VISVESWARAIAH TECHNOLOGICAL UNIVERSITY

BELGAUM-590014

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A Project Report on

DEVELOPMENT AND FORMULATION OF EFFECTIVE MICROORGANISM[EM] TECHNOLOGY FOR THE EFFECTIVE TREATMENT OF DAIRY INDUSTRY EFFLUENT

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SYNOPSIS

Of all industrial activities, the food sector has one highest consumptions water and is biggest producer's effluents per unit production in addition to generating; besides generate a large volume sludge biological treatment (Ramjeawon, 2000). Dairy industry an example this sector, which cleaning silos, tanks, heat exchangers, homogenizers, pipes other equipment, engenders amount with high organic load. load basically constituted by milk (raw material products), reflecting effluent levels chemical oxygen demand (COD), biochemical (BOD), oils grease, nitrogen phosphorus. Moreover, automatic system – CIP (cleaning place) - discards rinse waters pHs varying between 1.0-13.0. [Braz. J. Chem. Dec. 2007]

As a result of the new EPA policies, business expansion and a growing environmental responsibility like bad odor in surrounding areas, and health effects on humans and animals because of dairy industry effluent there is an urgent need to review the guidelines for the management of milking shed effluent and implement a assistance of proper management.

EM technology i.e the use of microorganisms to treat organic matter in the most effluent is most effective method for treatment of effluent and it is cost effective method also. It includes all the fool grade microbes which are all harmless to environment. It has very good effect on pH, odor and clearance of effluent. Thus treated effluent can also be used for gardening and plantation.