

ENVIRONMENTAL TECHNOLOGIES

Turn-Key Plants (Design Build Projects)

A plant can be designed, constructed, equipment manufactured and procured, installed, electrical and instrumentational work installed, commissioned, operated and maintained to give a complete turn-key service to our customers.



AMASYA SAFMAYA YEAST PLANT WASTEWATER TREATMENT PLANT (Phase 1)

First phase is constructed as double stage, highly loaded activated sludge Anaaerobic Treatment to be added as another stage in the future.

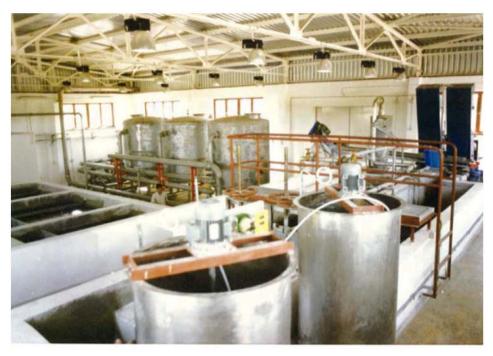


ELBISTAN SUGAR FACTORY DOMESTIC WASTEWATER TREATMENT PLANT (500 m3/day)









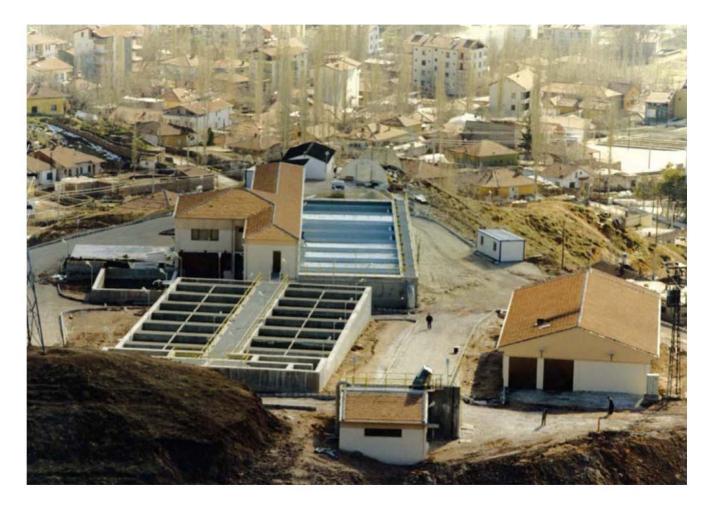
JEGORLYKSKAYA (RUSSIA) WASTEWATER TREATMENT PLANT

Realized within the scope of the military housing project. Process design, construction drawings, civil works, all mechanical and electrical equipment manufactured, procured and installed by EKOTEK.

In addition to the biological treatment process, nitrogen and phosphorus removal and sand filters are employed. The effluent satisfied the required criteria of BOD = 3 (mg/l.)

The designs were made according to German standards and Russian "SNIP"s, supervision (approval) of the designs and construction were made by the German and Russian consultants of the employer.





AKSARAY POTABLE WATER TREATMENT PLANT

Main units of the plant are "Upward Flow Sludge Blanket" type clarifiers and "Rapid Sand Filters". Process design, construction drawings, civil works, all mechanical and electrical equipment are manufactured, procured and installed by EKOTEK. The whole plant is completed in a very short time such as one year including the design period.

All critical equipment are of European origin and well known brands for quality. Metal parts in contact with water are made of stainless steel.

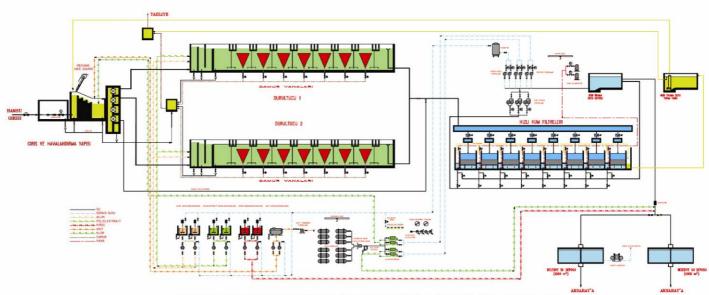
The plant capacity is 60.000 m³/day and it is completed at a cost of one third with respect to plants of similar capacity.



