

# **WATER - TEK**

**A Leading Company in Water Treatment,  
Waste Water Treatment & Sea Water Desalination**



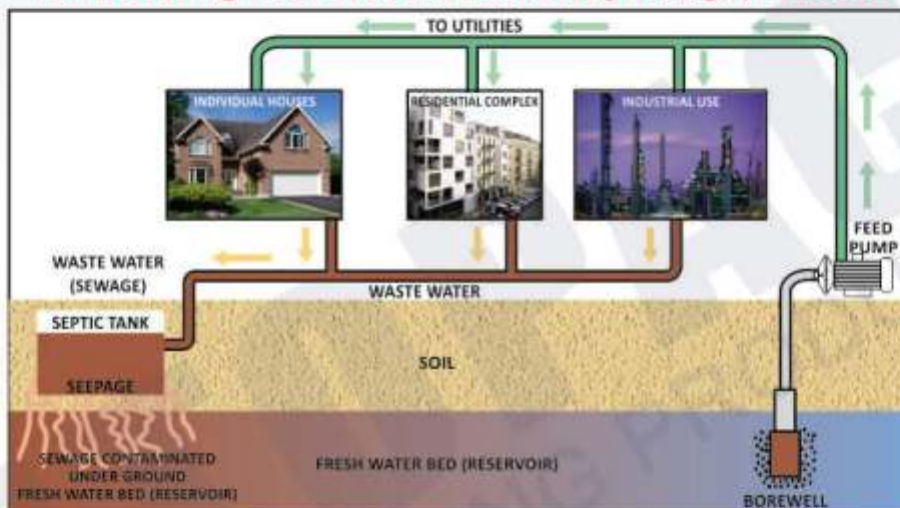
**Global Sterling Products Ltd.**

**Global Sterling Products Ltd** is a reputed process engineering company dealing in end to end solutions conceptualization, design, detailed engineering, supply, installation, training and post installation support of below:

- RO Plants (Industrial & Domestic)
- DM Plant
- Effluent Treatment (ETP)
- Sewage Treatment (STP)
- Sea Water Desalination
- Swimming Pool Filtration
- Water Softener Plants
- UV Disinfection
- Ozonators



### How Drinking Water is Contaminated by Sewage / Effluent



Waste management is the collection, transport, processing, recycling or disposal, and monitoring of waste materials, without affecting humans and other life systems and without disturbing the environment. The term usually relates to materials produced by human activity either at home / office / industry / agricultural fields / mines etc., and is generally undertaken to reduce their effect on health, the environment or aesthetics. Waste Management is also carried out to recover resources from it.

### Why we need ETP / STP

As the world has industrialized and its population has grown, the problem of water pollution has intensified. With numerous factories having no choice, inject untreated effluents directly into the ground, contaminating underground aquifers.

Another cause of water contamination is improper strategy of sewage treatment. Since human waste contain bacteria that can cause disease. Once water becomes infected with these bacteria, it becomes a health hazard. There are following sources of sewerage effluent as:

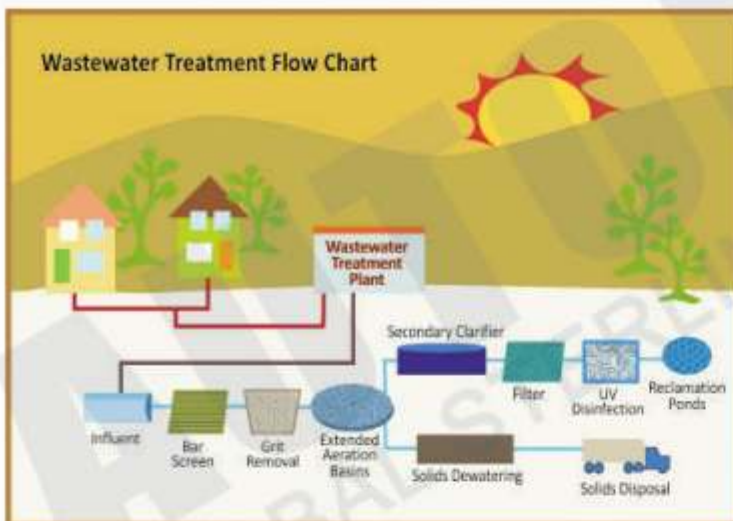
- Residential apartment
- Commercial complex
- Public amenities/convenience
- Labour camp/Defence/Refugee camp
- Resorts & clubs
- Factories/Industries



Sewage / Effluent Treatment Plant is a facility designed to receive the waste from domestic, commercial and industrial sources and to remove materials (containing physical, chemical and biological contaminants) that damage water quality and compromise public health and safety when discharged into water receiving systems.

