

A REPORT ON VISIT OF
**RAIYA SEWAGE
TREATMENT PLANT**

RAIYA ROAD, SAURASHTRA
UNIVERSITY CAMPUS, MUNJKA,
RAJKOT, GUJARAT 360005

ORGANISED BY
**DEPARTMENT OF COMMUNITY MEDICINE
RAJKOT HOMOEOPATHIC MEDICAL COLLEGE
PARUL UNIVERSITY**

(A. Y. 2020-2022)

PLACE OF VISIT

Raiya Rd, Saurashtra University Campus,
Munjka, Rajkot, Gujarat 360005

DATE OF VISIT

16th & 17th July 2021



WHAT IS SEWAGE?

Sewage is a waste water from a community, containing solid and liquid excreta, derived from houses, factories and industries.

COMPOSITION OF SEWAGE

Sewage contains 99.9% water. Remaining 0.1% includes organic & inorganic substances which are suspended in the waste water.

HEALTH ASPECT

- Sewage is a potent source of infection and can be a habitat of many insects and mosquitoes which are likely to spread various diseases.
- Sewage produces pollution of soil & water, hence proper treatment of the sewage is essential.
- Sewage causes contamination of food if sent directly in rivers without processing.

AIMS OF SEWAGE PURIFICATION

- To make the sewage free from harmful chemical, physical and biological matter.
- To make the sewage decontaminated.
- Reuse of waste water as fertiliser in agriculture.
- Prevention of water & soil pollution.
- Maintenance of sea flora.

PROCESS OF SEWAGE TREATMENT

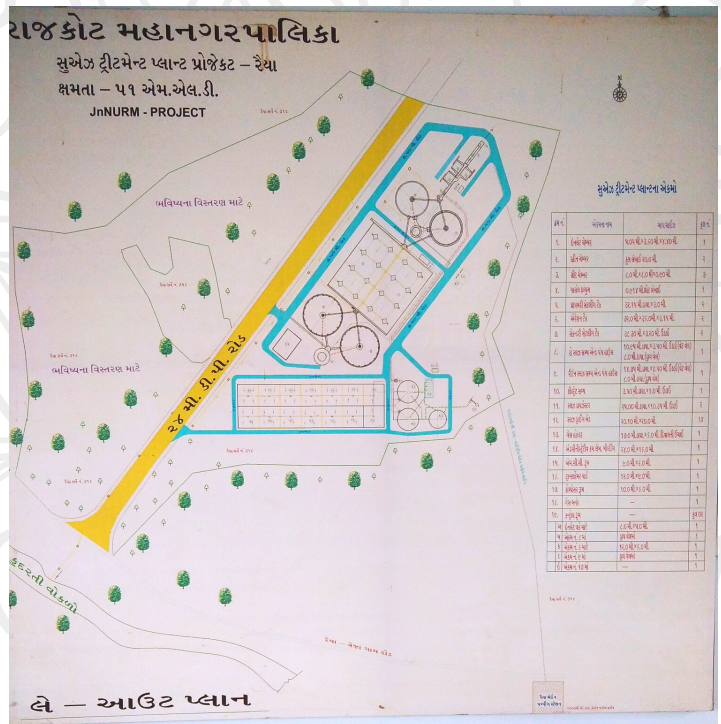
It includes

(A) Primary treatment : Screening, Grit Chamber, Primary sedimentation

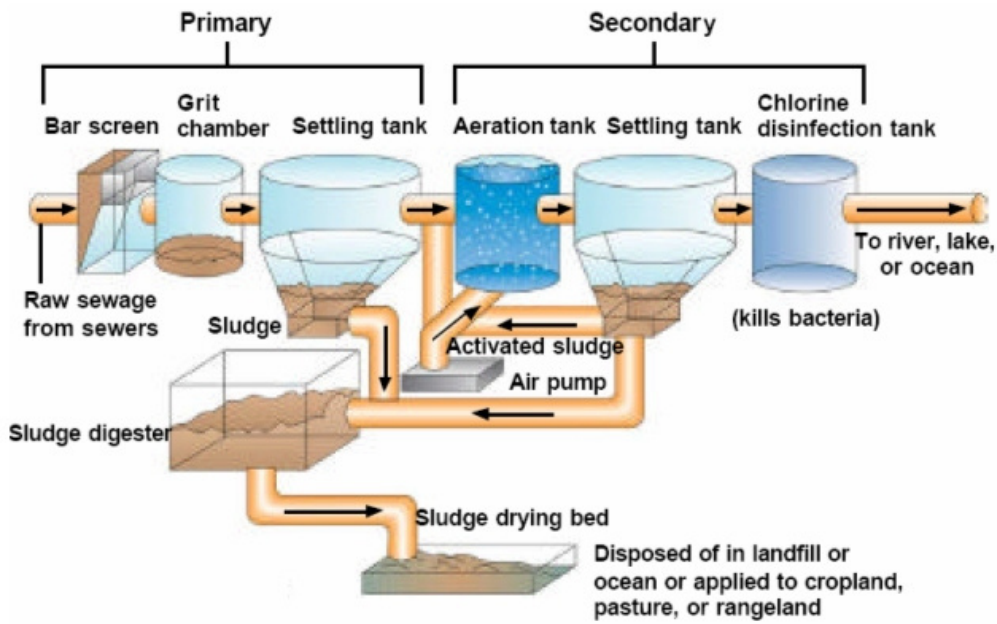
(B) Secondary treatment : Trickling filter, Activated sludge process, Secondary sedimentation

(C) Sludge Digestion

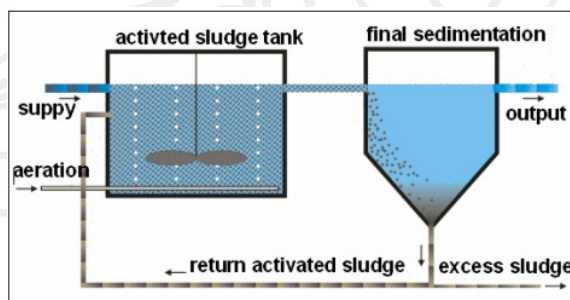
(D) Disposal of effluent



Layout plan : STP, Raiya, Rajkot, Gujarat



Flow diagram of a modern sewage treatment plant



Activated sludge process

OUTCOME OF SEWAGE TREATMENT

Followings are the end products of Sewage Treatment :

- (A) Effluent : Used in agriculture or can be mixed with river water or sea.
- (B) Methane Gas : Used as bio-fuel and also for heating and lighting purpose.
- (C) Fertiliser : Dried sludge is used as natural fertiliser.



GUIDED BY

DR. ANUP KUMAR DAS

HOD, Department of Community Medicine,
Rajkot Homoeopathic Medical College, Parul University



GUIDED BY

DR. HUMANI SHARMA

Lecturer, Department of Community Medicine,
Rajkot Homoeopathic Medical College, Parul University

PREPARED BY

JAY SARVAIYA

Roll no. 83, 4th BHMS
(2020-2022)

