WHAT IS CLAIMED IS:

1. A method of dispersing or dissolving a hydrocarbon foulant in a process fluid in contact with processing equipment for the preparation of an acrylate, methacrylic acid, or a methacrylate monomer comprising contacting the hydrocarbon foulant with an effective amount of an organic solvent, the organic solvent comprising an alkyl phthalate, an alkaryl phthalate, an aryl phthalate, a phthalic acid, or a combination thereof.

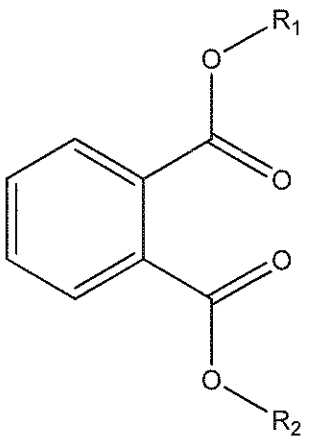
2. The method of claim 1 wherein the processing equipment is for preparation of methacrylic acid or methyl methacrylate or wherein the processing equipment for preparation of methacrylic acid or methyl methacrylate is adapted to an acetone cyanohydrin process.

3. The method of claim 1 or 2 wherein the process fluid comprises sulfuric acid, an ammonium salt of sulfuric acid, or a combination thereof.

4. The method of claim 3 wherein the process fluid comprises an acrylate, methacrylic acid, a methacrylate, or a combination thereof.

5. The method of any one of claims 1 to 4 wherein the hydrocarbon foulant comprises an oligomer or a polymer of acrylic acid, methacrylic acid, an acrylate, a methacrylate, a methacrylamide, or a combination thereof.

6. The method of any one of claims 1 to 5 wherein the organic solvent comprises a structure of Formula 1



Formula 1

wherein R_1 and R_2 are independently hydrogen, alkyl, alkaryl, or aryl.

7. The method of claim 6 wherein R_1 and R_2 are independently hydrogen and C_1-C_{12} alkyl.

8. The method of claim 6 wherein the organic solvent comprises phthalic acid, monomethyl phthalate, monoethyl phthalate, monononyl phthalate, monododecyl phthalate, monoundecyl phthalate, dimethyl phthalate, diethyl phthalate, dinonyl phthalate, didodecyl phthalate, diundecyl phthalate, monophenyl phthalate, monobenzyl phthalate, diphenyl phthalate, dibenzyl phthalate, or a combination thereof.

9. The method of claim 8 wherein the organic solvent comprises dimethyl phthalate, diethyl phthalate, dinonyl phthalate, didodecyl phthalate, diundecyl phthalate, or a combination thereof.

10. The method of claim 8 wherein the organic solvent comprises dinonyl phthalate, didodecyl phthalate, diundecyl phthalate, or a combination thereof.

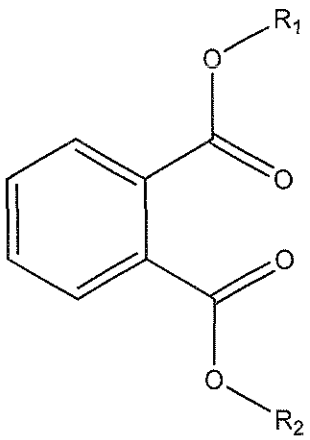
11. The method of claim 8 wherein the organic solvent comprises dimethyl phthalate.

12. The method of any one of claims 1 to 11 wherein the organic solvent concentration in the process fluid is from about 10 ppm by weight to about 1% by weight of the process fluid.

13. The method of claim 12 wherein the organic solvent concentration is from about 100 ppm to about 1000 ppm.

14. The method of any one of claims 1 to 13 wherein the organic solvent is added to the process fluid continuously.

15. A composition comprising aqueous sulfuric acid, an organic solvent, and a polymer of acrylic acid, an acrylate, methacrylic acid, a methacrylate, a methacrylamide, or a combination thereof, wherein the organic solvent comprises a structure of Formula 1



Formula 1

wherein R_1 and R_2 are independently hydrogen, alkyl, alkaryl, or aryl.