Lusail Real Estate Development Company (LREDC) is responsible for the development, construction, promotion and ongoing management of the future city of Lusail.

Qatari Diar Real Estate Investment Company was established in December 2004 to support Qatar’s growing economy and to co-ordinate the country’s real estate development priorities.

In 2006, the Qatari Diar Real Estate Investment Company signed a contract with SUEZ, to design, build and operate for 10 years the wastewater reuse plant for the seaside, residential and commercial real estate development project in Lusail.

This 60,000 m$^3$/day wastewater plant is equipped with the first biological membrane reactor, Ultrafor™, ever sold by SUEZ in the Persian Gulf. The contract involves the installation of a 12 kilometers collection system to carry wastewater from the new city to the purification station.

The water recycled by this plant makes it possible to introduce vegetation to desert parcels of land and to maintain green spaces throughout the artificial Pearl Island.

This contract was realized in Joint Venture with MARUBENI Corp. in charge of the design and built of the pumping stations, distribution network and collectors, and with Mushrif TCC for the Civil Works.
The pretreatment includes:
- screening (10 mm),
- equalization (buffer tank – 10,000 m³),
- fine screening (1 mm),
- grease removal and cooling

Secondary treatment with Ultrafor™ MBR membrane bioreactor

The MBR process combines biological purification using activated sludge with ultrafiltration membrane clarification. The hollow fiber membranes create a true physical barrier for the elimination of bacteria, and helminthic eggs, and a reduction in fecal coliforms.

Chlorination (1,250 m³)

Ultrafor™

It’s advantages

Performance
- Guarantee the water quality beyond the highest standard

Sustainable development
- Protects nature and its biodiversity with an effluent quality that allows discharge in protected zones
- Population protection with a guarantee of sanitation safety
- Protection of resources thanks to the option of reusing effluent to specific need
- Compact size reduces the environmental footprint

Safety
- A totally automated operation assures the safety of operating partners
sludge is also extensively treated by:

- Gravity Belt Thickening (GBT) of biological sludge
- Aerobic Digestion: mesophilic aerobic stabilization (total volume: 11,600 m$^3$/d), digested sludge tank
- Dewatering on filter presses

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**sludge line**

**air treatment**

Lusail City, one of the most ambitious and groundbreaking concepts of Qatari Diar Real Estate Investment Company, is a new waterfront city being built in Qatar that is intended to be the biggest domestic real estate development in the country. It will cover an area of 35 million square meters and be located north of Qatar’s capital city of Doha, next to The Pearl Island.

Lusail City accommodates 200,000 residents and 170,000 employees; it will also welcome over 80,000 visitors. The total estimated population of Lusail will eventually reach 450,000 people.

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Biological odour removal with physico-chemical treatment on Azurair® C (acids, bleach, sodium hydroxide, thiosulphate or bisulphite) combined with Azurair® B (biological process on Biolite®) to reduce the cost of reagents.
Since March 2015, all the Group brands (Degrémont, Ozonia, Aquasource, Ondeo IS, Ameriwater, Infilco, Poseidon…) became SUEZ.

Meanwhile, from now own, the technologies and know-how of our Treatment Solutions offer will be distinguished with the label degrémont®.