

APPLICATION FOR RESOURCE CONSENT

Form B9 - Assessment of Effects on the Environment (AEE)

To Discharge less than or equal to 6m³ / day of Domestic Wastewater onto or into Land



Auckland
Regional Council
TE RAUHĪTANGA TAIAO

To: General Manager
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(calls outside the Auckland area)

How do I fill in this form?

The following checklists and questions will help you to provide all the information needed for an Assessment of the Effects of your proposed activity on the Environment (AEE). It may be appropriate in some cases to address matters in addition to those identified in the form.

The information you supply should have the level of detail according to the scale and significance of effects that the activity may have on the receiving environment and should be relevant to your proposal.

For ease of checking, it is preferable that the issues are addressed in the same sequence as outlined in the checklist. Where relevant, place a tick ✓ in the box if you have provided the information and give a reference to the section of the AEE report it is in.

Discharge of domestic wastewater onto or into land - why is a resource consent needed?

Section 15 of the Resource Management Act 1991, (RMA) provides for the regulation of the discharge of contaminants into the environment.

The activity may be subject to rules in both the Auckland Transitional Regional Plan 1991 (TRP) and the Proposed Auckland Regional Plan: Air, Land and Water (PARP:ALW). As the relevant provisions of the PARP:ALW are not yet operative the status of the activity is determined as the more restrictive of the relevant rules of both plans.

Chapter five of the PARP:ALW outlines the objectives, policies and rules relating to the discharge of domestic wastewater onto or into land.

This form applies to all non-permitted activities that result in the discharge of domestic wastewater to land of volumes not exceeding 6m³/day (6,000 litres/day) and that meet the definition of domestic wastewater.

For Office Use Only

FORM A – WBS: _____
Consent No: _____
Other Related Consent Nos: _____
Customer No: _____

Fee / Deposit Paid: \$ _____
File No: _____
Site Address: _____
Applicant: _____

Domestic wastewater is defined in the PARP:ALW as:

“Wastewater originating from toilets, urinals, hand basins, kitchens, showers, baths, basins and laundries such as from a dwelling.”

This includes wastewater from facilities serving staff/students/patrons/residents in institutional, commercial and industrial establishments, but excludes trade waste, industrial or trade process wastewater or wash water and stormwater.

The discharge of less than or equal to 6m³ /day of domestic wastewater is a controlled activity under rule 5.5.24 of the PARP:ALW providing other controlled activity criteria is met and complied with. However, under the TRP it is a discretionary activity and the overall status of the activity is assessed as a discretionary activity.

Proposals accompanying applications for on site domestic wastewater discharge permits are assessed in accordance with the principles, procedures and parameter ranges in the Auckland Regional Council (ARC) technical publication no.58 titled “On-site Wastewater Systems: Design and Management Manual” Third Edition 2004 (TP58). Refer PARP:ALW Rule 5.5.24. TP58 is also used as a guide for assessing wastewater activities to land which are discretionary activities.

The ARC strongly recommends to all applicants that a chartered professional engineer or suitably qualified consultant(s), experienced in wastewater treatment and land application systems, is engaged to help you prepare your wastewater discharge application. In order for this consent application to be processed efficiently, it is critical that all relevant supporting information is included with this application.

Form B10, “To Discharge Contaminants into or onto Land and Water” is to be used for discharges from other sources (e.g. commercial) and includes domestic wastewater ≥6m³/day or directly discharging to water, discharges from networks and pump stations, production land activities, dairy discharges, biosolids, and agrichemical discharges.

More information concerning wastewater discharges can be found in the wastewater fact sheets.

