

# STUDIES AND EVALUATIONS OF CAPACITY AND EFFICIENCY OF PLANTS FOR WASTEWATER TREATMENT

**Innovations and Benefits** - In some geographical regions of our country there are complex problems related to the water cycle. Typically, the critical areas referred to are those with:

- Strong human activities
- Pollutant loads deriving from particular industrial activities and / or chemicals
- Urbanized areas subject to highly fluctuating loads
- Accidental or malicious spills of waste.

**Use** - The areas of intervention are those under the attention of the judiciary and the European Community, with infringement procedures in relation to wastewater treatment. In these complex contexts the ability to manage the water cycle effectively and efficiently is limited by the difficulty of carrying out a clear and shared analysis of the initial situation and then dealing with the necessary guarantees to implement new technologies with criteria of sustainability and circular economy.

**Applications and ongoing Activities** - ENEA, acting as "government reference" with sufficient strength and autonomy in the resolution of critical aspects regarding the integrated water cycle, has played a guiding and mediation role in the project choices, in the implementation programs, in the development and monitoring plans of different contexts. See for example:

- Consultancy activities for investigations on the water system of the Regi Lagni at the Public Prosecutor's Offices of Nola and Santa Maria Capua Vetere (CE).
- Assignment of legal custody and management for the adaptation of the Consortium Purifier of Nolana Area (NA).
- MBR technology integration projects for the Purifiers of Rocca Imperiale (CS) and Nova Siri Marina (MT).

The actions for the improvement of the wastewater treatment systems are carried out with a view to safeguarding the needs of the community and the sustainability of the programs to be assigned to the workers involved, linking the interventions with the supervisory and control bodies in the management of crisis situations.

