

An Innovative Wastewater Project

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Abstract

The Hastings Wastewater Treatment project is partly driven by Maori cultural and spiritual concerns over the discharge of human wastes to the sea. This, combined with a willingness by the Council to test the norm, has yielded a number of innovative solutions which all key stakeholders of the project have bought into.

This paper builds on a presentation given at last year's INGENIUM conference on the Hastings Wastewater Treatment project. It builds on that foundation and discusses both the technical and project management solutions required to convert an innovative resource consent variation into an inspiring project including:

- Separating domestic wastewater from industrial wastewater
- Forming a practical partnership between Tangata Whenua and Council
- Operating a pragmatic partnership between asset manager, operator and designer
- Using FIDIC conditions of contract instead of NZS3910
- Nominating subcontractors to supply specialist equipment
- Constructing over nine hundred soil mixing columns, of 600mm diameter to an approximate depth of 15m below ground level to overcome the poor soil conditions
- Constructing a 7m deep pump station with the floor some 5 metres below sea level
- Creating a Papatuanuku channel
- Building two 37 m diameter concrete biological trickling tanks filled with 19,500 m³ of plastic media
- Taking a "Principal's Controlled" approach to insurance requirements

Two key and fascinating contracts of this project are already underway namely the ground improvement and media production – and by the time of the INGENIUM conference the main civil works will be well underway.

Bios

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