

CHAPTER 9

CONCLUSIONS

The following conclusions may be drawn from the study :

- 1) The sludges from the bottling plant have a high BOD value (averaging 300 mg./l.) and must be treated before they are brought to dewater in the drying bed.
- 2) At normal temperature of our country, aerobic digestion can be used to treat sludge if settleability is improved.
- 3) A **detention** period of 15 days is sufficient for this sludge with total solids up to 2 % .
- 4) To treat this kind of sludge by aerobic digestion, the settleability of sludge is a serious problem.
- 5) Supernatant liquors from aerobic digesters exhibit relatively low BOD values when compared with anaerobic digestion liquors.
- 6) No odour is detected from sludge after digestion.
- 7) The **reduction** in volatile solids, BOD and COD is the function of time and temperature.
- 8) The reduction in volatile solid, BOD and COD as observed at 35°C is a little higher than at 30°C.

RECOMMENDATIONS

The following studies are hereby recommended as a continuation of this investigation.

- 1) An investigation should be made by other methods of treatment for soft drink sludge such as anaerobic digestion and chemical coagulation.
- 2) An investigation should be made in treating sludge of another waste by aerobic digestion.
- 3) An investigation should be made to improve the settleability of sludge by physical, chemical and biological methods.
- 4) More details such as all forms of Nitrogen in sludge should be carried out.