

## WORLD CONGRESS FACILITY TOURS

The IDA facility tours are complimentary to Congress delegates. A photo I.D. (passports or drivers licenses) are required for security purposes. Four facility tour offerings are available. Delegates may participate in one tour and space is limited on all tours so do not delay in registering for the Congress. To register visit [wc.idadesal.org/registration](http://wc.idadesal.org/registration)

Plant Name	Plant Description	Maximum of Attendees	Plant Tour Duration	Depart and Return Schedule (includes r/t transportation from and back to World Trade Center)	Security Rules
SABESP ETA RIO GRANDE	SABESP'S RIO GRANDE Water Treatment Plant (ETA) operates in São Bernardo do Campo located in the Southeast area of Greater São Paulo, It produces 5000 liters of water per second and supplies 1.5 million people in Diadema, São Bernardo do Campo and part of Santo André. It is an arm of the Billings Dam. The installation of ultrafiltration membranes is a state-of-the-art technology already used in countries such as the United States, Israel and Singapore, was implemented by Sabesp in WTP RIO GRANDE.	25 per tour	3 hours	Tour #1am: Depart WTC - 0610 Return WTC - 1250  Tour #2pm: Depart WTC - 1300 Return WTC - 1600	<ol style="list-style-type: none"> <li>1. Smoking, snacking or drinking is not permitted in the operational area;</li> <li>2. Shorts, slippers and high heels should not be worn.</li> <li>3. Sweaters are recommended.</li> </ol>
AQUAPOLO	Aquapolo Ambiental - The largest water reuse system for industrial purposes in the Southern Hemisphere and fifth largest on the planet. It is a result of a partnership between Brookfield and SABESP (Basic Sanitation Company of the State of São Paulo), and provides for a contract 650 liters per second of reuse water for the Petrochemical Complex of the ABC Paulista Region. Of modern and sustainable design, Aquapolo is able to produce 1,000 liters per second of reuse water, using the most advanced and complex technological processes available. The Aquapolo treatment process consists of pumping and preliminary treatment (disc filters), a tertiary biological system with an anoxic and aerated chamber, which main function is the reduction of ammoniacal nitrogen, nitrate and organic load, followed by ultrafiltration by submerged membranes, With the objective of reducing suspended solids and turbidity. In order to guarantee adequate salinity for boilers and cooling towers, part of the water is treated by reverse osmosis and then blended (water ultrafiltration and osmosis). Before final pumping the water is disinfected by chlorine dioxide.	25	40 min	Tour #3: Depart WTC - 1110 Return WTC - 1750	<ol style="list-style-type: none"> <li>1. In case of rain on the day of the visit, it will be automatically canceled;</li> <li>2. Smoking, snacking or drinking is not permitted in the EPAI's operational area;</li> <li>3. Everyone must wear long trousers, closed shoes and bottoms (boots or sneakers, slippers will not be accepted).</li> <li>4. Collection of material is not allowed in any part of the treatment during the visit.</li> <li>5. For security reasons, photographic and video records should be made only by one person in the group.</li> </ol>
SANASA	SANASA was one of the first Latin American companies to implement MBR system for municipal wastewater treatment designed to treat wastewater from 176,000 inhabitants. SANASA is responsible for the water supply (collection, adduction, treatment, reservation and distribution of potable water), collection, removal and treatment of domestic sewage in the municipality of Campinas through five treatment plants and has a production capacity of up to 4530 liter per second. The first step of the pretreatment is multi-rake bar screens (15mm bars), followed by rotary drum perforated plate screens (2mm punched hole) and settling grit chambers. After pretreatment, sewage flows by gravity to the bioreactors. There are two bioreactors in the plant that have capacity to treat 360 L/s (daily average flow). Each bioreactor is followed by three membrane trains. Each membrane train has circa 150m <sup>3</sup> volume and 12,000 m <sup>2</sup> filtration area, corresponding to 72,000m <sup>2</sup> filtration area in the whole plant. Average flux is 19 LMH, but during peak flows it can reach 29 LMH. The high quality of treated effluent (permeate) is shown by process stability and excellent analyses results achieved during the whole period of operation: BOD below 1.5 mg/L, TSS below 5 mg/L and turbidity below 0.5 NTU. Due to removal efficiency obtained in microbiological parameters no other disinfection procedure was need to meet discharge permits.	30	90 min	Tour #4: Depart WTC - 1300 Return WTC - 1830	<ol style="list-style-type: none"> <li>1. Smoking, snacking or drinking is not permitted in the operational area;</li> <li>2. Shorts, slippers and high heels should not be worn.</li> </ol>