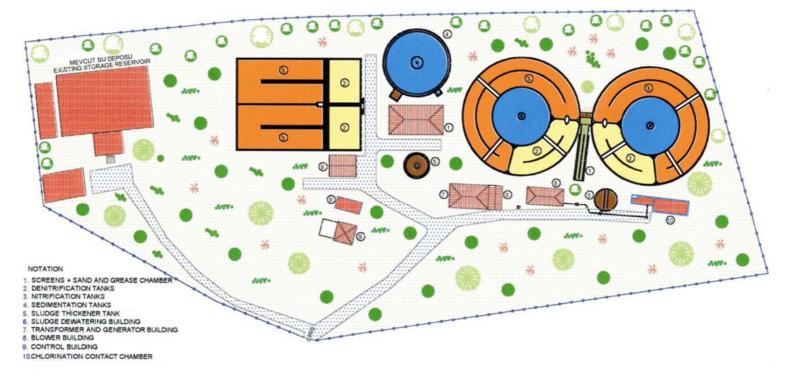




AKSARAY POTABLE WATER TREATMENT PLANT



AKSARAY POTABLE WATER TREATMENT PLANT FLOW DIAGRAM

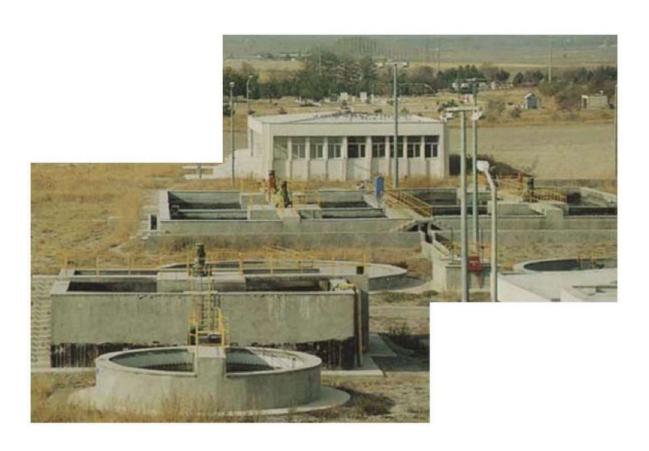


BELEK 2 (ANTALYA) WASTEWATER TREATMENT PLANT
Second phase with capacity 12600 m3/day is designed and constructed. Existing first phase is modified for nitrogen removal.





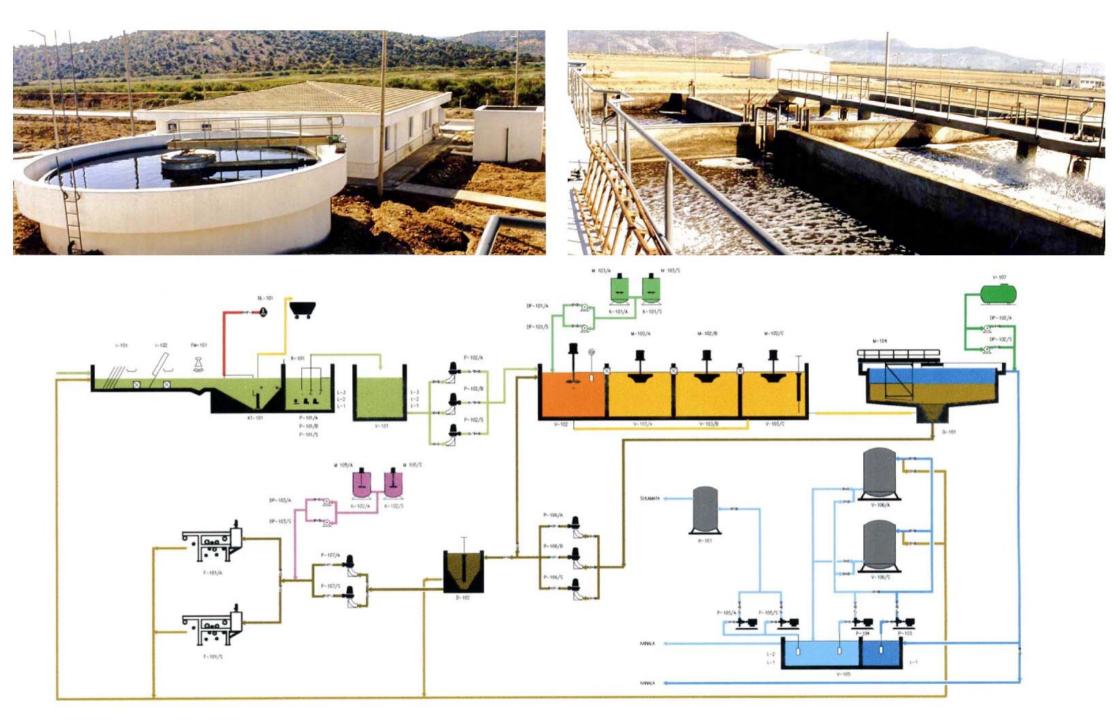




ESENBOGA (ANKARA) INTERNATIONAL AIRPORT WASTEWATER TREATMENT PLANT (5.000 m³/day)







BODRUM INTERNATIONAL AIRPORT WASTEWATER TREATMENT PLANT (1.000 m3/day)

THRACE NATURAL GAS POWER STATION (LULEBURGAZ)
WASTEWATER TREATMENT PLANT (200 m3/day)







SEMIRAMIS HOLIDAY VILLAGE (BODRUM) WASTEWATER TREATMENT PLANT (1.000 m3/day)

Constructed completely underground and covered with a thin layer of soil and vegetation. Service and maintenance to be made by manholes.