Wastewater Fact Sheet - WW01
Wastewater Fact Sheet - WW02
Wastewater Fact Sheet - WW03
Wastewater Fact Sheet - WW04
Wastewater Fact Sheet - WW05

On-site Wastewater Management
On-site Wastewater Management – Septic Tanks
Wastewater Consent Compliance – A Guide for Consent Holders
On-site Wastewater Management – Trouble Shooting
On-site Wastewater Management – Post Construction Information Requirements

Form B9 – Discharge of Domestic Wastewater ≤ 6m³ per day onto or into Land

Answer the following and/or discuss the following items in your AEE report

Where relevant, place a tick ✓ in the box if the item applies and has been provided in the report and give a reference to the section of the report it is in.

ARC Accepts / Rejects	A. Consultant / Specialist Explanation If one or more consultants or specialists have assisted in preparing this AEE report (e.g. driller), provide their details below.
	A.1 Name of Consultant:
	A.2 Area of Expertise:
	A.3 Postal Address: _____ _____ _____ Postal Code: _____
	A.4 Street Address: (if different from above) _____ _____ _____ Postal Code: _____
	A.5 Phone Numbers
	Business:
	Mobile:
	Fax:
	A.6 Email address:
	A.7 Name of Consultant:
	A.8 Area of Expertise:
	A.9 Postal Address: _____ _____ _____ Postal Code: _____
	A.10 Street Address: (if different from above) _____ _____ _____ Postal Code: _____
	A.11 Phone Numbers
	Business:
	Mobile:
	Fax:
	A.12 Email address:

ARC Accepts / Rejects	1.0 Description of the Proposal
	<p>1.1 Discharge location</p> <p>Is the discharge location on the same property as where the wastewater originates from? (as given in form A)</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>
	<p>1.2 Name of Property owner: _____</p> <p>Address: _____</p> <p>_____</p> <p>Legal description: Lot _____ DP _____ CT _____</p> <p>Lot Area _____ m²</p> <p>All formal documentation confirming easements and/or covenants including Certificate of Title of the property where the discharge occurs <input type="checkbox"/> attached. (This will be verified by the ARC legal advisers.)</p> <p>Map Reference of discharge location: _____mE _____mN.</p> <p>Use New Zealand Transverse Mercator (NZTM). e.g. 1756730mE 5919740mN)</p> <p><i>If possible, use a Geographic Positioning System (GPS) device to obtain a map reference accurate to 10m. The northing follows the easting. If you do not have a map reference, ensure that the location of the discharge is marked to an accuracy of 10m on your location plan.</i></p>
	<p>1.3 Describe the proposed activity:</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>

ARC Accepts / Rejects	Item No.	Item	Information Provided ✓ Report Reference e.g. ✓ 3.2
	2.0	Site Plan – Show the following on the Site Plan: (provide one set of plans reduced to A3)	
	2.1	Title Box including: <ul style="list-style-type: none"> • The name of the person and/or company that prepared the plans. • Address of property. • Date plans were drawn. • Unique plan reference or identification or variation number where relevant. 	
	2.2	Legend explaining symbols on the Site Plan.	
	2.3	North point (orientated to the top of the page if possible).	
	2.4	Appropriate metric scale e.g. 1:2000 (1cm = 20m) and page size reference (e.g. @ A3).	
	2.5	Scale bar.	
	2.6	Total site area in hectares or m ² .	
	2.7	Road frontages and names.	
	2.8	Property boundary dimensions – existing and future (<i>where relevant</i>).	
	2.9	Adjoining street numbers.	
	2.10	Location of any fill or slips.	
	2.11	Location of any cultural heritage features including historic, waahi tapu and archaeological sites on the site and environs. (<i>Refer to section 3.11 of this form</i>)	
	2.12	Location of any natural heritage features e.g. indigenous vegetation and / or any significant ecological or geological features or features with significant natural heritage and / or conservation values e.g. volcanic cones, wetlands etc on the site and environs. (<i>Refer to section 3.12 of this form</i>)	
	2.13	Existing and proposed ground cover.	
	2.14	Location of the swimming pool backwash filter disposal system (if relevant).	
	2.15	Location of water supply bores, water supply tanks and overflows.	
	2.16	Location of existing and proposed structures, roads, buildings, fences etc.	
	2.17	Location of existing and proposed underground services including public/private drains.	
	2.18	Location of vegetation existing vegetation and any proposed removal and planting including riparian etc.	
	2.19	Location of and distance to any "sensitive" neighbouring properties.	

