



Disinfection,  
O<sub>3</sub> Destruction

 Food &  
Beverage

 Amritsar,  
Punjab, India

# Disinfection of Borewell Water for a World-leading Beverage Company Bottler in Punjab, India

## The Challenge

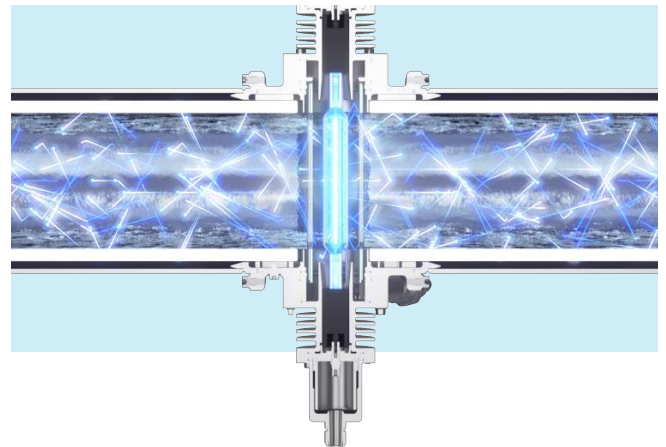
A global beverage company bottler located in Amritsar was unable to start production for more than two years due to high contamination of the borewell water. The water was contaminated by *Pseudomonas aeruginosa* bacteria, exacerbated by the cattle breeding and fertilizers used in farming in surrounding fields.

## The Solution

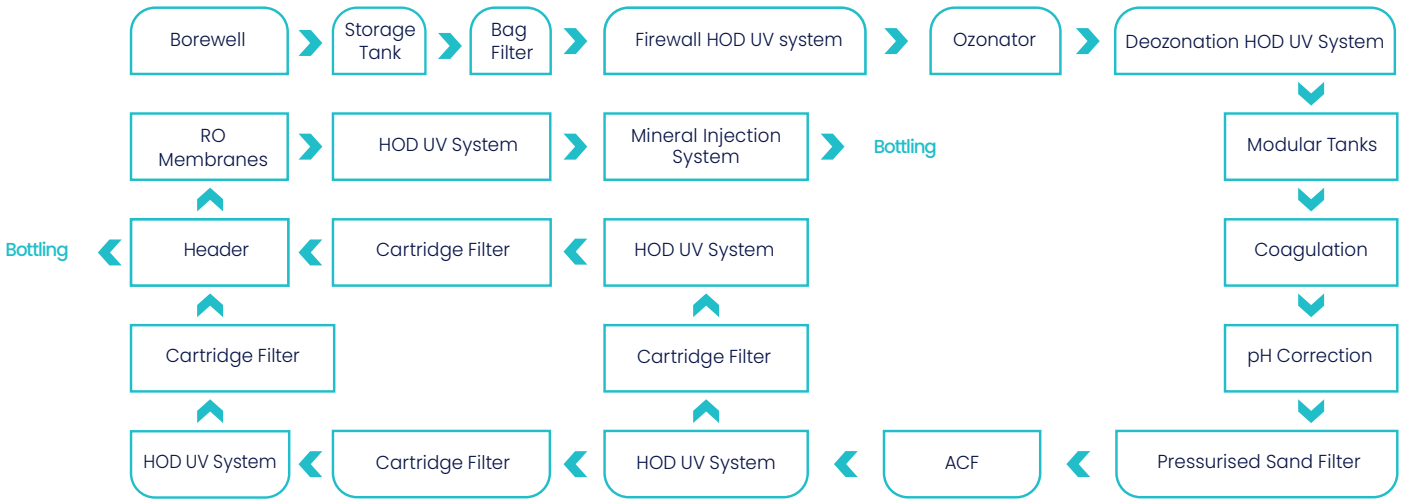
To achieve disinfection goal of 5 log reduction of *Pseudomonas* and ozone level BDL of 0.02 ppm, the bottler selected Atlantium's HOD™ (Hydro-Optic Disinfection) UV technology. Atlantium HOD UV systems effectively inactivate bacteria.

This is achieved by combining ultraviolet water disinfection technology with hydraulic and optic principles. The HOD UV system features the unique Total Internal Reflection (TIR) technology that recycles UV light energy, ensures homogenous UV dose distribution, provides superior power (kW) efficiency compared to traditional UV, and achieves unprecedented micro-organism inactivation.

To achieve 5 log bacteria reduction, the water treatment process included a firewall UV system and four UV disinfection systems. To reach ozone levels at the UV outlet with BDL of 0.02 ppm, a deozoneation UV system was installed following the firewall system.



# Water Treatment Process



## Results

After more than two years, the plant process is operational and production will commence shortly.



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## About us

For more than two decades, Atlantium Technologies has helped to ensure water safety with its innovative HOD™ (Hydro-Optic Disinfection) UV technology and novel approach to performance, monitoring, and control. Atlantium's superior, environmentally friendly water treatment solutions ensure stable, efficient, and dependable production.

With thousands of full-scale installations for leading brands in various industries globally, we're committed to consistently meeting our customers' water quality needs, ensuring pure results.

