IDRABEL
ENVIRONMENTAL BIOTECHNOLOGY

BIO-EPUR references for waste-water treatment plants (WWTPs)

The problems encountered in these different plants were:
- relatively low treatment yields
- odour nuisances at and around the plant
- excessive sludge production in the secondary settling tanks of the plants+
- high operating costs

Client	Site	Period of treatment	Issues to solve	Results
Essity (BEL)	WWTP and lagoon of Stembert (paper mill)	2019 Ongoing	BOD too high after physico-chemical treatment and before discharge	Ongoing tests
Boisset Bourgogne – (FR)	WWTP of the main industrial complex (winery)	2019 – 2018 Ongoing	Problems with the WWTP's performance	Improvement of WWTP efficiencies and discharge standards
Bières de Chimay (BEL)	WWTP of production site in the abbey of Scourmont	2019 – 2018 Ongoing	Insufficient results, poor yields in winter	Stabilization of WWTP yields and a correct functioning in winter
Puratos (BEL)	WWTP of Lummen (production of yeast)	2019 – 2016 Ongoing	Poor treatment efficiency; odour problems	Improvement of WWTP efficiency and discharge standards met
Puratos (BEL)	WWTP of Saint-Vith (production of yeast)	2019 – 2016 Ongoing	Poor treatment efficiency; odour problems	Improvement of WWTP efficiency and discharge standards met
Puratos (BEL)	WWTP of Grand-Bigard (production of yeast)	2019 – 2016 Ongoing	Poor purification efficiency; odour problems	Improvement of WWTP efficiency and discharge standards met
Européenne Lyophilisation (BEL)	WWTP of Flemalle	2019 – 2004 Ongoing	Undersized station efficiency	WWTP working correctly
Puratos (BEL)	WWTP of Belden Andenne (production of yeast)	2019 – 2002 Ongoing	Poor treatment efficiency; odour problems; very high discharge tax	Reduction of the discharge tax by more than €500,000; no more odours linked to the station, reduction of sludge production by more than 50%
Several Car Wash businesses (BEL)	WWTP of Car-wash for water re-use in Flanders	2019 – 2004 Ongoing	Low performance of undersized stations in about ten sites	No more odours and better reuse of process water
Brasserie Lefevre (BEL)	WWTP of Quenast	2016 – 2011	Undersized station efficiency and high odour emission	Total absence of odours and plant output values in compliance with discharge standards
Engie Cofely (BEL)	WWTP and pipes of Electrabel Tihange	2015 – 2010	Problems with sewer clogging and bio-disc plant performance	Perfect cleaning of pipes, no cleaning of pumps needed and improved bio-disc yields
Passendale (BEL)	WWTP of Fromunion (cheese production)	2015 – 2008	Filament and yield problem; Strong odours; Low nitrification	No more odours; no bulking
Engie Cofely (BEL)	Tech Space AeroMilmort	2011 – 2005	Processing of Glycol, process oils, and various other complex organic products	A small plant has been built with Cofely to allow these different treatments in alternation

Engie Cofely (BEL)	WWTP of Terbeke Andenne	2011 – 2004	Problem of presence of biocides in wastewater; Odour problems	Significant improvement of biological life during the cleaning phases
Engie Cofely	WWTP of Sugar refinery in Longchamps	2010 – 2006	Cleaning of sewage lagoons; Odour problems	50% reduction in use of surface aerators -> reduction in energy consumption
Engie Cofely	WWTP of the Fabrique National (Herstal)	2007 – 2002	Treatments of basins containing very high quantities of surfactants	COD reduced by approximatively 97%