

CASE STUDY

A MICRO SOLUTION TO SOLVE ONE OF THE WORLD'S BIGGEST PROBLEMS

Continuous population growth and industrialization across the globe demand increasingly effective technologies for treating various wastewaters. 80% of global wastewater is still released into the environment without treatment which, in turn, has an impact on the availability and quality of safe drinking water.

Sibelco provides solutions that address this critical issue through the supply of filtration minerals in collaboration with wastewater treatment companies. An example of the application of our products in wastewater treatment is at Siaap, the world's second largest wastewater treatment plant located in the Paris region in France.

Siaap treats the wastewater of eight million people in Paris and its surrounding area. In 2017 the plant treated on average over

1,340,000 cubic meters per day in the dry season, rising to 2,800,000 cubic meters per day in the rainy months.

Siaap uses the Actiflo process developed by Veolia OTV, which combines chemical and physical water treatment. Sibelco's microsand is a critical element in the Actiflo process as it accelerates the settling of the flocs, thus enhancing the performance of the coagulation-flocculation process. The microsand can also be partially recycled, with only a small amount

of new sand injected to compensate for any loss during the Actiflo process.

Sibelco's unique and high quality microsands are used because of their optimal performance in this process as well as their low consumption per cubic meter of treated wastewater. The specific shape, silica content, particle size and density all allow the sands to perform in the best way.

8m 

The Siaap wastewater treatment plant serves **8,000,000 people** from Paris and its surrounding area

2.8m 

Siaap treats up to **2,800,000 cubic metres of water per day**

100 

Actiflo process, using Sibelco microsand, is **100 times faster** than conventional systems

50 

Actiflo takes up **50 times less space** than traditional methods