Green Leather Industry for the Environment (greenLIFE) is a project run by a group of industry partners in Italy's Arzignano tanning cluster. The project partners have committed to sharing their findings by publishing a series of papers in World Leather. The fifth of six greenLIFE articles comes from the cluster's wastewater treatment service provider, Acque del Chiampo.

greenLIFE 5: Lifecycle assessment of the domestic and industrial wastewater treatment service at the Arzignano treatment works

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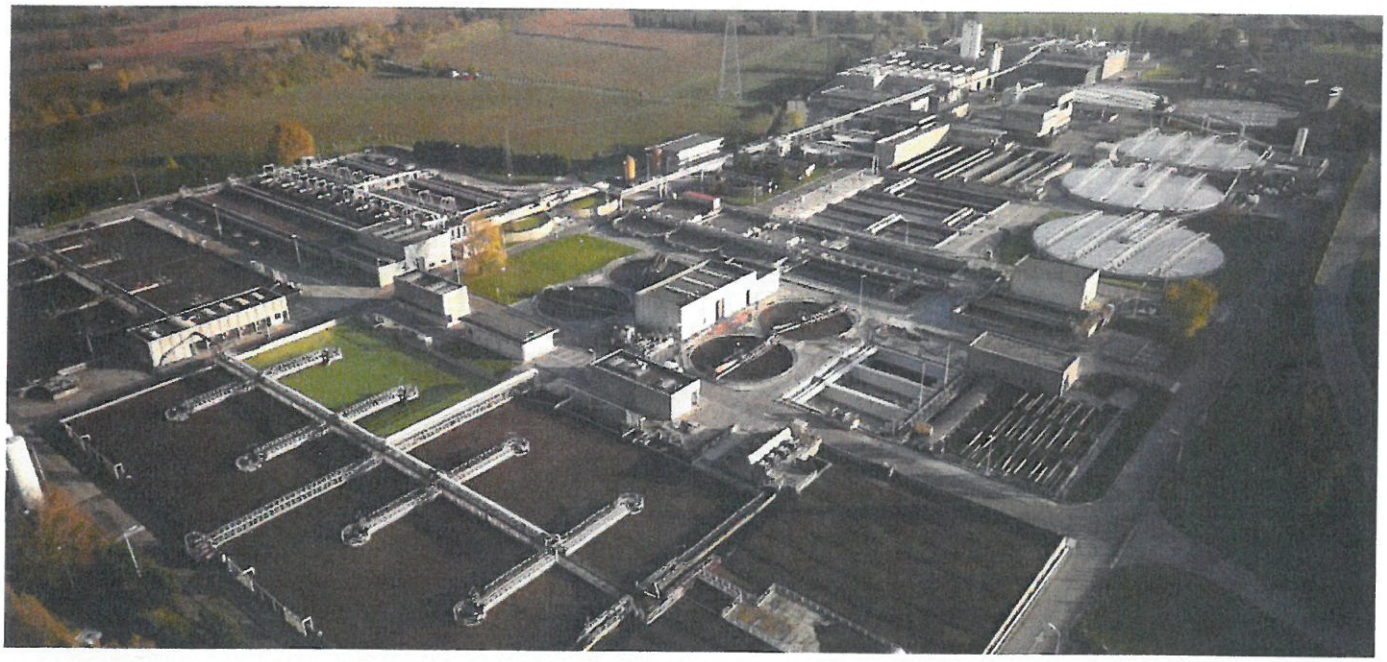

Introduction

Acque del Chiampo Spa is a company dedicated to the centralised 360-degree management of water supply, sewerage, wastewater treatment and sludge disposal services. More specifically, Acque del Chiampo manages the Arzignano treatment plant which, in addition to treating domestic wastewater from the seven municipalities in the Chiampo valley, also treats effluent from the tanning industry.

Acque del Chiampo is a partner in the greenLIFE project, the aim of which is to develop and implement new leather tanning processes. The company's role is to provide technical-analytical consultancy services and process the analytical data obtained from effluents and, in part, the resulting by-products. Acque del Chiampo's aim is to assess the potential impact on the operation of the consortium treatment plant if the new processes being investigated were to be adopted by the tanneries, and subsequently by other (or all) affected businesses connected to the treatment plant.

In order to be able to assess the potential impact on the treatment activities created by the introduction of these new technologies, Acque del Chiampo has, in collaboration with Aequilibria, carried out a lifecycle assessment (LCA) of the treatment of the effluents arriving at the Arzignano treatment plant. The purpose is to determine the environmental impacts and then evaluate how these impacts could change in line with variations in the characteristics of the incoming industrial effluent.