

EVALUATION OF TECHNOLOGICAL SOLUTIONS FOR A MORE EFFICIENT OPERATION OF THE BIOLOGICAL TREATMENT PLANT OF THE MUNICIPAL ENTERPRISE „APA-CANAL” MAGDACESTI

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Abstract. The paper advises technological solutions to overcome the current shortcomings by modifying the technological line in order to increase the oxidation potential of the treatment system. The Magdacesti biological treatment plant serves here as an example, where a new source of pollution, the “Ocean Fish” factory, has recently appeared. At the major loading during the biological treatment stage the activated sludge, as well as the biological film, formed by flakes of aerobic microorganisms, changes the composition of their cultures and loses their sedimentation properties. The anaerobic pretreatment process and the integration in the aerobic process of the “Integrated Fixed-Film Activated Sludge” technology for the intensification of biological treatment have been recommended.

Keywords: active sludge, biological oxygen demand, biological treatment plant, chemical oxygen demand, integrated fixed activated sludge.