Providing safe drinking water to Dhaka city is a critical issue for Dhaka Water Supply and Sewerage Authority (Dhaka WASA), in charge of water management of Bangladesh’s capital.

With a daily capacity of 450,000 m³/d, the Saidabad drinking water treatment plant was constructed in 2 phases and is running at full capacity since December 2012.

Phase 1 – 225,000 m³/d – has been completed by SUEZ in June 2002.

Awarded to MTH – SUEZ Consortium in 2010 and completed in 2012, phase 2 aimed at doubling the capacity of the plant, but also upgrading the overall quality of water produced during the dry seasons of the year, when Dhaka City is facing severe deterioration of water quality within Sitalakya river and DND canal. In this purpose, a world-first innovative pretreatment solution has been implemented both in DND canal and the plant, ensuring a constant water quality.

The plant is operated by SUEZ since December 2012.
In this purpose, pretreatment is initialized directly inside DND canal, with 3 sets of 4 surface aerators installed in different locations in the canal in order to increase oxygen content in water so as to:

- Reduce sulphides concentration
- Start biological process of nitrification

Second stage pretreatment consists of biological nitrification aiming at:

- Ensuring ammonia removal
- Reducing organic compounds, including THM precursors

The biological nitrification system:

**Meteor**

hybrid growth system

- **Meteor 660 biofilm carriers**
  - Automatically responds to load fluctuations
  - Resilient to toxic shocking
  - High surface area biofilm carriers

**Vibrair air diffuser**

- A robust, maintenance free system
- Proven extended lifetime
- Installed on a large number of plants built by SUEZ
water purification

The water treatment line relies on proven and robust technologies, easy to maintain equipment:

clarification
Pulsatube™ clarifiers

- All the advantages of the Pulsator plus lamellar settling
- More compact design: twice the rising velocity for only half the floor space

filtration
Aquazur V® filters

- High speed filter installed on hundreds of water plants worldwide
- Efficient and cost-effective washing system
- Tailor-made operating control

chlorination: a safe and reliable solution for algae removal and disinfection

preoxydation

- During the dry season: residual amonia removal and disinfection by monochloramine
- During the rainy season: by a low dosage of chlorine

disinfection
by chlorine with a residual for network protection

energy production

- A gas generators power plant with 4 x 1415 kW capacity that continuously supplies the treatment plant
- Full time energy supply secured by dual-source with synchronization to power national grid

sludge treatment
sludge thickeners
(installed on phase 2)

drying beds
Rehabilitation of drying beds built during phase 1
Since March 2015, all the Group brands (Degrémont, Ozonia, Aquasource, Ondeo IS, Ameniwater, 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®.