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INTRODUCTION

The objective of this form is to collate the required information that will support QLDC with evaluating the risk of the proposed Onsite Wastewater Disposal system in terms of Building Code compliance (G13), RMA Act and Environmental and Public Health requirements.

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 system design and 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 oncharged to the applicant as part of their building consent fees.



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1 SITE DESCRIPTION

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



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2 SITE ASSESSOR, DESIGNER AND INSTALLER DETAILS

2.1 SITE ASSESSOR

Company	Click here to enter Company name		
Contact Name	Click here to enter primary contact name Pho		Phone Number
Qualifications/Technical Experience	Click here to enter relevant qualifications or brief summary of technical experience that verifies they are suitably qualified to perform the role		

2.2 SYSTEM DESIGNER

Company	Click here to enter Company name		
Contact Name	Click here to enter primary contact name	Phone	Phone Number
Qualifications/Technical Experience Click here to enter relevant qualifications of experience that verifies they are suitably of			*

2.3 SYSTEM INSTALLER

Company	Click here to enter Company name			
Contact Name	Click here to enter primary contact name Phone		Phone Number	
Qualifications/Technical Experience	Click here to enter relevant qualifications or brief summary of technical experience that verifies they are suitably qualified to perform the role			

2.4 SERVICING TECHNICAN/COMPANY

Company	Click here to enter Company name	Phone	Phone Number	
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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:	Click here to enter 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:	Click here to enter text.	
Topography:	Click here to enter text.	
Slope angle:	Click here to enter text.	
Vegetation cover:	Click here to enter text.	
Are there areas of potential ponding?	Click here to enter text.	
Are there risks associated with drainage patterns and overland flow paths?	Click here to enter text.	



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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.)		
	Click here to	enter design mitigations.	
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.		
	Click here to	enter design mitigations.	
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.		
	Click here to enter design mitigations.		
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?	Click here to enter text.		
Slope stability assessment- For land slopes greater than 15° (25%) summarize any areas unsuitable for waste water irrigation.	Click here to	enter text.	
What is the depth to the highest potential ground water level:	Summer:	Click here to enter text.	
potential ground water level.	Winter:	Click here to enter text.	
	Information Source:	Click here to enter text.	
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.		
	Click here to	enter design mitigations.	



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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
completed: 13 report attached:	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:	Click here to enter text.
Number of test pits or bores:	Click here to enter text.
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?	Click here to enter text.
Has the soil permeability beneath the proposed land application field been tested?	☐ Yes ☐ No
proposed fand application field been tested:	If Yes please provide details of test method and results (e.g. Percolation test method (refer to B6 for applicability):
	Click here to enter design mitigations.



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 inforconsiderations have been example:	•	Ğ

Note: The soil category and groundwater level will determine the required loading rate for the land application system. This needs to be specified in section 7.2 and should be referenced from L1, M1 or N1 tables.

Modified trench or bed details for category 1 soils to ensure even

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Secondary treatment Tertiary UV treatment

Click here to enter design mitigations.

distribution

7 SYSTEM DESIGN

7.1 SYSTEM INPUT INFORMATION

Property Water Supply	☐ Council reticulation
	☐ Water bore
	☐ Rainwater collection
	Other- please provide details: Click to enter text.
Total number of bedrooms that will be serviced by the system	Click here to enter text.
Maximum design occupancy	Click here to enter text.



Flow allowance litres / day per person: Refer to Appendix H, Table H3 and H4. Justify variations.	Click here to enter text.
List any water conservation devices or water recycling details and volume estimates (Table H3):	Click here to enter text.
Specify flow allowance for any other activity on the site such as spa baths, luxury showers etc:	Click here to enter text.
List any allowance for seasonal variations and loads:	Click here to enter text.
Total design flow allowance (litres per day):	Click here to enter text. Note: If above 2,000 litres per day an ORC resource consent is required

7.2 SYSTEM SELECTION & CAPACITY

Select One	Proposed Treatment System	Manufacturers Details	No. of Chambers and Capacity (litres)	Emergency Storage (litres)
	Primary System (e.g. Septic tank)	Click here to enter text.	Chambers & Litres	Litres
	Secondary Treatment system ¹	Click here to enter text.	Chambers & Litres	Litres
	Tertiary Treatment System	Click here to enter text.	Chambers & Litres	Litres
	Other:	Click here to enter text.	Chambers &	Litres
Rated treatment capacity of the system (litres/day):		Click here to enter text.		
Details of effluent filter:		Click here to enter text.		

¹ For on-site wastewater management systems requiring secondary or better treatment, QLDC strongly recommends that applicants select treatment plants certified by the On-site Effluent Treatment National Testing Programme (OSET NTP), or an equivalent or better independent certifying organisation. These have been verified as meeting the secondary effluent treatment requirements of AS/NZS 1547.

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Select One	Annlication System	Design Description. Please attach site plans/drawings	Design Loading Rate mm/day (DLR or DIR)
\Box	Surface dripper irrigation	NOT PERMITTED IN QLDC DUE TO FREEZING	N/A
	Sub-surface dripper irrigation	NOTE: MUST BE MINIMUM OF 300mmTO PREVENT FREEZING Click here to enter text.	Click to enter DLR or DIR
	Conventional Bed	Click here to enter text.	Click to enter DLR or DIR
	Conventional trench	Click here to enter text.	Click to enter DLR or DIR
	Deep trench	Click here to enter text.	Click to enter DLR or DIR
	Discharge control bed or trench	Click here to enter text.	Click to enter DLR or DIR
	Mound system	Click here to enter text.	Click to enter DLR or DIR
	Other (specify):	Click here to enter text.	Click to enter DLR or DIR

Note: The land application system site plans/drawings are to include dimensions, location, layout and component labels, cross-section details (with dimensions) and where appropriate; filter cloth, material type, structural details, flushing points, venting, valving, special fittings, intercepting drains and other detail specific to the design.

Select One	Proposed Loading Method	Details
	Trickle load, gravity	Click here to enter text.
	Gravity dosing: Flout, siphon or other	Click here to enter text.
	Pump	Click here to enter text.
	Other	Click here to enter text.

7.3 ADDITIONAL SYSTEM REQUIREMENTS



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Select One	Additional design considerations	Details
	Specify details or alarm system(s)	Click here to enter text.
	Specify available reserve area (5.5.3.4)	Click here to enter text.
	Specify fencing, warning signs and vegetation and planting requirements	Click here to enter text.
	Storm / surface water management:	Click here to enter text.
	Depths pipes to buried:	Click here to enter text.
	Flood protection:	Click here to enter text.
	Cut off / diversion drains (show on site plan):	Click here to enter text.
	Other:	Click here to enter text.

8 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
	Detailed plans of system layout showing treatment unit, drains/pipes and land application field including cross-section detail
	Ensure it covers information requirements covered in sections 7
	For secondary treatment units provide evidence of OSET NTP (or equivalent) certification
	Independent certification of in-ground tanks in terms of AS/NZS 1546.1 2008, or an
	equivalent standard. Provide details of performance criteria to which certification applies.
	Design Producer Statement of the on-site wastewater management service
	Loading certificate in accordance with Section 7.4.2 (d)



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Operation & Maintenance guidelines for the treatment plant and land application system		
Homeowner's operation manual for the treatment plant and land application system		
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		

9 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:

Company:	Click here to enter text.
Email:	Click here to enter text.
Phone number:	Click here to enter text.
Name:	Click here to enter text.
Signature:	
Date:	Click here to enter text

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

http://www.qldc.govt.nz/planning/building-consents/apply-online/