

French WWTP installs LIT open channel UV-system

Recently O.E.I. France, distributor of LIT for the French market, installed a LIT open channel UV system in the South of France close to the Mediterranean Sea. The system is placed in the municipal Waste Water Treatment Plant (WWTP) of the village of Canet-en-Roussillon with 10.182 inhabitants. The capacity of the WWTP however is based on the summer season population of 66.000 inhabitants.



The LIT UV system is part of a classical urban WWTP water line. The design of the plant was based on an hourly peak flow of 21.000 m³ per day and treats on average 12.250 m³ per day. The municipal waste water is first treated by an activated sludge system including a clarifying process. Just before the discharge into the Têt River the effluent passes through the UV-system. The river then runs for 2 more kilometers before it reaches and flows into the Mediterranean Sea.



The installed LIT UV system consists out of 2 banks of 3 modules with twelve 350W lamps each. The lamps are submerged and placed parallel to the flow. The entire UV system is installed outdoor. All electrical cabinets are built in stainless steel, to withstand the Mediterranean climate conditions. Because in summer the outside temperature can reach up to 40°C, the cabinets are equipped with air conditioners. An Automatic Water Level Control System (AWLCS) including a channel slide gate assures a constant water level in the UV channel. Integrated monitoring and control of the water level is essential for the performance of horizontal open channel UV systems. The UV-sensor controls continuously the applied UV intensity. An Ethernet connection with Scada system facilitates remote logging and control of the entire UV system.

The installation of the LIT UV system in Canet-en-Roussillon assures the water quality to comply with the stringent European Bathing water directive. This compliance is an essential part of the annual review by the Foundation for Environmental Education (FEE) and allows this popular touristic area to wave the blue flag on their beaches. The blue flag is an indication for sustainable development at beaches/marinas through strict criteria dealing with water quality, environmental education and information, environmental management, and safety and other services.

