

Central Wastewater Treatment Plant in Al-Shadadiya Industrial Zone

ECG Client

UGCC United Gulf Construction Company

End User

Public Authority of Industry - PAI

Scope of Work

Process Design Review
Civil Works Detailed Design

Location

Kuwait

Types of Activities

Architectural
Civil
Communications and Security Systems
Electrical
HVAC
Landscaping
Mechanical
Roads

On a land area of 5.89 million m²; Shadadiya Industrial zone is the largest industrial area in Kuwait, where it will be managed using sustainable development methods. It contains 1,036 industrial units, as well as many services. It is divided into different sectors, as the most important sectors are chemical and food industries, in addition to other multi-purpose industries. The chemical sector comprises 242 industrial units; the food industries sector contains 299 industrial units; while the mixed sector comprises 495 industrial units.

On a land area of 265,000 m²; The project comprises public services including a fire station, medical clinic, security center, mosque, administrative offices, gas station, truck service station, and car parkings. In addition; the project consists of fresh water network, stormwater network, sewage and industrial networks, fire-fighting network, 5 main power stations, 91 substations, security fence, overhead water towers and ground tanks, wastewater treatment plant, stormwater collection pit, environmental control building.

On an approximate area of 80,000 m², the project includes a central wastewater treatment plant (12,572 m³/day) consisting of four zones; Zone 1: food section with a capacity of 2,665 m³/day, Zone 2: mixed section with a capacity of 1,613 m³/day, Zone 3: chemical section with a capacity of 3,370 m³/day, Zone 4: sanitary wastewater section with a capacity of 1,924 m³/day, and storm water purification line with a capacity of 3,000 m³/day. The purified water is used for irrigation purposes.

The project also comprises Administration & SCADA Building, Control/Blower Building, DAF Building, Disk Filter, Equalization Tank, Flocculation Tank, Nitrification Tank, Settling Tank, Return Sludge Pump station, Sludge Holding Tank, Calamity Tank, Sludge Storage, guard room, Environmental Monitoring Center and Electrical Substations/Generators Buildings with BUA 10,100 m².



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