



International Journal of ChemTech Research CODEN (USA): IJCRGG, ISSN: 0974-4290, ISSN(Online):2455-9555 Vol.9, No.07 pp 318-323, 2016

Treatment of Activated Sludge Lagoon Inlet Wastewater in Pulp and Paper Industry

Sudarshan Kumarasamy^{*1}, P. Kotteeswaran² and A. Murugan¹

¹Department of Chemistry, Kalasalingam University, Srivilliputhur, India. ²Department of Chemistry, Renganayagi Varatharaj College of Engineering, Sivakasi, India.

Abstract : Pulp and paper industry releases a huge volume of wastewater and it pollutes the environment. The pollution problems related to this type of industrial wastewater are mainly due to color, toxicity and odor. The removal of chemical oxygen demand (COD), biochemical oxygen demand (BOD), color and total suspended solids (TSS) of the wastewater is studied using coagulants like Ferrous sulfate, Alum, medium and high basicity of Polyaluminium chloride (PAC). At the optimized pH attained from these coagulants using to treat the wastewater, the flocs formation / settling and the pollutant removal efficiency is encouraging. The resulting color of the wastewater during Ferrous sulfate treatment is very effective for this wastewater is very effective compared with others. The reduction efficiency of color, TSS, COD and BOD₅ of the wastewater is 91%, 81%, 76% and 65% respectively. **Keywords :** BOD₅, COD, coagulation, pulp and paper mill, wastge water.

Sudarshan Kumarasamy et al /International Journal of ChemTech Research, 2016,9(7),pp 318-323.
