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PRELIMINARY STUDY OF SIMPLE AND FENTON OXIDATION WITH HYDROGEN PEROXIDE APPLIED ON FINAL EFFLUENTS FROM A ZOOTECHNICAL FARM

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Abstract

The paper presents the preliminary experimental results performed at laboratory scale set-up for different combined mechanochemical treatments of final effluents from a zootechnical farm from the central Moldavian region of Romania. Because of the high content of pollutants into wastewaters, the soil can be polluted and also the ground waters. To avoid this soil pollution episode, some combined mechano-chemical processes were studied and applied into a specific technological order as coagulation-sedimentation-oxidation or coagulation-sedimentation/filtration-disinfection. Thus, the treated wastewater can be safely recycled for diverse requirements into the zootechnical farm or can be used for irrigation in condition of water scarcity or drought.

Key words: coagulation, combined treatment, disinfection, hydrogen peroxide, mechanochemical treatment, oxidation, sedimentation, wastewater, zootechnical farm

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