

SOLID WASTE DISPOSAL FACILITIES IN KAHRAMANMARAŞ

Kahramanmaraş Mayor Mustafa Poyraz says: 'I would like to ask you to go back 10 years ago and think. This facility did not exist back then. The garbage collected in the Aksu quarter stank. We used to pray for a non-windy day during the parade at the Aksu military quarters. We built this facility to address this problem'

The Kahramanmaraş Solid Waste Disposal Facilities, built by the Kahramanmaraş Municipality and Nearby Municipalities Solid Waste Disposal Facilities Construction and Operation Union (MARAŞCEBBİR), has opened.

Speaking at the opening ceremony, Kahramanmaraş Mayor Mustafa Poyraz said: "I would like to ask you to go back 10 years ago and think. This facility did not exist back then. The garbage collected in the Aksu Quarter stank. We were praying for a non-windy day for the parade at the Aksu military quarters. We have built this facility to address this problem. The Ministry of Environment and Urban Planning has assumed 30 percent of the construction costs. The remaining was borne by Kahramanmaraş and nearby municipalities."

The construction of the solid waste disposal facility consisted of three major stages:

Stage 1 (LOT 1):

Lot 1 was built on a construction site of 56,931 square meters. Drilling and filling works was done as part of Lot 1 construction. A waterproof layer was included to prevent contamination of underground waters. The layer was include a geo-synthetic kiln layer and a high-density polyethylene (HDPE) geo-membrane, geo-textile. After the construction of the waterproof layer, HDPE pipes was installed in the lot base to collect any leaks. For drainage, a 50-centimeter-thick drainage layer was installed over the pipes.

Leaking water pool: This site collects the water that leaks via the HDPE pipes installed on the Lot 1 base. The water is carried over the garbage via a recycling system to ensure evaporation and accelerate the breaking down of the garbage.

Facility units

Weighing building: Garbage trucks arriving at the facility are electronically weighed. This precise measurement will provide statistical information on the solid waste stored at the facility.

Wheel washing unit: This is the area where the truck wheels are washed with chemical substances to disinfect the trucks carrying domestic waste to the lot.

Fire water system: Fire hydrants and stores are located around Lot 1. This system is connected to the water tank via HDPE pipes. The system for extinguishing fires has been specially designed.

Surface water channels: Surface water channels have been built to prevent the inflow of surface water into the facility.

Generator unit: A 200 kVA generator will be used in the event of a power outage.

Security building: A building has been built for the security in the facility.

Protection fence: The facility is surrounded by a fence to protect the assets inside.

Administrative building: This is used for administrative purposes

Workshop building: Maintenance of the vehicles is carried out inside this building.

Road and engineering structures: A 960-kilometer-long road between Kahramanmaraş and Kayseri will be constructed for this purpose. In the second phase of the project, a solid waste integrated facility will also be built.

The construction of the solid waste disposal facility was started



Solid waste disposal facility

on Sept 22, 2011. The construction is regularly inspected. The facility was projected in three lots because of the topographic outlook and structure of the terrain. The lifetime of Lot 1 is estimated to be seven years. Lots 2 and 3 will sit on an area of 111,804 square meters and they will remain in service for 18 years. All the three lots will cover an area of 170,415 square meters. The total service of the solid waste disposal facility is 25 years.

The construction work of the solid waste disposal facility was carried out in three stages. In the site affairs section, a domestic waste lot, leak water collection pool, ground/or base for domestic lot and leak water pool, roads inside the facility, a facility access road, a fire water system and leaked water recycling system were constructed. Additionally an administrative building, maintenance workshop building, wheel washing unit, full electronic weighing unit, water tank, generator and security unit were built.

The construction work started on Sept. 22, 2011. Fifty percent of the drilling and filling work is already complete. The construction of the domestic solid waste lot and of several roads are under way. The provisions of solid waste control regulations by the Ministry of Environment and Urban Planning are applied to address any danger to human health and the environment during the construction and operation of the Kahramanmaraş Solid Waste Disposal Facility.

Gas explosions can happen in the raw garbage storage areas. The methane gas that forms from the stored solid waste at the facility is collected via chimneys, thereby preventing explosions.

Before the vehicles carrying waste leave the facility, the wheels of the vehicles are disinfected to prevent the dissemination of bacteria causing infectious diseases.

Entrance and admission to the facility is controlled. To this end, a protection fence has been built around the facility.

Waste arriving at the facility is weighed for statistical purposes.

Stage 1: The solid waste storage disposal facility was completed on Sept. 20, 2012. A total of TL 13,000,000 was spent; this amount includes the expropriation and the construction of the solid waste disposal facility.

Stage 2: The capacity of the medical waste sterilization facility is 400 kilograms. The total closed area in the facility is 500 square meters.

The construction of the medical waste sterilization facility is under way; it will be launched in March.

Stage 3: When the integrated waste use, recycling and disposal facility is opened for service, plastic, paper and metal substances in the waste will be recycled for economic purposes. The remaining organic materials will be processed in the recycling and energy production facility and transformed into byproducts and electrical energy.

