

STAFF REPORT

TO: Chair and Members, Engineering Services Committee

FROM: Jeff Cuthbertson, Utilities Asset Manager

REFERENCE: S314

SUBJECT: **Takaka Wastewater Treatment Plant – RESC-10-11-12**
Report prepared for meeting of 11 November 2010

1 PURPOSE

- 1.1 The purpose of this report is to inform the Engineering Services Committee on the status of the Takaka Wastewater Treatment Plant upgrade.

2 BACKGROUND

- 2.1 The Takaka Wastewater Treatment Plant receives effluent from a very wide area of the Lower Takaka Plains. Effluent is pumped from Pohara, Ligar Bay, Tata Beach, Takaka South (around the hospital and central Takaka Road) and Rototai.
- 2.2 The Takaka Wastewater Treatment Plant was originally constructed by the Golden Bay County Council in 1984. Since this time there has been several upgrades to ensure compliance with the respective resource consents.
- 2.3 In 2005 Council included the next upgrade of the Takaka Wastewater Treatment Plant in its Ten Year Plan. The reasons for the upgrade were:
- Non-compliance with resource consents;
 - Allow capacity for growth;
 - Odour issues;
 - The need for a better quality effluent discharge to the environment.

3 PLANNING

- 3.1 Council has purchased 1.8 hectares of additional land. A resource consent (Appendix A attached) enables staff to undertake test drilling and water monitoring of the site in anticipation that a design for the upgrade can be achieved.
- 3.2 To date Council has undertaken the following work on the site:
- Two monitoring wells installed by drill rig. Resource consent was obtained for this work and all work was in accordance with the consent. A permanent standpipe was installed at both wells. Wells were installed in the location shown in the consent.

- Eight test pits, which were backfilled. Depth to about 2.5m. A standpipe was installed in most of the test pits and infiltration tests were conducted. The standpipes were left in the ground, but were not of permanent construction.
- Four Scala penetrometer tests.

- 3.3 The plan (Appendix B attached) was prepared by MWH's geotechnical engineer, who was on site for the full duration.
- 3.4 A black pipe of about 450mm-diameter was brought to the site by the contractor in case it was needed for infiltration testing. It wasn't used and the pipe was removed from the site. The only pipes that were installed at the site were the vertical pipes used for infiltration testing (these pipes are white)
- 3.5 CW Drilling installed the monitoring wells and Downer performed the test pits and infiltration tests (excavator and water cart on site).
- 3.6 Soil samples were collected and have been sent to the laboratory for analysis and groundwater levels are being recorded.

4 FUTURE WORKS

- 4.1 Council has applied for a new resource consent and designation for the site. A few issues have arisen since the resource consent application and staff and our consultants are working through those issues.
- 4.2 It should be noted that no work on construction and upgrading of the Takaka Wastewater Treatment Plant will be undertaken without the correct and appropriate resource consents in place.
- 4.3 As previous reported to the Engineering Services Committee in September 2010 (RESC-10-09-08), it is still Council's intention to set up a working party to consider the best options for the development of the wastewater treatment plant site. This will include the layout, site development, landscaping etc.

5 TRADE WASTE

- 5.1 Council approved a Trade Waste Bylaw in 2005. The Bylaw defines Trade Waste and what a Trade Premise is:

TRADE PREMISES means:

- (a) *Any premises used or intended to be used for any industrial or trade purpose; or*
- (b) *Any premises used or intended to be used for the storage, transfer, treatment, or disposal of waste materials or for other waste management purposes, or used for composting organic materials; or*
- (c) *Any other premises from which a contaminant is discharged in connection with any industrial or trade process;*
- (d) *Any other premises discharging other than domestic sewage, and includes any land or premises wholly or mainly used for agricultural or horticultural purposes.*

TRADE WASTE is any liquid, with or without matter in suspension or solution, that is or may be discharged from a trade premises to the Council sewerage system in the course of any trade or industrial process or operation, or in the course of any activity or operation of a like nature; and may include condensing or cooling waters; stormwater which cannot be practically separated, or domestic sewage.

- 5.2 As part of the Wastewater Treatment Plant upgrade an assessment of all potential trade waste effluent will be undertaken. This will require an individual inspection of all potential trade waste premises within the Takaka Wastewater Treatment Plant catchment will take place.
- 5.3 The outcome of this inspection may result in some premises needing to treat their effluent to an acceptable standard before it is permitted to enter Council's reticulation network and thus to the Wastewater Treatment Plant. Others may find that their effluent is above the chemical acceptance of normal sewerage but is able to be treated at the Treatment Plant at a cost over and above the "pan charge", ie Trade Waste charges may be incurred.

Note – Trade Waste charges are reviewed annually through the Annual Plan process.

6 RECOMMENDATION

THAT the report RESC-10-11-12 Takaka Wastewater Treatment Plant be received by the Engineering Services Committee.

Jeff Cuthbertson
Utilities Asset Manager