Abstract

In every field of sugar industry will be produce the waste during the production process. In the process of the sugar industry will result in either liquid waste, solid or gas. Toelangan sugar company is one of the sugar industry which has made the processing of waste, one of them with the treatment of wastewater. According to data of the UKL-UPL that all parameters have met the standard of wastewater SK.Gub. Jatim No.45 Tahun 2002, but due to additional source of untreated wastewater in Wastewater Treatment Plant (WWTP) at Toelangan sugar company it is necessary to re-checking at each source of waste produced by the Toelangan sugar company. It turned out that water imbibition (water used to wet bagasse at the mill in order to optimize the nira extract) at Toelangan sugar company not flowed untreated into Wastewater Treatment Plant (WWTP) and thus still pollute the environment. Therefore, we need to redesign of the WWTP Toelangan sugar company.

To facilitate the planning of the WWTP Toelangan sugar company, it is necessary to calculate the pollution load to the new plan. Based on calculations, the need for wastewater treatment due to aerobic or anaerobic waste treatment in Toelangan sugar company which done as well as the lack of adequate sludge treatment.

Building wastewater treatment plants are planned consist of Anaerobic Baffle Reactor (ABR) and Sludge Drying Beds (SDB). Building aerobic is used aeratood lagoon and building anaerobic is used Anaerobic Baffle Reactor (ABR)

Because all the old buildings still in operation processing will still be used for new planning wastewater PG. Toelangan. This
plannning is need to add an anaerobic process using Anaerobic Baffle Reactor (ABR) and Sludge Drying Beds (SDB) as a sludge treatment building.

Key words:
Wastewater of sugar company, redesign, aerobic and anaerobic process