

Biological Denitrification Project in La Eliana (Valencia, Spain)

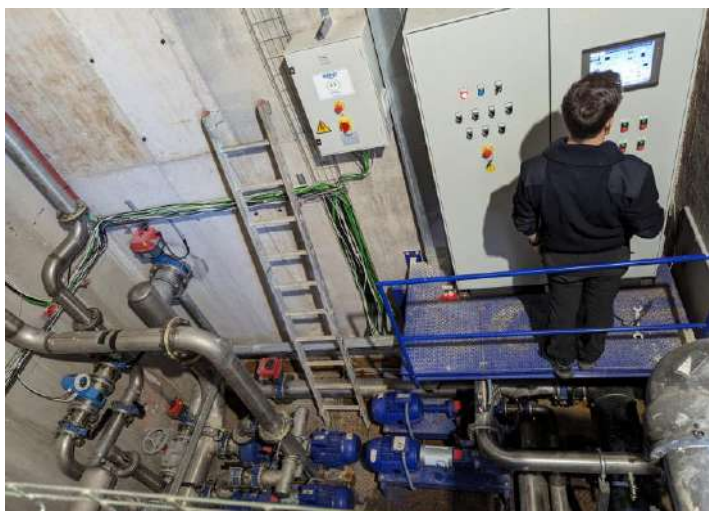


Figure 1: BIOBOX Nitrates Biofiltration Plant 286 GPM

Technical Summary of the Article:

- **Influent:** Well water
- **Technology:** BIOBOX Nitrate
- **Flow rate:** 286 GPM (65 m³/h)
- **Influent N-NO₃:** 14-16mg/L / (**NO₃:** 60-70 mg/L)
- **Effluent N-NO₃:** <8 mg/L (**NO₃:** <35 mg/L)
- **Plant Features**
 - Biological Denitrification
 - Ultraviolet Treatment
 - Refining to eliminate suspended solids
 - Final disinfection by Sodium Hypochlorite.

This ambitious project faces the challenge of an extremely limited space, with the construction of a **drinking water treatment** plant of 286 GPM ((65 m³/h) in an area smaller than 322 ft² (30 square meters) . The plant is part of a special execution in which prefabricated modules have been built to fit into two old tanks that previously filtered with sand. Due to the client's limitations, BIOBOX® has demonstrated its flexibility and technical capacity to offer tailored solutions under complex conditions.

This unique project, **scheduled to start up in the coming months**, highlights BIOBOX®'s ability to implement complex solutions with exceptional results. The installation improves drinking water quality sustainably, perfectly adapting to the client's needs while meeting the highest operational and environmental standards.

Table 1: Expected Treatment Results

Parameter	Influent	Treated effluent
Flow rate (GPM)	286	
Flow rate (m ³ /h)	65	
N-NO ₃ (mg/L)	14-16	<8
NO ₃ (mg/L)	60-70	<35