of claim 1, wherein said salt is magnesium sulfate tetrahydrate.

14. A water treatment composition, comprising:

(a) an inner core layer comprising calcium hypochlorite;

(b) one or more interlayers positioned on top of said inner core layer, said interlayer comprising one or more hydrated or anhydrous inorganic salts, hydrated or anhydrous organic salts, hydrated or anhydrous polymeric salts, alkaline metal hydroxides, alkaline earth hydroxides, and combinations thereof, said interlayer comprising from about 1% to about 80 wt% of the total weight of said composition; and

(c) one or more outer layers positioned on top of said interlayer(s), said outer layers comprising at least one hydrated or anhydrous salt, said outer layer comprising from about 1% to about 35 wt% of the total weight of said composition;

wherein said composition contains about 20 wt% to about 80 wt% available chlorine based on the total weight of said composition;

wherein said composition contains from about 1 wt% to about 50 wt% of hydrated water based on the total weight of said composition;

and wherein said composition is classified as a non Division 5.1 oxidizer or as a NFPA Class 1 or NFPA Class 2 oxidizer.

15. The water treatment composition of claim 14, wherein said calcium hypochlorite contains from about 0 wt% to about 12 wt% of water, based on the total weight of said calcium hypochlorite.

16. The water treatment composition of claim 14, wherein said calcium hypochlorite is a particle having a diameter ranging from about 40 to about 5000 microns.

17. The water treatment composition of claim 16, wherein said calcium hypochlorite is a particle having a diameter ranging from about 200 to about 5000 microns.

18. The water treatment composition of claim 14, wherein hydrated or anhydrous salt in said outer layer is selected from the group consisting of hydrated or anhydrous inorganic salts, hydrated or anhydrous organic salts, hydrated or anhydrous polymeric salts, and combinations thereof.

19. The water treatment composition of claim 18, wherein said hydrated salt is selected from the group consisting of alkaline and alkaline earth metal salts of halides, alkaline and alkaline earth metal salts of sulfate, alkaline and alkaline earth metal salts of phosphate, alkaline and alkaline earth metal salts of silicate, alkaline and alkaline earth metal salts of borate, alkaline and alkaline earth metal hydroxides, and combinations thereof.

20. The water treatment composition of claim 18, wherein said hydrated salt is selected from the group consisting of sodium sulfates, lithium metaborate, sodium carbonate, sodium orthophosphate, sodium monohydrogen orthophosphate, sodium phosphate, sodium pyrophosphate, sodium tetraborate, sodium silicate, aluminum sulfate, sodium metasilicate, sodium aluminum sulfate, magnesium sulfate, aluminum potassium sulfate, zinc sulfate, copper sulfate, sodium citrate, poly(acrylic acid-maleic acid) sodium salt, and combinations thereof.

21. The water treatment composition of claim 14, wherein said one or more outer layers further comprise one or more additional ingredients selected from the group consisting of water clarifiers, scale inhibitors, dispersants, water softeners, corrosion inhibitors, algaecides, fungicides, binders, and combinations thereof, and wherein said additional ingredients are present in an amount ranging from 0.1 to 5 wt%, based on the total weight of the coated composition.

22. The water treatment composition of claim 21, wherein said outer layer further comprises one or more additional agents selected from the group consisting of copper sulfate, zinc sulfate, aluminum sulfate, sodium citrate, sodium borate, sodium tripolyphosphate (STPP), sodium hexametaphosphate (SHMP), 1,3-dichloro-5,5-dimethylhydantoin (DCDMH), 1,3-dibromo-5,5dimethylhydantoin (DBDMH), 1-bromo-3-chloro-5,5-dimethylhydantoin (BCDMH), 1,3-dichloro-5-ethyl-5-methylhydantoin (DCEMH), 1,3-dibromo-5-ethyl-5-methylhydantoin (DBEMH), 1-bromo-3-chloro-5-

methyl-5-ethylhydrantoin (BCEMH), trichloro-, dichloro- and monochlorotriazine, sodium dichloro-s-triazinetrione dichloride, their hydrated form, and combinations thereof, and wherein said additional ingredients are present in an amount ranging from 0.1 to 5 wt%, based on the total weight of the coated composition..

23. The water treatment composition of claim 14, wherein said inorganic salt in said interlayer comprises alkaline metal chlorides, alkaline metal sulfates, alkaline metal phosphates, alkaline metal silicates, alkaline metal borates, and combinations thereof.

24. The water treatment composition of claim 14, wherein interlayer is a salt selected from the group consisting of sodium chloride, sodium sulfate, sodium borate, sodium silicate, lithium hydroxide, calcium hydroxide, and combinations thereof.

25. The water treatment composition of claim 14, wherein said composition contains about 30 wt% to about 60 wt% available chlorine, based on the total weight of said composition.

26. The water treatment composition of claim 14, wherein said composition contains from about 4 wt% to about 30 wt% of hydrated water based on the total weight of said composition.

27. The water treatment composition of claim 14, wherein said composition is formed into a tablet or briquette.

28. The water treatment composition of claim 14, wherein said salt is magnesium sulfate tetrahydrate.

29. The water treatment composition of claim 14, wherein said outer layer comprises a polymeric salt comprising from about 0.5% to about 15 wt% of the total weight of said composition.