

BioShield versus Pellet Chlorinators

The typical pellet chlorinator is capable of injecting **5600 mg of chlorine per minute** into your well or storage tank.

Every time your pump starts up the chlorinator injects pellets. Some **manufacturers of pellet Chlorinators** actually recommend **19.0 mg/L chlorine for treatment of iron bacteria with iron, sulfur, and manganese.**

The typical municipal water supply carries a 0.2 to 0.5 mg/L residual.

High concentrations of chlorine precipitate solids out into the well sump making water quality problems worse, and the high concentrations cause equipment to corrode and fail. Well and pump contractors are aware of these problems with pellet chlorinators. Many groundwater professionals will not install pellet chlorinators.

Conversely, BioShield treats the volume of the well **once** per 12 hours at less than **3 mg/L!** This matches the NSF certified treatment level for HaloSan that is protective of public health and is effective in killing bacteria.

What does all of this mean for your family?

For the average 4 member household using 168 gallons of water per person per day, a pellet chlorinator will inject a **manufacturer recommended 48,332 mg of chlorine into your well or storage tank daily for the treatment of iron bacteria with iron, sulfur and manganese.**

To understand why such high levels of chlorine are required, see the PowerPoint presentation "The Science Behind BioShield" on the brochures page of the website www.berrysystemsinc.com.

BioShield achieves daily well disinfection with the minimum of chemical intervention:

Family of Four	Pellet Chlorinator	BioShield			
		4" Diameter Well		6" Diameter Well	
Water usage /day/person	168 gallons	Unlimited		Unlimited	
Chemical Dosage	19.0 mg/L	1 mg/L	3 mg/L	1 mg/L	3 mg/L
mg/Day	48,332	411	1234	2780	8340
Pounds per Year	39	<1	1	2.2	6.7

Notice the chemical exposure on the 4" well is 100 times higher for the pellet chlorinator than for BioShield!

For purposes of calculation the following were assumed:

high concentrations of iron bacteria, anaerobic bacteria, hydrogen sulfide, iron and manganese

4" well is 100' deep with 20' static water level

6" well is 350' deep with 100' static water level