

Location: United States



AMI system drives improved quality and sustainability in algae cultivation

Maintaining consistent and quality water supply is critical for algae cultivation. AMI systems remove unwanted contaminants and produce reliable, high-quality water.

Challenge

A biotech-agricultural company focuses on the sustainable production of nutrients derived from algae.

Its product line includes protein powders and omega-3 oils, cultivated using proprietary methods.

These products serve as dietary supplements, food fortification, and wellness products.

The company approached Applied Membranes to build an RO unit for one of its greenhouses, given Applied Membranes' extensive experience in this space.



Solution

Applied Membranes designed and built a **10,000 GPD (2 m3/h)** Reverse Osmosis (RO) system, fully integrated inside a 20-foot container.

This AMI system was instrumental in ensuring a reliable water supply for the customer's algae cultivation processes.

Key Features:

- 20-foot ISO climatized container with electrical and piping integrated
- Multimedia filters
- Greensand filter
- Clean-in-place system
- Chemical injection system



Results

Algae cultivation requires a controlled environment, with proper water quality, light, and nutrients.

Quality: AMI system produces high-quality water required for optimal algae growth within the customer's greenhouse.

Improved yields: AMI system removes unwanted impurities from water, improving algae production yields for customer.

Sustainable operations: By integrating this AMI solution into its operations, the customer reduced water wastage, improved product quality, and enhanced overall operational efficiency.