Because the volume of waste will be minimized by the operation of integrated waste use, recycling and disposal facility, the lifetime of the solid waste regular storage disposal facility will be prolonged from 25 to 50 years.

Wastewater treatment plant

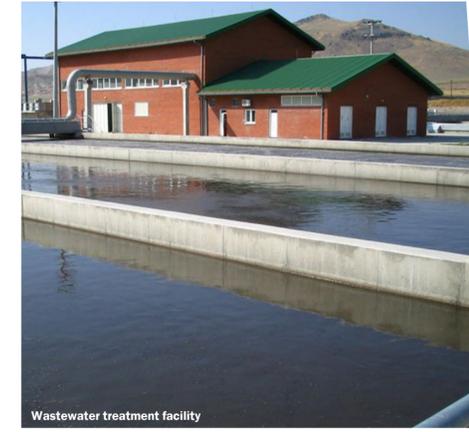
A 242,683 square meter parcel of land in Sumbullu near the city of Pınarbaşı has been taken into the public domain to establish the Kahramanmaraş Central Wastewater Treatment Plant for the domestic sewage of Kahramanmaraş.

The goal of the project is to protect populated areas and the environment by collecting wastewater through the city's sewerage system and discharging it after treating it according to the environmental standards applicable in the European Union and in Turkey. It is expected that the pollution load and health risks to Sir Dam Lake and the surrounding area will be greatly diminished once the plant is constructed and in operation.

The proposal seeks to build an advanced biological treatment facility with an anaerobic sludge digester that will use microorganisms to convert waste water into easily disposable digested sludge. The digester will have an installed capacity of about 6,000 kilowatts per day.

The Environmental Impact Assessment (EIA) process for the project has been completed and a positive EIA report was obtained. The Instrument for Pre-Accession Assistance (IPA) application form, a feasibility report, a cost-benefit analysis, the EIA summary and the tender documents have been completed and filed with the EU Investments Department of the Ministry of Environment and Urban Planning, as well as provided to the EU Turkey delegation and the EU Commission in Brussels. The IPA application file and its annexes have been approved by the EU Commission and a grant has been awarded for 85 percent (41,664,105 euros) of the anticipated total project cost of 49,016,594 euros. The Ministry of Environment and Urban Planning has provided a grant of 6 percent of the project cost (2,940,995 euros).

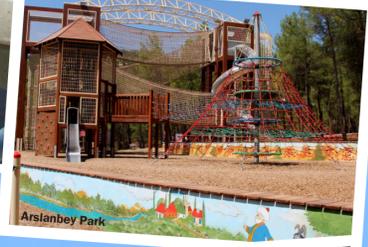
The tendering work is currently being conducted by the EU Investments Department of the Ministry of Environment and Urban Planning.



Wastewater treatment facility



Kilavuzlu



Arslanbey Park



Recreational facility

Kilavuzlu recreation project

The recreation project is located 12 kilometers to the west of the city of Kahramanmaraş and is near the coast of Ceyhan river.

The project area is 1,700 decares.

The recreation area will consist of the following:

- Instructive playgrounds for kids of different age groups
- A plant collections park with special sections of various types of plants
- Outdoor exhibition areas
- Outdoor theaters
- Viewing binoculars
- Amusement parks
- Fishing zones
- Water sports areas (for water skiing, canoeing and swimming)
- Outdoor sporting equipment, racetrack, cycling and walking tracks
- Resting areas, promenades and observation terraces
- Places to eat and drink
- Leisure centers

Kumasir Lake recreation project

The municipal council of Kahramanmaraş approved the Kumasir Lake and Environs Preservation and Recreation Local Zoning Plan in a meeting held on Oct. 7, 2009. A 100-meter strip around the lake was defined as a strict preservation zone in this plan. The rest of the area is planned to become recreational area.

The total planning area is 1,100 decares. Of this, 317 decares will be a part of the strict preservation zone.

The project for the reclaiming of Kumasir Lake and its environs will create a recreational area for organizing various water sports, thereby appealing to the inhabitants not only of Kahramanmaraş, but also of other provinces nearby.

Moreover, the Malik Ejder shrine located atop a hill to the east of Kumasir Lake has the potential for driving religious tourism in Kahramanmaraş.

The project has been submitted to the General Directorate of Nature Preservation and National Parks of the Ministry of Forestry and Waterworks for approval.

Kahramanmaraş Municipality attaches great importance to the green patches in the city and has built some 250 parks including Muhsin Yazıcıoğlu Promenade, Kilavuzlu Promenade, Arslanbey Park and Promenade, Camlik Park, Asik Mahsuni Şerif Park, Abdurrahim Karakoc Park, Dostozan Park and Poets Park. The green space per capita in Kahramanmaraş rose from 1.5 square meters in 2002 to about 8 square meters.



Malik Bin Ejder's tomb



Lake Kumasir



Kahramanmaraş Mayor Mustafa Poyraz

KATI ATIK DÜZENLİ DEPO BERTARAF TESİSİ