It is claimed:

1. Method for making a sand composition for use in hydratable cementitious compositions, comprising

(A) providing a plurality of manufactured sand particles having angular shapes and particle sizes whereby 5%-30% of said plurality of particles passes a 75 micron sieve, said manufactured sand particles further having a clay such that said manufactured sand has a methylene blue value of at least 0.5 mg/g; and

(B) pre-treating said plurality of clay-bearing manufactured sand particles by intermixing them with at least one clay-mitigating polycation compound selected from the group consisting of epichlorohydrin dimethylamine and polydiallyldimethylamine, said clay-mitigating polycation compound being used in an amount of 0.01% to 0.5% based on weight of active polycation compound to weight of treated sand; and

(C) blending the pretreated plurality of clay-bearing manufactured sand particles with a plurality of washed natural sand particles having generally spheroidal shapes and wherein the natural sand is washed to remove fines to the extent that at least 90 percent of the natural sand particles by weight are retained on a 75 micron sieve, whereby the ratio of the manufactured sand particles to the washed natural sand particles are in the range of 10-90:90-10.

2. The method of claim 1 wherein, in providing said plurality of manufactured sand particles, said particles have a particle size whereby 10% to 30% of said plurality of particles passes a 75 micron sieve.

3. A hydratable cementitious composition comprising a hydratable cement and a sand composition made according to claim 1.

4. A hydratable cementitious composition comprising a hydratable cement, at least one polycarboxylate cement dispersant, and a sand composition made according to claim 1.

5. A hydratable cementitious composition comprising a hydratable cement; at least one polycarboxylate cement dispersant; at least one poly-hydroxyl or hydroxyl carboxylic acid or salt thereof; and a sand composition made according to claim 1.

6. A hydratable cementitious composition of claim 5 wherein said at least one poly-hydroxyl or hydroxyl carboxylic acid or salt thereof is a gluconate.

7. Method for mitigating clay-bearing aggregate in a concrete composition, comprising: combining a hydratable cement, at least one polycarboxylate cement dispersant, and at least one poly-hydroxyl or hydroxyl carboxylic acid or salt thereof, with a sand composition made in accordance with claim 1.

8. Method of claim 1 wherein the manufactured sand particles have shapes depicted in Fig. 2 and the natural sand particles have shapes depicted in Fig. 1.

It is claimed:

1. Method for making a sand composition for use in hydratable cementitious compositions, comprising

(A) providing a plurality of manufactured sand particles having angular shapes and particle sizes whereby 5%-30% of said plurality of particles passes a 75 micron sieve, said manufactured sand particles bearing clay such that said clay-bearing manufactured sand has a methylene blue value of at least 0.5 mg/g; and

(B) pre-treating said plurality of clay-bearing manufactured sand particles by intermixing them with at least one clay-mitigating polycation compound selected from the group consisting of epichlorohydrin dimethylamine and polydiallyldimethylamine, said clay-mitigating polycation compound being used in an amount of 0.01% to 0.5% based on weight of active polycation compound to weight of sand the clay-bearing manufactured sand particles being pretreated; and

(C) blending the pretreated plurality of clay-bearing manufactured sand particles with a plurality of washed natural sand particles having generally spheroidal shapes and wherein the natural sand is washed to remove fines to the extent that at least 90 percent of the natural sand particles by weight are retained on a 75 micron sieve, whereby the ratio of the manufactured sand particles to the washed natural sand particles are in the range of 10-90:90-10.

2. The method of claim 1 wherein, in providing said plurality of manufactured sand particles, said particles have a particle size whereby 10% to 30% of said plurality of particles passes a 75 micron sieve.

3. A hydratable cementitious composition comprising a hydratable cement and a sand composition made according to claim 1.

4. A hydratable cementitious composition comprising a hydratable cement, at least one polycarboxylate cement dispersant, and a sand composition made according to claim 1.

5. A hydratable cementitious composition comprising a hydratable cement; at least one polycarboxylate cement dispersant; at least one poly-hydroxyl or hydroxyl carboxylic acid or salt thereof; and a sand composition made according to claim 1.

6. A hydratable cementitious composition of claim 5 wherein said at least one poly-hydroxyl or hydroxyl carboxylic acid or salt thereof is a gluconate.

7. Method for mitigating clay-bearing aggregate in a concrete composition, comprising: combining a hydratable cement, at least one polycarboxylate cement dispersant, and at least one poly-hydroxyl or hydroxyl carboxylic acid or salt thereof, with a sand composition made in accordance with claim 1.

8. Method of claim 1 wherein the manufactured sand particles have angular shapes from being crushed by mechanical equipment and the natural sand particles have shapes which are generally more spheroidal and smoother than the angular shapes of the manufactured sand particles.