

## MBR Lake Melissa, USA

### Task

Turnkey project / Design, supply, installation and commissioning of the MBR compact plant in Lake Melissa. Client: Sales Partner SJE. Commissioning in 12 / 2005.

### Inlet

The membrane bioreactor plant receives the flows into the pre-settling tank stage from a pumping station. Approx. 250 residents are connected to the system.

### Process Description

The raw water passes through a septic tank to the biological treatment. The biological process combines nitrogen removal in a preliminary denitrification tank and afterwards in a nitrification step including two siClaro® Filter. The filtrate passes through the membranes via under pressure created by filtrate pumps.



### Design Data

Population Equivalent (PE)	300,0
Average flow (m <sup>3</sup> /d)	30,0
Peak flow (l/s)	02,0
No. of siClaro® Filter	2,0 + 1,0
Installed membrane surface area (m <sup>2</sup> )	150,0 + 75,0
Aeration tank volume (m <sup>3</sup> )	10,0