

# Shanghai Chemical Industry Park (SCIP): Reconciling economic growth and green growth

Shanghai Chemical Industry Park (SCIP) is located in the south of Shanghai, north of Hangzhou Bay, with the management area of 36.1km<sup>2</sup>. It is one of the world's largest integrated petrochemical bases. In 2002, SUEZ signed a cooperation agreement with SCIP to provide integrated water supply and wastewater treatment services for industrial customers in SCIP.

## The mission

SCIP is the first professional petroleum and fine chemical industrial park since the reform and opening up. SCIP acts as the center of six south industrial zones in Shanghai, it is also one of the largest investment industrial projects during the 10<sup>th</sup> Five Year Plan period. At present, many world class chemical companies such as Sinopec, Covestro, BASF, Evonik, Huntsman, Mitsubishi, Mitsui Chemicals set their business in SCIP.

Such large scale of production brings great challenges to environment, the water demand of chemical companies increases sharply, and the large amount of wastewater pollution concentration is also turning high, therefore, the professional integration of water services is significantly requested to achieve a harmonious development of chemical industry and environment with balanced production and the ecology.

**36.1** km<sup>2</sup>

management area

## Our solution

Along with cooperation with the development of SCIP, since 2002, SUEZ operates as one of the utilities companies in SCIP to provide wastewater treatment and water services to SCIP clients. It runs a water treatment plant and a wastewater treatment plant. Business scope covers: industrial water, tap water, demineralized water supply; wastewater collection and treatment services.

Wastewater Treatment Capacity: 44,500 m<sup>3</sup>/d

CODcr Load: 40 tons/d

Water Supply Capacity:

- Industrial water: 300,000 m<sup>3</sup>/d
- Domestic water: 7,000 m<sup>3</sup>/d
- Demineralized water: 6,720 m<sup>3</sup>/d



SUEZ and its local partners – Shanghai Chemical Industry Park, Tongji University and East China University of Science and Technology – set up the first research Centre in China: SCIP Water Research Center (SWRC), specialized in industrial water supply and wastewater



In addition to providing high quality industrial water and the treatment on high concentrated industrial effluents for SCIP clients, it also creatively reuses treated wastewater to produce demineralized water through tertiary treatment and membrane technology, which can save 2,000,000 m<sup>3</sup> of water resource every year.



treatment. It is dedicated to industrial wastewater research and characterization as well as R&D for treatment and recycling technologies, including sludge.

Major business covers:

- 1) Feasibility study on wastewater treatment
- 2) Optimization of wastewater treatment plant and water treatment process
- 3) Applied study on water treatment process
- 4) Recycling of water resource

### The results

Since 2002, SUEZ provides water supply and wastewater treatment services in SCIP :

- many chemical clients such as Covestro, BASF, SECCO, Evonik, Huntsman, Mitsubishi, Mitsui Chemicals in SCIP;
- strictly complies with the discharge emission standards, being monitored on-line 24 hours a day;
- establishes the first professional R&D Center for industrial wastewater treatment in China, having obtained 33 patents;
- innovatively produces demineralized water with treated industrial wastewater, which can save 2,000,000 m<sup>3</sup> of water resource each year;
- Have obtained the certifications of CNAS, ISO17025 for the R&D center specialized in industrial wastewater;
- Have obtained the certifications of ISO9001, ISO14001, OHSAS18001, etc.

**300,000** m<sup>3</sup>/day

industrial water supply capacity

**44,500** m<sup>3</sup>/day

wastewater treatment capacity

**2** million

m<sup>3</sup>/year water resource can be saved

**33**

patents by SWRC



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