

Indirect Contact Wsatewater Treatment System with Natural Mineral Catalyst

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Indirect Contact Catalyst Wasterwater Treatment System which dilute NaOCl solution is contacted with mechanical catalyst to give catalytic oxidation-water is a new wastewater treatment system. This system is operated under ambient temperature and normal pressure. Especially the catalyst is separated with reactant in this process. So this Indirect Contact Catalyst Wasterwater Treatment System has advantage of cleaning as well as cost economy. Because of high cost of catalyst and low reaction activity, more efforts are needed to develop cheaper and more efficient catalyst. Recently we made the natural mineral catalyst from simple solid state reaction method. This natural mineral catalyst could enhance oxidation potential of catalytic oxidation-water about 100mV comparing with dilute NaOCl solution without catalyst. In the degradation of Orange-2, this system enhanced over 15% of CODcr than dilute NaOCl solution.