



➤ Effluent Treatment Plant (ETP) And Its Operation

Techno Color Corporation is producing S.O.Dyes. Most of the dyes are spray-dried with our recently commissioned Spray Dried Plant.

The waste water generated from the production process is mainly the washings of the Spray Dried Plant and the reactors, which gets collected in 25 M3 capacities RCC underground Collection Tank from this tank, the waste water is pumped to 3 X 5 M3 capacities R.C.C stirred tanks, three such tanks are available in series.

The waste water is checked for pH. (There are 2 X 10 M3 capacity HDPE underground tanks in reserve. In most cases, it is neutral and if not, it is corrected either with HCl or Caustic Lye depending on the pH value to get the resultant pH within 6.5 - 8.5. It is then treated with diluted Ferrous Sulphate solution and the pH is compensated to form small flocks. It is then treated with Polyelectrolyte solution to precipitate the coagulated mass.

The resultant coagulated mass is then filtered in Nutsche filter. The clear liquid is allowed to flow either in underground 10 M3 HDPE tank or underground 25 M3 R.C.C tank. The contents are checked for COD. The treated waste water is aerated further by diffuse aeration system, if required.

The treated waste water, Okay in all respect, is pumped to G.I.D.C. Drainage system through clarifier containing Activated Carbon Bed.

➤ Details of Effluent Treatment Plant

1) Collection Tank

No of Unit	1
Length	7550 mm
Breadth	1200 mm
Depth	1750 mm
Total Volume	25000 Ltrs
Flow From	Process Plant
Flow to	Equalization-cum-Treatment Tank by Pump
Material of Construction	R.C.C

2 (A). Newly Installed Equalization-Cum-Treatment/Neutralization Tank



No of Unit	3 × 5000 Ltrs Capacity of each Tank
Diameter	1750 mm
Breadth	1200 mm
Length	2500 mm
Flow From	Underground Effluent Collection Tank by Pump
Flow to	Filter N-utsch by Gravity
Material of Construction	R.C.C

2 (B). Equalization-Cum-Treatment / Neutralization Tank

No of Unit	2
Length	2000 mm
Height	3450 mm
Total Volume	1000 Ltrs of each Tank
Flow From by Pump	Process plant or underground effluent collection
Flow to	Filter Nutsche by Gravity

3) Filter Nutsche

No of Unit	1 (+1 as standby)
Diameter	2200 mm
Height	660 mm
Total Surface Area	380 cm ²
Total Volume	2500 Ltrs
Flow From	Equalization Tank by Pump
Flow to	Aeration tank by Gravity
Material of Construction	Mild Steel Rubber Lined

4) Sludge Storage Tank

No of Unit	1
Length	1270 mm
Breadth	1270 mm
Depth	700 mm
Total Volume	1000 Ltrs
Material of Construction	Mild Steel



5) Aeration Tank

No of Unit	1
Length	7550 mm
Breadth	1200 mm
Depth	1750 mm
Total Volume	25000 Ltrs

6) Settling Tank

No of Unit	1
Total Volume	2000 Ltrs

7) Activated Carbon Column

No of Unit	1
Diameter	275 mm
Length	1800 mm
Packing	Packed with Activated Carbon