

## PT Toba Pulp Lestari Effluent Treatment Plant (ETP)

PT TPL has ETP to treat all the wastewater generated during the process from the wood yard, pulping process, chemical plant, chemical recovery loop, energy, landfill, and other supporting facilities before being discharged into the river. This Effluent Treatment involves a physical process (screening, deposition, temperature reduction), a biological process (activated sludge process) and a minor chemical process (floc formation, pH adjustment). Effluent treatment is controlled by a Distributed Control System (DCS) which is controlled by the operator from the control room, online wastewater quality analyzers to automatically measure the quality every time, and 24 hour laboratory control. PT TPL also has one emergency basin to ensure stable and homogenous wastewater quality to be treated to ensure quality before discharge. Wastewater quality is checked regularly by accredited laboratories following regulation standards and maximum permissible limits. Besides, in 2021, PT TPL SPARING system has been online and started reporting effluent quality to the government for 24 hours.

