Onsite Wastewater Disposal Site & Soils Assessment Form

QUEENSTOWN LAKES DISTRICT COUNCIL

INTRODUCTION

The objective of this form is to collate the required site and soil information that will support QLDC with evaluating the risks associated with installing any proposed Onsite Wastewater Disposal systems on a new subdivision or greenfield site.

This form can be used in conjunction with AF OSW which is designed to cover both the site assessment as well as the system design review.

REFERENCES

The design standard for waste water treatment and effluent disposal systems is **AS/NZS 1547:2012**. All references within this form relate to this standard.

RISK BASED APPROACH

QLDC has adopted a risk based approach which involves evaluating key factors relating to the site and soil features to ensure that any risk to environment or public health is fully mitigated. The key potential risks that QLDC will consider include, but are not limited to, the following:

High risks

- Pathogen risks

Moderate risk

- Odours
- Loss of amenity service due to technology failure, power outage
- High capital and/or operating costs

Minor risks

- Slope instability on the steeper sites
- Noise
- Risk to cultural values
- Nutrients (nitrogen and phosphorus) and emerging contaminants

HIGH RISK APPLICATIONS

Throughout this application form there are a number of information fields that are highlighted in red. These relate to key risk factors that the system designer must consider during their design process. If these risks are present then an explanation of what design mitigations have been taken is required.

For systems that breach the requirements of Section 3, you will be required to raise an application with the Otago Regional Council for a Resource Consent. Once the ORC Resource Consent has been granted it can be referenced as part of the QLDC Building Consent Application.

QLDC reserves the right to engage expert peer review of applications that are either very high risk, or system designs which appear to have inadequate design mitigations in place. The cost of this will be on-charged to the applicant as part of their building consent fees.

APPLICATION FORM CONTENTS

1 SITE DESCRIPTION

Property Owner:	
Location Address:	
Legal Description (e.g. Lot3 DP1234) :	
List any existing consents related to waste disposal on the site:	
General description of development and describe all sources of wastewater:	

2 SITE ASSESSOR

Company	
Contact Name	
Email	
Phone	
Qualifications/Technical Experience	

3 ORC RESOURCE CONSENT REQUIREMENTS:

Please complete below checklist to confirm whether an Otago Regional Council (ORC) resource consent will be required to discharge domestic waste water in the Queenstown Lakes District:

Yes	No	System Requirement
☐	☐	Daily discharge volume exceeds 2,000 litres per day
☐	☐	Discharge will occur in a groundwater protection zone or in the Lake Hayes catchment
☐	☐	Discharge will occur within 50 metres of a surface water body
☐	☐	Discharge will occur within 50 metres of an existing bore/well used to supply water for domestic needs or drinking water for livestock
☐	☐	There will be a direct discharge into a drain, water race or groundwater
☐	☐	Discharge may runoff onto another persons' property

If any of these apply then you will need to make an ORC resource consent application for domestic wastewater discharges to land with a maximum volume of 14,000 litres. The application form for this is Form 6A.

Once the ORC consent has been granted please enter the reference number below and provide a copy of the approved ORC consent.

ORC Resource Consent Number:	

4 SITE ASSESSMENT DETAILS

For the areas where the treatment plant and land application system and reserve area are to be located, please provide the following information:

Land use description:	
Topography:	
Slope angle:	
Vegetation cover:	
Are there areas of potential ponding?	
Are there risks associated with drainage patterns and overland flow paths?	
Does site have Flood potential? (show with return period on site plan)	☐ **Yes** ☐ **No** If Yes, please provide information below on what design considerations have been adopted to mitigate this risk (e.g. elevated tanks, sealed lids etc.)
Is the system within 100m distance to nearest open water bodies, emphemeral streams and wetland?	☐ **Yes** ☐ **No** If Yes, please provide information below on what design considerations have been adopted to mitigate this risk.
Is the system within 50m distance to stormwater drains and stormwater soakage areas?	☐ **Yes** ☐ **No** If Yes, please provide information below on what design considerations have been adopted to mitigate this risk.

Are Water bores within 50m? (reference ORC Maps)	☐ **Yes** ☐ **No** If Yes then an ORC resource consent is required	
Are there are other key site features that may affect the system design?		
Slope stability assessment- For land slopes greater than 15° (25%) summarize any areas unsuitable for waste water irrigation.		
What is the depth to the highest potential ground water level:	Summer:	
	Winter:	
	Information Source:	
Is there potential for waste water to short circuit through permeable soils to surface and / or ground water?	☐ **Yes** ☐ **No** If Yes, please provide information below on what design considerations have been adopted to mitigate this risk.	

5 SOIL INVESTIGATION

For the areas where the land application system and reserve area are to be located, provide the following information

Has a Site Specific Field investigation been completed? Is Report attached?	☐ Yes ☐ No Note: Report shall include a plan showing test pit or bore location, and a detailed soils report in accordance with Table B2 and Figure B1 or and equivalent format and detail. Photos of the profiles and soils shall be included including photos of soil ribbon tests (Section E4.1)
Field investigation date:	

Number of test pits or bores:	
If fill material was encountered during the soil investigation, describe the fill material and explain how this will impact on the waste water land application system design and performance?	
Has the soil permeability beneath the proposed land application field been tested?	☐ Yes ☐ No If Yes please provide details of test method and results (e.g. Percolation test method (refer to B6 for applicability):

6 SOIL CATEGORY

Based on the site investigation report please confirm the soil category that is present for the land application system.

Select One	Soil Category (Table 5.1)	Soil Texture *(Appendix E)*	Drainage Characteristic	Risk limits for Groundwater Setback
☐	**1**	Gravel and sands	Rapid	**5m**
☐	**2**	Sandy loams	Free	**5m**
☐	**3**	Loams	Good	**1.5m**
☐	**4**	Clay loams	Moderate	**1.5m**
☐	**5**	Light clays	Moderate to slow	**0.6m**
☐	**6**	Medium to heavy clays	Slow	**0.6m**

Is the groundwater level (refer section 4) within the above risk limits for the site?	☐ Yes ☐ No If Yes, please provide information below on what system design considerations have been adopted to mitigate the risk to groundwater. For example: • Secondary treatment • Tertiary UV treatment • Modified trench or bed details for category 1 soils to ensure even distribution

Note: The soil category and groundwater level will determine the required loading rate for any land application system.

7 ATTACHMENTS CHECKLIST

Select One	Required Documents
☐	Copy of any existing QLDC or ORC consents
☐	Copy of QLDC Site & Soils Assessment (if previously completed)
☐	Copy of slope stability geotechnical report (if required)
☐	Copy of flood hazard assessment (if required)
☐	Site Specific Field Investigation Report. *Ensure it covers information requirements covered in sections 5 &6*
☐	To scale site plan. The following must be included on the plan: • Buildings Boundaries • Treatment system components Reserve disposal area Retaining Walls • Embankments • Cutoff drains / diversion bunds Water bodies • Stormwater drains, discharge points or soakage facilities • Flood risk areas • Other wastewater treatment units and discharge systems

	• Water bores • Direction of ground water flow • Existing and proposed trees and shrubs • North arrow

8 APPLICANT STATEMENT:

I believe to the best of my knowledge that the information provided in this application is true and complete. I have the necessary experience and qualifications to design the above proposed waste water treatment system in accordance with the requirements of AS/NZS 1547:2012:

Name:

Signature:

Date:

Please scan the completed document to PDF and upload along with supporting information to the QLDC Sharefile portal:

http://www.qldc.govt.nz/index.php/planning/resource-consents/apply-online/