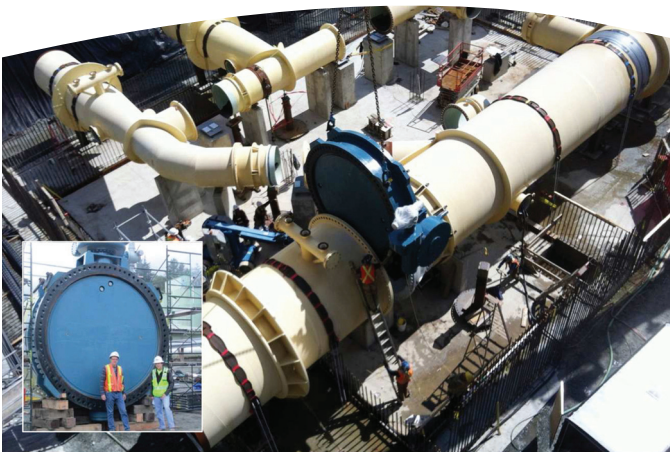




Award of Merit

Coquitlam UV Disinfection Project - Water Treatment Facilities



Consultants

Ausenco Engineering Canada Inc.

Owner

Metro Vancouver

Category

Municipal & Civil Infrastructure

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Operated by Metro Vancouver, the Coquitlam Water Treatment Plant provides approximately 370 million litres of potable water on an average day – approximately one third of the total water supply delivered in the Metro Vancouver region.

The existing Coquitlam water disinfection process provided ozonation and chlorination, as well as soda ash for corrosion control. However, to comply with the new requirements under revisions to Health Canada's Guidelines for Canadian Drinking Water Quality, further improvements were required for rapid and effective inactivation of chlorine-resistant microorganisms such as *Giardia* and *Cryptosporidium*.

To meet the new requirements, the existing water treatment facilities were upgraded and an ultraviolet (UV) disinfection plant was added. The plant is located within the Coquitlam watershed, on an environmentally sensitive site. Construction activities and the finished facility were managed and designed to protect the extensive wildlife present as well as terrestrial and aquatic systems, while reflecting the goals outlined in Metro Vancouver's Sustainable Region Initiative.

The Ausenco team developed the conceptual design for the facility, implementing a range of innovative approaches to allow the facility to be located on the tightly constrained site. The team also provided preliminary and detailed engineering and design; construction management; and commissioning management services.

The project was completed under the \$110 million budget and on schedule, helping Metro Vancouver continue to provide a reliable source of safe, high-quality drinking water to the region while minimizing impact on the environment.