

Z1630903 0102

02 July 2010

NZ Transport Agency
PO Box 5245
Dunedin 9050
Atten: Simon Underwood

Dear Simon

Waitati Curve Realignment Project

As part of the project, the Waitati Store will be relocated and a new onsite wastewater treatment and disposal system will be built.

Based on the layout drawing Z1630901C527 Site Plan Permanent Store and Disposal Field, I confirm that it is technically feasible to establish a new onsite wastewater treatment and disposal system to meet requirements of the regional plan controlling discharges (Regional Plan: Water for Otago) and the applicable New Zealand Standard (AS/NZS 1547: 2000 On-site domestic wastewater management) subject to the following matters being addressed.

Complying with conditions of Regional Plan: Water for Otago with Permitted Activity Rule 12.6.1.4
The key conditions for discharge as a permitted activity are that the flow rate does not exceed 2000 litres per day and that the discharge is greater than 50 metres from any surface water body, mean high water springs and any water supply bore.

Land Application Area

The area set aside for the soil soakage system should be a minimum of 300 square metres plus a marginal strip around the land application area to meet District Plan set back requirements for buildings and to allow for fencing. This area is based on 2000 litres per day maximum wastewater flow and allows for an active soil soakage bed system and a 100 percent reserve area.

Fill Material

The hydraulic assimilative capacity of site needs to be adequate. This requires that the fill material beneath and about the land application meets a minimum depth requirement and complies with a nominated materials specification. The infiltrative surface (i.e. the surface in the soil soakage system on which the effluent is applied) should be a minimum of 1 metre above the underlying limiting horizon (i.e. the in-situ clay). This means the fill material may need to be about 1.6 metres deep. The fill material should be a sandy soil that meets the nominated specification.

Site Drainage

The fill material will need to drain freely. This means the fill material must not be contained laterally so that the treated effluent beneath the mound and rainfall soaking into the ground can drain away without causing groundwater to mound within the fill material. The fill material will need to have hydraulic connectivity to adjacent surface water drains such that the drain inverts are below base of the fill material and that the flow in the drains is not inhibited by tide level.

Yours sincerely



John Cocks
Principal Environmental Engineer
MWH New Zealand Limited