



VI. CONCLUSIONS

1. Synthetic wastewater of fish cannery was used in the laboratory-scale activated sludge. The concentration of the simulated BOD, COD and most of the parameters were approaching those of the wastewater from the SAFCOL (THAILAND) FISH CANNING FACTORY. The grease and chloride contents were neglected on purpose.

2. The efficiency of BOD removal was over 95% and over 90% COD removal.

3. In designing activated sludge for fish cannery wastewater, the optimum range of F/M ratio was likely to be 0.2 - 0.4 (or SRT 33 - 10 days).

4. The SVI under 50 seemed to be beneficial in sludge settling.

5. Eightytwo - ninety two per cent of the suspended solids was removal.

Volatile mixed liquor suspended solids was found to be equal to 90% of mixed liquor suspended solids.

6. The organic content of the raw wastewater was high. Sludge rising would be expected when the F/M ratio was higher than 0.6

7. The maximum rate of substrate utilization per unit weight of microorganisms, k was 1.15 day^{-1}

Half velocity coefficient, K_s was 40 mg/l

8. Solids Yield Coefficient, Y was 0.415 mg/l/mg/l

9. Microorganism decay coefficient, b was 0.0415 day^{-1}