

CESME

WATER-SAVING STRATEGY: REUSE OF WASTEWATERS

Presented by Granarolo S.p.A.

Point of contact
<i>Mirella Di Stefano – Environmental management system</i>
Brief Description of Good Practice
<p>Granarolo is the leading Italian company in the sale of fresh milk and is one of the market leaders for fresh cheese (3rd largest market share).</p> <p>Granarolo is located in a subsidence area, i.e. an area where there is an excessive withdrawal of ground water. Before, Granarolo was taking 50% of the water needed from wells and 50% from the aqueduct (data of 2012-2013), with a total amount of about 1 million cubic meters of water. However, water consumption decreased to 860,000 m³ and then 600,000 m³ from wells given the authorized limit.</p> <p>Today, thanks to the plant of wastewater treatment, water coming from the sedimentation of the purifier is treated through sand filtration (to remove most of the suspended solids) and subsequent ultrafiltration to appropriately filter the water sent to final reverse osmosis. Part of this water is sent to the thermal power plant and the rest is mixed with water coming from the ultrafiltration in order to obtain a suitable mix to supply the cooling towers. Osmosis and ultrafiltration concentrate will then be sent to the purification plant.</p> <p>Thanks to the reuse of wastewater, the water saving rate is equal to 12% compared to the last medium term.</p>
Problems/challenges and how they were overcome
<p>Wastewater could be reused also for other means, however, given the strict prohibition of contact with products, this is not possible.</p> <p>The agri-food sector is indeed a very delicate and high-controlled sector.</p>
Impact from Good Practice
<p>60,000 m³ of water are reused every year.</p> <p>Water saving rate is 12% compared to the last medium term.</p> <p>The cost of the water used is 2,00 euro per cubic meter, so the money saved through reuse of wastewater is equal to 120,000 euro.</p>
Lessons learnt from the Good Practice
There is a lack of exploitation of poor-recharging resources.

Recommendation you want to stand

More incentives and a stronger support from both environmental and veterinary institutions together, especially in the dairy industry.

For more information

www.gruppogranarolo.com