

Table No. 1

 EXPECTED LOADS ON THE TREATMENT PLANT

I T E M	First Phase	Second Phase
Number of Inhabitants	26 000	41 000
Sewered Population	20 000	35 000
Specific Flow (l.p.c.d.)	120	140
Sewage - daily flow cu.m/d	2 400	5 000
Pollutant Contribution BOD and SS (g.p.c.d.)	50	60
Pollutant Load (Kg/d)	1 000	2 100
Pollutant Concentration (mg/l)	400	420

*120 x 12000 = 1440000
 / 1000 = 1440 m³/d*

4. TREATMENT PROCESS

4.1. General

Four basic methods can be considered as representative of the biological processes which can produce high quality effluent. Their technical and economic aspects should be studied and compared in order to find the most suitable method of sewage treatment. These methods are:

- a. Trickle Filters - A method in which air is introduced naturally and not mechanically into the wastes, and has proven itself, in operation, in many places over the world for many years.
- b. Rotating Biological Contactors (R.B.C.) - A process based on a fixed film biological reactor consisting of plastic media mounted on a horizontal shaft and placed in a concrete basin. This process is preceded by primary settling and followed by secondary clarifiers. It requires additional stabilization of the sludge.