



DIVULGAÇÃO CETESB

Okano: "the water pollution load of São Paulo industries dropped 95% in the last few years"

Efficient use of water

For at least two decades the abundance of natural resources in Brazil stopped being an excuse for excessive consumption on the part of São Paulo state industrial sector. Since the 1980s, the entire chain has strengthened the concept that environmental protection generates profits that really transcend just money.

The work that led (and still leads) to the optimization of industrial activities is even longer standing. Created in 1968, the State of São Paulo Environmental Protection Agency (CETESB) is responsible for licensing and controlling pollution-generating activities, prioritizing the preservation and quality recovery of water, air and soil.

As an example of the entity's positive work, CETESB President Otávio Okano points out that water wastage was mainstream in the past. Today, such practice he

guarantees is another. In addition to focusing on reducing the volume of water consumed by plants, equal attention is given to water treatment. "The water pollution load of São Paulo industries dropped 95% in the last few years", informs Okano, celebrating the result.

Working these last 30+ years for CETESB, the engineer became the company's president in February 2011. One of the priorities of his administration will be to expand the municipalization of environmental permits, increase the list of businesses that can obtain their license through the internet and improve the infrastructure of CETESB's 56 branches.

In this month's interview to *O Papel*, the CETESB executive reveals how the company operated to achieve this significant transformation and highlights that environmental improvements should be a continuous pursuit of all industry segments.

O Papel – How do you outline the scenario of water usage on the part of São Paulo industries?

Otávio Okano – In the early 1970s, plants discharged all the water they used in their industrial activities into streams. CETESB's initial job was to treat such waters, before returning them to their natural flow. The efficiency of these treatments improved over time, leading to an even greater reduction in pollution load. By the mid-1980s, part of the industrial sector began to contemplate the reutilization of water, which also contributed to reduce the pollution load generated by industrial activities. Today, all sectors seek to establish continuous environmental improvement goals.

O Papel – So, water utilization and the various forms of disposal can thus be considered examples of evolution in industrial procedures?

Okano – Let's say they are goals strived by any industrial segment in the state of São Paulo. Based on the awareness that the less water a plant consumes, less it will have to pay for it and for water treatment, everyone strives to optimize processes. Even unions encourage companies to reuse water in their industrial sites. Also on this subject, it is important to distinguish "water reuse" from "reused water". The first is a product that comes from home or municipal sewage treatment, carried out by City's or concessionaires. The second possesses a broader meaning and encompasses water reuse, recirculation or recycling activities within a given industrial activity or process.

O Papel – Is water reuse still an uncommon practice among different industry segments? Why?

Okano – Yes. Many sectors still do not engage in the reutilization of water because they are not encouraged to do so. This lack of motivation is mainly of an economic nature, since many industries do not pay attention to the total cost of water and wastewater in their facilities. And it's not just the cost of the natural resource and the treatment itself. The value includes the non-billing of water captured and volume of water released. Of the 22 hydrographic basins in the state of São Paulo, only three effectively charge for water: Paraíba do Sul, Piracicaba-Capivari-Jundiaí and Sorocaba-Médio Tietê.

O Papel – Therefore, billing for water works as a motivator towards more efficient water management in industrial activities?

Okano – Paying for water consumption is certainly one of the ways for promoting efficient use. The schedule for billing the use of water is advancing. I think that in five years, all hydrographic basins will charge for the use of water. Good industrial management should preferably begin with

conservation, minimization and optimization of the direct usage, in order to then focus on reuse and recirculation actions associated with wastewater treatment.

O Papel – In what way does CETESB offer support towards engaging in cleaner processes?

Okano – The periodic inspection of companies could be considered a measure that favors the adoption of more appropriate methods. Since 2002, operating permits are no longer fixed. At the time, it was defined that they would be renewed every two to five years on average, according to size and volume of water consumed by a plant. Even with companies complying with their obligations, we saw an opportunity to make gradual improvements and established goals. The measures adopted to achieve the goals stipulated depend on the programs followed by each company.

O Papel – Do certain sectors stand out in relation to others in terms of efficient water usage? Where does the pulp and paper industry rank?

Okano – Industrial segments stand out in different ways. There are those that encompass a large number of companies, such as the sugar & ethanol sector, totaling more than 180 companies in the state of São Paulo. Of this total, most already adopt water recirculation at their industrial sites. The pulp and paper sector, in turn, stands out for its reduction in water toxicity. Additionally, many companies collect only the volume strictly necessary for production, implementing appropriate environmental practices.

O Papel – Is any sort of benchmarking conducted between different industrial segments?

Okano – The Federation of Industries of the State of São Paulo (Fiesp) is the top entity encompassing all industry sectors, but very little exchanging of experiences is done. At CETESB, each sector communicates with its respective environmental body. In practice, there isn't an exchange per se, since the wastewater generated differs from one sector to another, leading to specific process-optimization challenges.

O Papel – Do you believe that the population has also developed greater awareness about the efficient use of water? Does this aspect influence the adoption of new industrial methods?

Okano – Without a doubt, environmental awareness has evolved these last 20 years. But I believe that the real impetus to adopt sustainable activities more and more has come from the industrial sector, since there exists an undeniable economic relationship in parallel with the environmental. ■

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