### Key Components:

- Sewage / Effluent collection tank: Where preliminary, effluent is collected.
- Screening: Any solid materials like; iron particles, stones, plastic items, grass weed, polythene paper, cloth etc are checked through bar screen filter to avoid any damages of the transferring pump.
- Equalization tank: In which, suspended materials are mixed properly to make a homogeneous mixture. An steering arrangement is employed in the tank.
- Neutralization tank: Some chemicals are added for maintaining Ph, and for quick flocculation.
- Sludge tank: After neutralization and flocculation of effluent, the suspended matter undergoes settling which is called sludge. The tank is used for sludge collection.
- Aeration tank: A mechanical aeration system is adopted in the tank for growth of biomass which are easily coagulates suspended and dissolved particle.
- Bio reactor: Where biomass is developed in aerobic condition.
- Lamella filtration: After aeration of effluent, it allows to further settling with certain contact time. Gradually all solids matter deposits at the bottom while the liquid water passed to PSF
- Pressure sand filter (PSF): Used to remove suspended impurities from the water.
- Activated carbon filter (ACF): De-odorize any smell in the water.
- UV/chlorination disinfection: After de-odorizing of water, it is disinfected by either UV (ultraviolet radiation) or with chlorine. So that all types of micro-organisms, pathogens are killed before going to further use.
- Final water discharge: The discharged water is used for various purpose like, gardening, cleaning, irrigation, car washing etc.



### Salient Features of Plants Designed by our company:

- Easy operation & low maintenance cost.
- Space saving due to compact and proven design.
- Highly reliability because of most modern technology.
- Available in all capacity as per requirement.
- Easily installation, overall plant is prefabricated, only joints, piping and wiring works are required at site. Therefore installation work is easy time saving.

### Where ETP/STP water can be used after treatment:

- Gardening
- Land irrigation
- Floor, room washing
- Car washing
- Toilet flushing
- Fish pond



## Product Range Requirement



### Breweries & Food

- ✍ Softeners
- ✍ DM plants
- ✍ Ozonation
- ✍ UV systems
- ✍ Effluent treatment



### Power Sector

- ✍ DM plants
- ✍ Side stream filters
- ✍ Clarifiers
- ✍ Clariflocculators
- ✍ UF systems
- ✍ Effluent treatment

### Biotechnology

- ✍ UF treatment
- ✍ RO systems
- ✍ Distribution loops
- ✍ Effluent treatment



### Semiconductors

- ✍ RO systems
- ✍ High pure Water
- ✍ Distribution loops
- ✍ Effluent treatment



### Infra Structure

- ✍ DM plants
- ✍ Ozonation
- ✍ UV systems
- ✍ Effluent treatment



### Pharmaceuticals

- ✍ DM plants
- ✍ High pure Water
- ✍ EDI treatment
- ✍ UF systems
- ✍ Effluent treatment

### Steel Sector

- ✍ Clarifiers
- ✍ DM plants
- ✍ Effluent treatment



### Hospitality

- ✍ Portable Water
- ✍ RO systems
- ✍ Softner
- ✍ Sewage treatment



*After sale, we provide complete technical support. For upgradation, technical specification are subject to change without notice*



## GLOBAL STERLING PRODUCTS LIMITED

379, Ikorodu Road, Opp. Ojota New Garage, Lagos, Nigeria.

Phone: +234-1-7737853, 7908227, 7612444, 7406084-5, 080-23124812.

E-mail: [harness@hyperia.com](mailto:harness@hyperia.com), [info@gsplautopack.com](mailto:info@gsplautopack.com) • Website: [www.autopackglobal.com](http://www.autopackglobal.com)