CASE STUDY

BATHURST

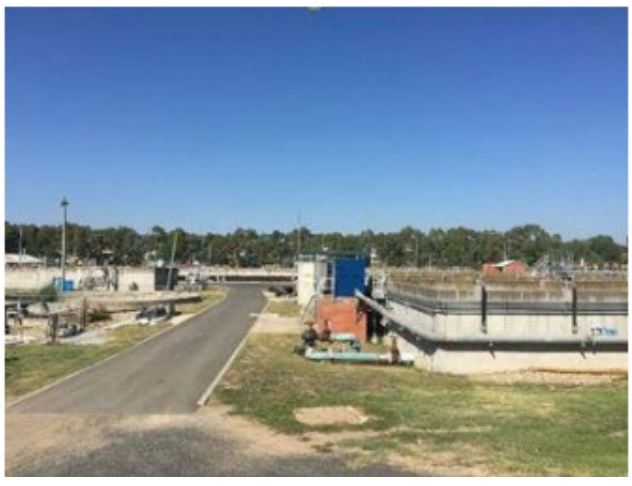
The City of Bathurst, Australia Installs Microclor® On-Site Sodium Hypochlorite Generation System

OVERVIEW

Bathurst is the home of the Bathurst 1000 Race, the largest NASCAR-style "touring car" race in Australia. On race day, tens of thousands of additional visitors' tax the capacity of the Bathurst 5 million-gallon-per- day wastewater treatment plant. The diligence and capability of the treatment staff allows the plant to meet the challenge every year.

The Bathurst Regional Council uses treated effluent from the Bathurst Wastewater Treatment Works at its bio-solids plant for general wash down and as non-potable water throughout the plant. The water is drawn from the end of the treatment process before the final step of UV disinfection.

The Council was using delivered 12% liquid chlorine (bulk sodium hypochlorite) to provide residual disinfection to the re-used effluent. However, the risks in using the liquid bleach was identified, and although the risk was low, the health consequence to staff was high while using the reuse water in locations where a fine spray was generated.



"We use UV, but with no chlorine residual, disinfection could not be verified" said Nicholas Lavoipierre, Senior Water & Sewer Engineer at Bathurst Regional Council. The Council then put out a bid tender for the Design, Construction and Commissioning of an On-Site Sodium Hypochlorite Generating (OSHG) System. OSHG systems use salt, water and electricity to generate a safe, dilute liquid chlorine (0.08% concentration sodium hypochlorite). This system would eliminate the need for the transport and storage of hazardous concentrated liquid chlorine and thus remove the risks for their staff. There were seven responses to the request for tender and Continental Water using Microclor® from Cleawater1 (a UGSI Solutions company) was selected as the preferred supplier. The Microclor® system utilizes a series of vertical cells that safely generate the hypochlorite and immediately vent the by-product hydrogen. The project was engineered by PH Consulting from the local Bathurst area.

80 Pound-Per-Day (PPD) or 36 KG-Per-Day chlorine equivalent Microclor® skid, housing and proud

In addition, Bathurst is a long-time user of Cleanwater1 Encore® 700 metering pumps (below). There are approximately 20 of the Encore® pumps that are used to dose various chemicals throughout the wastewater plant. The Encore® 700 is known throughout the world as an extremely reliable dosing pump.

Encore® 700 diaphragm chemical dosing pumps

Engineer Nicholas Lavoipierre was quoted as saying: “Although not the lowest price – a comprehensive tender with good technical information from Continental Water plus good references with after sales service were the key factors that won.”

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