

Do we have to kill the good guys to get the bad guys?

The Bacteria Bad Guys

They're called *Pathogens*, microscopic organisms that cause human disease by direct invasion of body tissue. These bad guys reproduce on their own and often produce toxins that poison the cells they invade.



They have to be killed.

The way farmers typically destroy these dangerous microorganisms is

with *chlorine*. And it works – chlorine is an extremely effective sanitizer.

A bomb blast that kills everything

The problem with **standard chlorine** is that it doesn't differentiate between *Bad Bacteria* and *Good Bacteria*. It is a **bomb blast** that kills all microorganisms *indiscrimiately*.

Killing the Good Guys

Good bacteria are *Nature's allies*. For a farm to thrive, good bacteria need to be present and active. One type of beneficial microbe is **Slurry Bugs.** When these *aerobic bacteria* are introduced to an effluent pond, they help the farmer by:

- 1. Eating pond crust and sludge, giving the farmer liquified, spreadable effluent.
- 2. Converting volatile effluent nutrients into forms that are readily available to plants over time.
- 3. Reducing leaching and soil run-off.
- 4. Reducing pond odor by capturing the ammonia within the urine.

Slurry Bugs are the good guys.

A nasty green discovery

In March this year, something strange happened at a pond we were treating with **Slurry Bugs**. After initially seeing the solids being eaten away, the condition of pond began going *backwards* after five weeks.

We also noticed a *green colouration* in areas of the pond where **Slurry Bug** activity had

been dynamic. On closer inspection, in was clear that the **Slurry Bugs** were no longer active.

Something had killed the Good Guys.



Could it be Chlorine?

When asking the farmer about his daily activities, we learned that he had recently washed Chlorine into the pond after cleaning down the yard.

To confirm the presence of chlorine, we took pond samples from the *effected* area to a laboratory. Tests conclusively showed that the green colouration was due to the reaction of Chlorine with the Slurry Bugs.

Further confirmation came in the form of phone calls from other farmers informing us that they had somehow *"killed the bugs"*. All farmers had recently washed chlorine into their effluent ponds.

What's the alternative to the Chlorine Bomb?

Most farmers would gladly switch from standard chlorine *as long as* the alternative ticks two boxes:

- 1. It kills bad bacteria just as *effectively* as chlorine.
- 2. It's as *easy* and *cost-effective* as chlorine.

So what's the effective easy alternative to chlorine? <u>Answer</u>: A better type of Chlorine.

<u>Sniper</u>™: the new Chlorine

In searching for a sanitiser that would *target* bad bugs and leave the good bugs alone, we came across the perfect product: <u>Sniper</u>TM.

<u>Sniper</u>[™] is **Chlorine Dioxide**, a chemical engineered to be highly selective in its bacteria killing.

It works like this.

Every organism omits an electrical charge and that charge is either *positive* or *negative*. Poison producing pathogens are always negatively charged. Beneficial bacteria, on the other hand, emit a positive charge.

<u>Sniper</u>™attracts and kills bad bugs, not good bugs

Because <u>Sniper</u>[™] has been designed with a *positive charge*, it *attracts* and kills anything *negatively charged* = **the Bad Bugs.** Conversely, <u>Sniper</u>[™] leaves the Good Bugs alone because their positive charges mutually repel each other.

<u>Sniper</u>[™] works perfectly with **Slurry Bugs** because it <u>targets</u> the bad bugs and leaves the good bugs alone.



More about Slurry Bugs

If you'd like to know more, call Angie on 0800 4 SLURRYBUGS (0800 4 758779) or visit our website **www.slurrybugs.co.nz**

