

# ZLD - The Law of Nature!

About the blog



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THEMES

WASTE WATER TREATMENT

With our consistent approach to make our life comfortable and effortless, we are adopting more and more unsustainable life practices with exorbitant use of mechanization, automation and chemicals in our routine lives. Mechanization & automation isn't bad, but the entire industry behind making this happen is in turn causing a lot of imbalance to the natural ecology and environment. To regulate this, we made regulatory bodies for the industries and departments and ministries in Governments to control, manage and regulate the harm done to the environment due to industries, like we have pollution control boards, we have ministry of environment, climate change, global warming, and so on. These bodies keep coming up with new prohibition laws acts in order to minimize the damage caused to the environment.

But today, we've gone beyond the sustainable limits of this damage control. Now we need laws and acts towards restoration of the environment, not mere damage control. And this ZLD or Zero Liquid Discharge policy is one such exemplary step, if implemented and enforced in the right spirit.

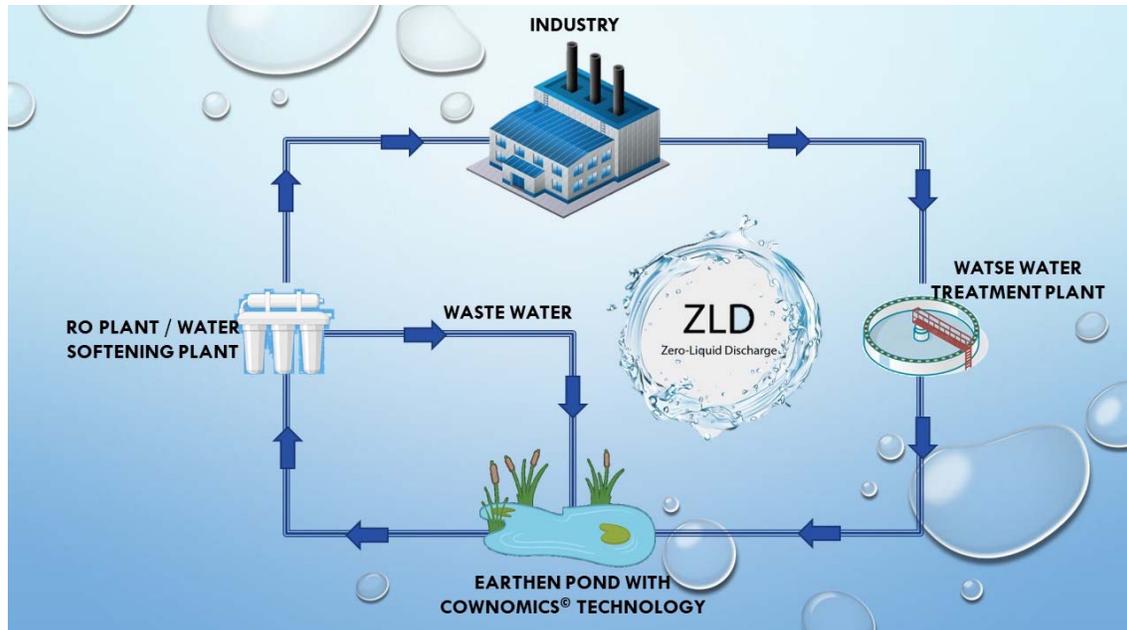
## What is ZLD?

Irrespective of the industry, the consumption and wastage of water is just a mandatory rule. There is no industry on the planet that doesn't use or waste water. Paper to pesticides, tractor to teflon to tannery, adhesive to airplane to automobile – all use and waste water.

Zero liquid discharge is just a policy to keep Restoring, Revitalizing, Rejuvenating, Recycling and Reusing the same water, that has been supplied to the industry, so that they stop wasting water. Which means, if their daily requirement is let's say 10 million liters of water for their routine production and they waste about 9 million liters per day as waste, the regular supply from the government shall be reduced to just 1 million liters

per day, so that they are enforced to recycle and reuse the water that they have been wasting.

Now this idea is very noble, but implementation has many challenges, because none of the available technologies in the market is capable of restoring water to its original natural state, some or the other residue is left in the water, due to which it isn't left reusable for the industry's usage.



## Challenges

1. Every industry has a different contaminant –

The contaminant varies from industry to industry. Like the Teflon industry add PFAS (Poly Fluoro Alkyl Substances) or the fabric protector industry adds PFOS (Per Fluoro Octane Sulfonic acid), but on the other hand the paper industry adds lignin (complex organic polymers). The dye industry is considered to be one of the most polluting industries adding chromium, lead and cadmium in major quantities to their waste water, apart from other harmful pollutants which include sulfur, nitrates, chlorine compounds, arsenic, mercury, nickel and cobalt.

The biggest challenge is to neutralize these variety of contaminants and bring back the water to its natural state to be reused by the industry. None of the existing technologies of ETP / STP is capable of reinstating all of these contaminants. There's no single formula fitting all the scenarios.



## **2. Waste Water Treatment Technology –**

All the technologies available in the market works on a single philosophy – 95% of waste water is pure and on 5% is the contaminant added to it. Thus if we extract this 5% waste from it, the rest would become pure again. But this ideology has a fundamental flaw. The problem is lack of understanding of the basic nature of Water.

Whenever anything is added to water, the decomposition process starts there and then. For example, when we put ammonia in Water it would get decomposed to nitrate, which in turn would get decomposed into nitrite. Therefore, if we take out nitrite out of Water, there's something that is left behind. And thus, Water is not back to itself natural self.

## **The Right & Sustainable Approach**

The only sustainable and continuous phenomena that's happening on this planet since its inception is "nature". In nature there's nothing called waste. Restoring, Revitalizing, Rejuvenating, Recycling and Reusing of all the resources is natural. And the same stands true with water, soil and air as well.

**So the obvious right approach is to take inspiration from nature and mimic the same.**

In nature, this removal of contamination doesn't happen at all. Rather all contamination, pollution, impurities or toxins are consumed and digested in the aqua-ecology.

But if this was true, why are our waterbodies getting contaminated across the globe? It is only because our extent of pollution is beyond the natural rejuvenation capacity of water.

## **So what's the way out?**

The only way out is to increase the digestion and consumption capacity of water so that it is rejuvenated and restored on a daily basis, exactly the same way as we are polluting and contaminating the water on a daily basis.

## **Cownomics© Technology**

This is a Vedic Science inspired technology for rejuvenation of natural ecology in soil, water and air, that doesn't need any machines, chemicals, or



biologicals additives neither any coagulants, enzymes, catalysts, emulsifiers or surfactants. Neither any hydrocarbons are burnt nor is any electricity consumed in the process. The process harnesses the forces of nature and thus is mimicking nature to enhance the consumption and digestion capacity of Water through which all the contamination, pollution, impurities or toxins are consumed and digested in the aqua-ecology, leaving ZERO sludge and all pure and natural water.

## **Limitation**

Like all other processes, there's a limitation here as well.

Since Cownomics© Technology is only working on reinstatement of natural ecology, the existence of the ecology is a mandatory requirement for this technology to work. Which means, earth in the bottom, above which the pool of Water and above which has to be the natural atmosphere. That essentially means that the waterbody has to be earthen linking the Soil, Water and Air, neither laminated from bottom nor a covered top surface, allowing Sunlight to penetrate Water.

Secondly, the surface area of the Waterbody has to be above 10,000 sq.ft.

## **Implementation**

Therefore to implement ZLD in any industry, after the WWTP (Waste Water Treatment Plant) adoption of Cownomics© Technology will make any industry ZLD complaint.