## Inspiration Out of the Dust

## George Serrill

EnviroTech Soil Solutions, Inc.

Inspiration is found in many places. For Jeff Kitchens and Jim Thomas of EP Minerals, it began with believing something more could be done.

Their survey of 12 infield managers revealed the most common complaint was the amount of dust during latter innings. Could something be done about this nuisance to make infields less dusty?

In their search, they ended up developing a new, patent pending, infield conditioner called Game Changer.

Game Changer utilizes two proven methods to manage soil moisture in one product. First, it uses the absorptive properties of calcined clay as a conditioner. Second, a portion of the calcined clay is infused with a proprietary blend of non-ionic surfactant to reduce the surface tension of water and allow more water to penetrate into, and throughout, the soil easier and quicker.

Part of the challenge was to get the right chemistry because some surfactants are persistent for only a few weeks. Jim and Jeff worked for three months with engineers and chemists from a leading surfactant manufacturer to get the prolonged effectiveness they were looking for.

They found it with a blend of short-, medium-, and long-lasting surfactants that are non-toxic and biodegradable, and have proven to be effective in the field over an entire college season – providing approximately three to four hours of increased moisture retention,

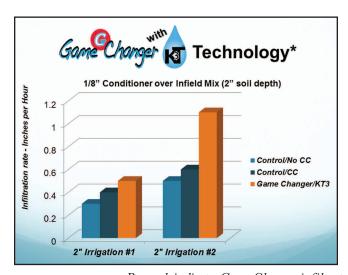
even in the heat.

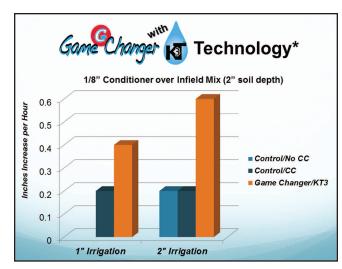
To quantify the difference Game Changer creates on infields versus untreated calcined clay, they enlisted the services of Sam Ferro with Turf Diagnostics and Design. The results showed that infiltration rates were twice as fast with Game Changer, providing double the amount of water penetration over the same time period.

These results were supported by beta trials at three university and two high school fields where there was increased water-holding capacity. In three of these cases, the field managers said they have been able to lower their water applications. In all cases, the increased moisture has dramatically reduced or eliminated dust during games, and has made working on and maintaining the fields easier with less time required.

Increased infiltration rates are applicable to wet conditions, too. The surfactant technology increases the absorption speed of the calcined clay and increases the rate at which water perks into the soil and away from the infield surface.

As we know, navigating moisture extremes and trying to keep infield moisture levels consistent is difficult and time consuming. Finely textured soils required for infields define the challenge. Having a tool in your toolbox that works in two dimensions is a potent resource. It is also the result of two inquiring minds that decided we could do better.





Research indicates Game Changer infiltrates water at twice the rate of calcined clay alone