New wastewater treatment technologies in petrochemical industries

Caşen PANAITESCU^{a*}, Cornel PĂTRAŞCU^a, Loredana DOBRE^a and Maria POPA^a

^aDepartment of Chemical and Petrochemical Engineering, The Oil-Gas University of Ploieşti.Bd.Bucureşti no. 39, 100680, Ploieşti, Romania

Abstract In the petrochemical industries where water-using activities create an important flow of wastewater, is necessary to find the best solution for wastewater treatment. In this paper are presented the advantages of new technologies of wastewater treatment based on natural biochemical processes and also the results obtained with those technologies. The condition for collecting, wastewater treatment and water evacuate and condition for pollutants concentration limits in water that are evacuate in surface water, are regulated by NTPA-001/2002 and H.G.352/2005. The advantage and disadvantage of application of new and old wastewater treatment technologies is based on analysis form wastewater six month in different petrochemical wastewater treatment plants. Also the efficiency of new wastewater treatment technologies are calculated and compared.

Keywords: wastewater treatment, effluent, efficiency.