ANACONDA AIR BASE (IRAQ) WWTP

Located 80km north of Baghdat in Balad region. This American airbase (logistic support area) has a total population of approximately 50.000. The wastewaters of a certain part of the airbase are treated in this plant. The capacity of the plant is 5.000 m³/day. Guaranteed effluent characteristics are as follows: COD=50 mg/l, BOD=10 mg/l, SS=20 mg/l

The tanks are made of prefabricated steel plates erected at site and the buildings are also prefabricated and equipment installed in them at the factory. The plant is contracted and completed on turn-key basis for the main contractor YÜKSEL CO.

EKOTEK also operated the plant for one year after competition.





ANACONDA AIR BASE (IRAQ) WWTP COMPACT INLET UNIT

This compact unit which includes the following functions,

- Mechanically cleaned fine screen,
 Aerated grit and grease removal tank,

■ Grit Classifier,
■ Flow splitting
is designed and manufactured by EKOTEK.







ANACONDA AIR BASE (IRAQ) WWTP

Some of the sewage is conveyed by sewage pipes and some of it is carried by tankers from different parts of the airbase and discharged at special inlet manholes. A checklist of tankers, type and volume of their loads, and hour of discharge are recorded manually.







ANACONDA AIR BASE (IRAQ) WWTP

- Tankers can discharge 24 hours a day, at nights also (above)
 The treated effluent is stored at prefabricated steel tanks and taken by tankers to be used for irrigation and dust abatement. (middle)
- A multinational team of experts operates the plant. (below)









KOYA (IRAQ) POTABLE WATER TREATMENT PLANT (30.000 m³/day)

KOYA (Kuysanjaq) is located in between Arbil and Suleimany in Northern Iraq. The project is executed in coorparation with local civil works contractor KAT Company of Suleimany.

General view of the plant.

Cascade aerator, flash mixer and clariflocculators.

Pumps (Q= 600 m³/hr, Hm=275m, P=840 kW) & Scraper bridges.







KOYA (IRAQ) POTABLE WATER TREATMENT PLANT

Inside the filters, installation of SS manifolds in the filter. (up)
Installation of pipes, fittings and valves in the filter mechanically gallery. (down)





KOYA (IRAQ) LOW LIFT PUMP STATION

Low lift pumps (up). Booster pumps (for chlorinators), service water pumps, filter backwash pumps, low lift pumps (down).

KOYA (IRAQ) CONSTRUCTION OF INTAKE and



Diversion of the river.



Excavation and rockfill at the foundation.

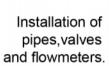


WATER PROJECT LOW LIFT PUMP

STATION

Construction of Intake and Pump Building.





















NEW SULEIMANY UNIVERSITY CAMPUS (IRAQ) WASTEWATER TREATMENT PLANT

Designed for a total of 25.000 students and related staff and personel. Treated water will be used for irrigation. Main contractor FDC & TEPE, employer MOCH.









ÇATAK (VAN) SOLID WASTE COMPOSTING PLANT

The client is "Foundation for Sustainable Rural and Urban Development" (SURKAL) Turkey and the project was funded by European Union. It was about low-cost, in-vessel, compost plant, enclosed for the severe cold weather in the region.

The project included, collection, sorting and composting through Rotary Drum and built windrow system. The project was selected as most successful practice among funded projects of year 2006-7.

