Field Notes By Rusty Waters

"Unscientific wisdom from a collection of the greatest minds in water quality improvement"

(We ain't passin' judgement,…we're passin' ideas!)

MetalEase™ Well Application

Here is a field tip for MetalEase™ that was passed on to us from a dealer in Sugar Grove, IL. We liked it so much, we wanted to pass it on to you. This one falls under the heading of "That's so simple, we should have thought of that before." John, at Supreme Soft Water, says that when he runs into particularly tough hydrogen sulfide problems, he recommends the following low cost solution before telling his customers to "drill a new well."

Real Life Solution # 1:

In this well application where the hydrogen sulfide level is reaching levels that fluctuate between 5 to 10 ppm and the well pump is not capable of pushing more than 6 gpm through the bed. John suggests instead of putting in a single 1 cubic foot unit of MetalEase, install two ½ cubic foot units in parallel.

He says to split the water stream in half by teeing into two 7 x 44 tanks, each with there own separate control valve. Each tank has a ½ cubic foot of MetalEase in it. Now, instead of running 6 gpm of flow through 1 cubic foot, you end up running 3 gpm through each ½ cubic foot of media. This increases the square foot surface area that the water comes into contact with. Most of MetalEase's reaction to metals occurs in the top portion of the bed anyway. After the twin tanks you bring the two water streams back together before sending it off to the rest of the house.

Here is the truly great benefit of this type of installation. John's simple engineering now allows you to utilize the full flow of the well pump to backwash the two tanks separately, giving a full 6 gpm to each ½ cubic foot of media. How? By setting the filter valves to backwash at two different times. He sets one valve to backwash at 2:00 AM, and the other valve to backwash at 3:00 AM. This allows tremendous lift to each bed separately. A further improvement to this is to use a heavy underbedding, such as quartz, for additional distribution of the water.

Most oxidation beds only work properly if the beds are kept clean. This unique installation idea allows the beds to backwash at twice the rate of service flow. This more powerful backwash would help keep the bed cleaner than if you were trying to lift a full cubic foot at a time. It also allows you to use filter valves that may not be fully ported.

Rusty

If you have an unscientific idea that you would like to share with your fellow water quality improvement professionals, by all means let us hear it so we can pass the information along. Design by experience and evolution can be more reliable than what the eggheads can do in the lab or on a computer. We here at SWT believe that knowledge is meant to be shared. We do not presume to know more than our customers, and we really enjoy the exchange of ideas.

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