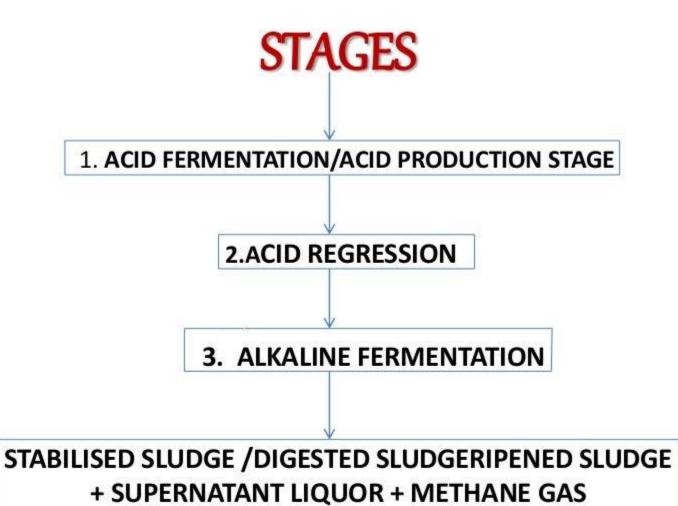
Subject name: Sanitary Engineeing

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HIGHLY ACIDIC.

PH < 6

 HIGHLY PUTREFACTIVE ODOURS ARE EVOLVED FOR 15 DAYS.

BOD IS INCREASED.

BRIEF EXPLANATION OF MAJOR FACTORS

(a) ZONE OF THERMOPHILIC DIGESTION

- THERMOPHILIC ORGANISMS MEAN HEAT LOVING ORGANISMS.
- $40^{\circ}C 60^{\circ}C$
- OPTIMUM THERMOPHILIC TEMPERATURE = $54^{\circ}C$
- DIGESTION PERIOD 10 TO 15 DAYS
- IT IS NOT PREFFERED BECAUSE OF ODOUR AND OPERATIONAL DIFFICULTIES.

2. PH VALUE

- VOLATILE ACIDS METHANE FORMERS METHANE GAS
- IF METHANE FORMERS WERE NOT PRESENT IN THE SLUDGE DIGESTER, PH VALUE WILL GO BELOW 5. IT WILL INCREASE THE ACIDITY, AND THUS SUPPRESS FURTHER BACTERIAL ACTION.
- IN INITIAL STAGE (ACID FERMENTATION/ACID PRODUCTION STAGE) PH VALUE OF 6.5 HAVE TO BE MAINTAINED.
- SO THAT IN FINAL STAGE (ALKALINE FERMENTATION STAGE) PH VALUE OF 7.2 – 7.4 WILL BE MAINTAINED.

SEEDING WITH THE SLUDGE DIGESTER

WHAT IS SEEDING?

*A SLUDGE DIGESTION TANK.

*WHEN FIRST PUT IN OPERATION -

*DIGESTED SLUDGE FROM OLD SLUDGE DIGESTER IS KEPT IN IT FOR SOME DAYS.

THANK YOU...