EnviroAqua CONSULTANTS INC.

Water Talk

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Microbiological Control Utilizing Terbuthylazine

The last issue of Water Talk dealt with the control of microbiological contamination in commercial and industrial recirculating systems, with the use of Polyquats. While Polyquats are excellent algaecides, they aren't alone in this critical area. Terbuthylazine (TBZ) is another excellent algaecide.

Terbuthylazine has been shown to work great with halogens, have no odor, low fish toxicity, non-ionic and are non-foaming.

While TBZ is an extremely effective algaecide, it exhibits no effectiveness against bacteria, fungi or other organisms commonly found in cooling water systems. This is available in an EPA registered package as 7430, in 5s, 30s and 55s.

General Uses

Terbuthylazine (or TBZ), is the common name for (2-(Tert-butylamino)-4-chloro-6-ethylamino)-s-triazine), a 4% active liquid algaecide.

TBZ is effective over a wide pH (6.0 to 9.0), and temperature range. TBZ will work moderately slowly on its own, 6 to 24 hours. It also exhibits good staying power with a half-life measured in days. This long half-life is due to the mode of action. TBZ inhibits the growth by

inhibiting the photosynthesis of the organism. This slow working action will not result in rapid fouling of the distribution deck orifices or the heat exchange equipment.

7430

7430 contains 4% TBZ as the active ingredient. 7430 exhibits excellent algaecide characteristics, especially when fed at the same time, and in the same dosing point as chlorine and bromine. Feed rates of 7430 can be reduced when feeding along with chlorine and bromine by as much as 1/3 as compared to without chlorine or bromine.

7430 is approved for use recirculating cooling water systems, and in decorative ponds and ornamental fountains. Recirculating cooling water systems include evaporative condensers, heat exchange water systems, commercial and institutional and industrial cooling towers.

Treat with 7430 early in the algae growth period (typically early spring), before the system is in jeopardy of becoming fouled with algae.

For slug feeding, and in conjunction with chlorine or bromine, feed at a rate of up to 25 ppm product (equivalent to 1 ppm active ingredient). For slug feeding, but not when feeding chlorine or bromine, feed at a rate of up to 75 ppm product (equivalent to 3 ppm active ingredient).

Overall, systems that have shown to be prone to algae blooms in the spring, can be effectively treated with 7430. 7430 will provide reduced maintenance costs by keeping the system from plugging with algae, it is cost effective over a wide pH range, it is available in 5, 30 and 55, and when used at the same time as chlorine or bromine, is extremely effective.