





1 View of the membrane tanks and connecting elements. 2 Tank pipes. 3 Above tank view of the membrane tanks.

PAEROA WTP UPGRADE

Harrison Grierson for Hauraki District Council

Project Location: Paeroa



The Paeroa Water Treatment Plant upgrade, designed by Harrison Grierson for Hauraki District Council (HDC), was commissioned in June 2015. The key objectives of the upgrade were to provide compliance with Drinking Water Standards New Zealand and to increase capacity to meet future demand. HDC's brief was for a cost effective and practical solution which maintained plant production over the construction period.

Harrison Grierson's innovative solution, which enables the plant to produce a chemical free waste for the majority of the time, was designed by our water treatment process engineers, structural engineers and planners alongside the selected technology suppliers. The process train solution involves a treatment process which does not use chemical coagulation for the majority of the time. This means that the bulk of the waste stream produced is chemical free, and can be discharged directly back to the source river via an existing stormwater network.

As well as being a practical and environmentally sensitive solution, it has financial, social and cultural advantages. It has meant that no manmade chemicals are sent to the receiving environment and that sludge lagoons were not required to be constructed on the banks of the Ohinemuri River. The volume of chemicals held onsite has been minimised and it has provided increased capacity due to the recovery and efficiency of the process stream.

Our solution met all of HDC's objectives. The ability of the plant to produce a chemical free waste stream is the culmination of our technical expertise and understanding of existing infrastructure.

Judging & Copyright Statement

This project is an entrant in the 2016 INNOVATE NZ Awards of Excellence competition. The winners will be celebrated at our Awards Gala Dinner on Saturday, 12th August 2017 in Taupo.

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