

# **Amarina Resort Wastewater Treatment Plant**

# **Background**

The hotel is located in a beach area in Hurghada, 4.3 km from Sentido Palm Royale Reort Soma Bay. Be sure to visit the Orca Dive Club just minutes from the luxurious Amarina Abu Soma Resort & Aquapark. Red Beach is about 3.6 km away. Notable religious buildings nearby include the Islamic Center of Safaga, about a 10-minute drive from Amarina Abu Soma Resort & Aquapark. For those traveling from afar, Hurghada International Airport is a 45-minute drive away.



The wastewater in the resort is treated through an established treatment plant to meet environmental requirements and to utilize the treated water for spraying and irrigation operations in the resort's green areas. The efficiency of the station is very low and has many problems, which the resort's customers and owners have also complained about

# . Objectives

- Remove bad odors
- Reducing sludge removal costs.
- Increase plant capacity.
- Reducing the chemicals used.

#### **Solution**

- According to Valens Company's professional experience in managing, operating, and maintaining sewage treatment plants, they were contacted to design and activate the required solution.
- Increasing the operational efficiency of the station through the use of Valens technology

### **Implementation program**

- Using Valens company technology with initial shock doses to rehabilitate the system, then maintenance doses that gradually decrease to reach complete stability in the system.
- The program was carried out in successive strong shock doses from our product on the first, second and third days, 3 ppm and 1 ppm on the fourth and fifth days, then maintenance doses of 1 ppm every week.
- The doses included all the tanks in the plant, as well as the production tank, in the first stages
- Maintenance doses were on the plant's tanks only, without the production tank, because the product outflow conformed to the specifications

#### **Results**

- Completely remove bad odors from the resort 3 days after starting treatment with our product.
- Increasing the plant's capacity as a result of reducing the retention time.
- Increasing the efficiency of the plant means enhancing, stimulating and accelerating the digestion process of organic materials and thus reducing the volume of sludge by a large percentage of up to 80% from what it was before the treatment operations and thus reducing the costs of sludge disposal.
- Improving the chemical properties of treated water (BOD & COD) .
- Reducing the amounts of chemicals used in all treatment operations up to 70%..

### **Conclusion**

Based on the visual observations and laboratory analysis results, the administration's recommendation was to use Valens technology in all stages of treatment, and also to discuss the extent of its use in the feed lines coming to the plant to eliminate odors permanently.

## **Contact**

**VALENS** 

Building No32-El Oboor Building -Salah Salem Street-Nasr City-Cairo Post Office No. 34- 44, Dubai City - Bur Dubai - Al Fahidi Phone No: 0583037024 mobile no: 971527107797

E-Mail: info@uvalens.com