

Airing your dirty laundry... The truth about laundry and pollution



It's a subject often forgotten. Our daily impact on the environment. Yea, we all try to recycle, turn off the faucet while we brush our teeth, and teach our kids about not littering. But what about the unseen pollution? The stuff that leaks out of our homes that we aren't even aware of but has a significant impact on the world we live in?

Let's take a quick moment and make ourselves aware of how one household chore is changing our ecosystem, and how we can easily do better. But before you move on, I have to warn you. This may get a little sciency, and you will most likely learn something new!

To put it clearly, your choice of laundry detergent has a direct impact on the quality and health of your local lakes, streams and water supply. How, you ask?

If you are washing your clothes with heavy chemicals, your laundry's wastewater includes a hefty amount of chlorine bleach, lots of detergent, acid, fragrances, softeners, and more. All of this adds up to mean the wastewater coming from a typical washing machine is not very nice. In short, it does the opposite of what your local wastewater treatment plant is trying to accomplish, so that when the water

is discharged into our environment, it won't damage the receiving stream's water habitat. Or to put it more simply, it won't kill the fish!

Here's the science:

- The wastewater treatment plant works to do the following things:
 - lower the Biological Oxygen Demand (BOD)
 - lower the Chemical Oxygen Demand (COD)
 - raise the Dissolved Oxygen (DO)
- Wastewater from laundry does the following things:
 - raises the Biological Oxygen Demand (BOD)
 - raises the Chemical Oxygen Demand (COD)
 - lowers the Dissolved Oxygen (DO)

The negative factors of a laundry's wastewater (BOD and COD) support the growth of algae in rivers which consumes all of the dissolved oxygen (DO) and thereby suffocates the fish. Who would have known!

The great news is that there is a BETTER way to wash your clothes! One that is not only safe for our environment, but actually GOOD for it!

The natural oxidizers created by pureWash Pro replace most and sometimes all of the detergents, bleach, and softener needed to effectively clean your clothes. Ozone, being made purely of oxygen, first oxidizes and destroys odors, stains, bacteria, viruses, parasites, cysts, oils and greases and reduces them to carbon dioxide, inert material and water.

Think about it, all organic substances are made of long-chain carbon molecules. Stains, odors, living organisms, oils etc. are all made of these molecules. pureWash Pro water with dissolved ozone is full of Hydroxyl Radicals and on contact, they clip the molecules and instantly attach to the Carbon to form something else, the most of which is CO₂ or Carbon Dioxide gas. This Carbon Dioxide gas floats harmlessly into the air – the same gas that comes out of a newly-opened soda or out of your mouth when you breathe. What is left is certainly not a stain or odor or living organism.

These Hydroxyl Radicals are OH molecules that have an insatiable desire to bond with something else. Each time they do, they are delivering oxygen to the material that creates the BOD (biological oxygen demand) and neutralizing the oxygen demand. What a win-win situation! The OH is happy

and now the wastewater is happy. Also, any remaining ozone, oxygen or OH molecules after all the work is done simply raise the DO (dissolved oxygen) content in the water.

Essentially, this is all superlatively green in nature because you are adding oxygen to the environment instead of who knows what chemicals. Now that you've eliminated the BOD & COD and raised the DO, your laundry wastewater will actually benefit the process down at the local wastewater treatment plant, which in turn leaves our lakes and streams cleaner and healthier!

For more information on the science behind pureWash Pro or our laundry's impact on the environment, feel free to shout out to me by emailing sarah@pureWash.com, or you can click the little Help icon in the bottom right corner of your screen.

Until next time, happy laundering!

Sarah