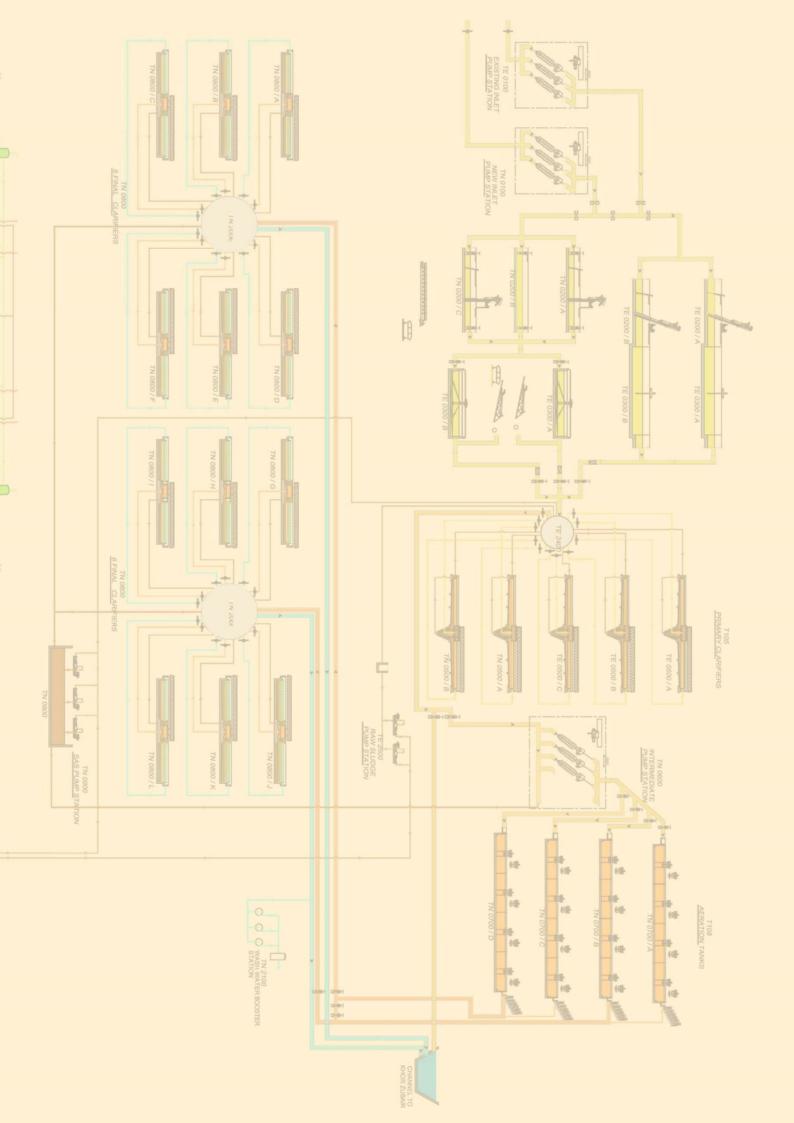


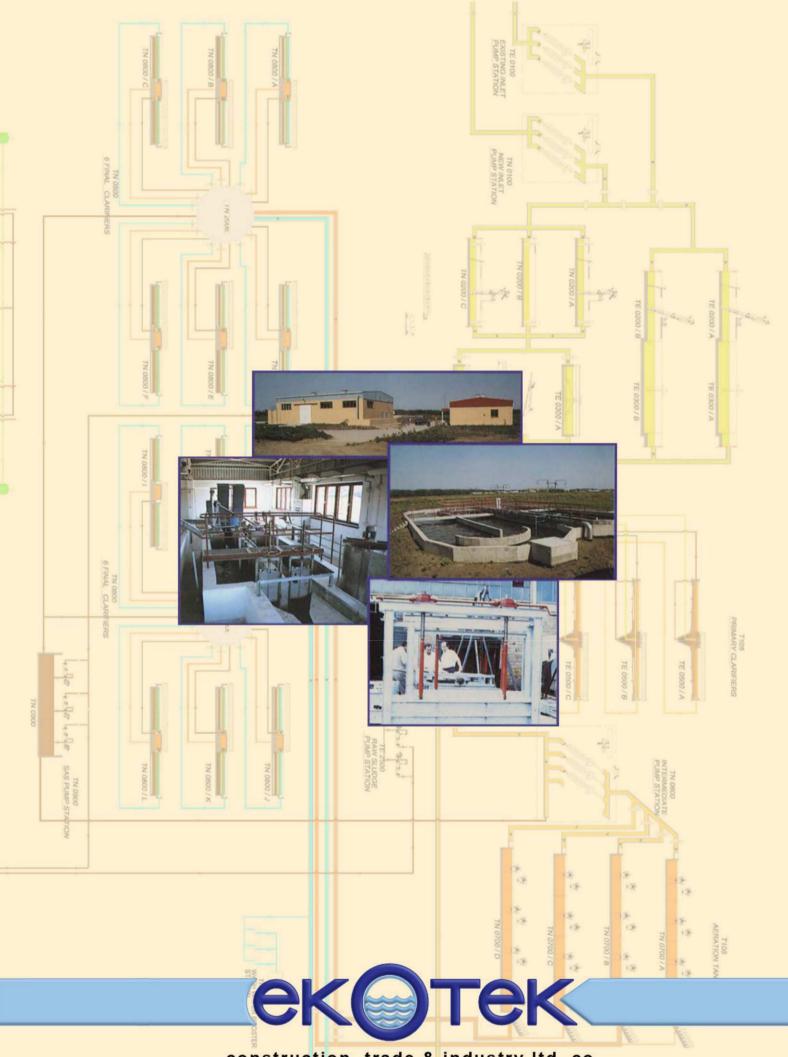




ÇATAK (VAN) SOLID WASTE COMPOSTING PLANT

Views during construction and erection of equipment.





construction, trade & industry Itd. co.

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