ARC Accepts / Rejects	Item No.	Item	Information Provided ✓ Report Reference e.g. ✓ 3.2
	2.20	Historical location of structures that may have affected the distribution of contamination e.g. buildings, underground storage tanks, treatment path etc.	
	2.21	Direction of ground slope (indicate with arrows).	
	2.22	Location of each process listed in description of proposed activities.	
	2.1.0	Soil Information	
	2.1.1	Location of different soil types (NZ Geological Maps).	
	2.1.2	Location of all soil assessment bore holes or test pits.	
	2.1.3	System components including disposal field location and reserve area.	
	2.2.0	Separation Distance of Wastewater Disposal / Treatment Field from nearest:	
	2.2.1	Location of wastewater system - all components including: <input type="checkbox"/> <i>All treatment system components..</i> <input type="checkbox"/> <i>Primary Disposal Field.</i> <input type="checkbox"/> <i>Reserve Disposal Field.</i> <input type="checkbox"/> <i>Diversion Drains (stormwater cut-off drains).</i>	
	2.2.2	Habitable buildings.	
	2.2.3	Boundaries.	
	2.2.4	Surface water (measure from edge of feature, not middle): a) Roadside drains b) Watercourses c) Lakes and ponds d) Coastal Marine Area (Mean High Water Spring (MHWS)) f) Wetlands g) Others (<i>specify</i>) _____	
	2.2.5	Groundwater -wells, water bores, springs (on-site and neighbouring properties).	
	2.2.6	Embankments / retaining walls.	

ARC Accepts / Rejects	<p>3.0 Site and Location Characteristics – Provide a description and assessment of the existing site and environs including, but not limited to, the following:</p> <p>NB: <i>If you DO NOT use the spaces provided to answer the questions, please ensure you state the relevant section of where it is discussed in the AEE report.</i></p>
	<p>3.1 Has a Desk Top Study been undertaken for this property?</p> <p><input type="checkbox"/> Yes (specify the findings below). <i>(Refer to AEE report attached)</i></p> <p><input type="checkbox"/> No (specify why this was not considered necessary below).</p> <p>_____</p> <p>_____</p> <p>_____</p>
	<p>3.2 What is the 'slope angle' (minimum, average, maximum) of the land generally and of the following locations?</p> <p>_____ Treatment plant location.</p> <p>_____ Disposal field location(s).</p> <p>_____ Head from treatment plant pump station to disposal field (highest lateral).</p> <p><i>(Discuss in AEE report and state relevant section)</i></p>
	<p>3.3 Has a 'slope stability' assessment been carried out on the property?</p> <p><input type="checkbox"/> Yes (geotechnical report attached)</p> <p><input type="checkbox"/> No (explain why not below)</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>
	<p>3.4 What aspect does the proposed disposal system face?</p> <p><input type="checkbox"/> North <input type="checkbox"/> North-East <input type="checkbox"/> East</p> <p><input type="checkbox"/> South-East <input type="checkbox"/> South <input type="checkbox"/> South-West</p> <p><input type="checkbox"/> West <input type="checkbox"/> North-West</p>

ARC Accepts / Rejects																																							
	<p>Site Clearances</p> <p>Fill out the table below and show all separation distances on a Site Plan.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 40%;">Separation Distance from (nearest)</th> <th style="width: 20%;">Treatment System Separation Distance (m)</th> <th style="width: 40%;">Disposal Field Separation Distance (m)</th> </tr> </thead> <tbody> <tr> <td>Boundaries</td> <td></td> <td></td> </tr> <tr> <td>Habitable buildings</td> <td></td> <td></td> </tr> <tr> <td>Embankments / retaining walls</td> <td></td> <td></td> </tr> <tr> <td>Groundwater -wells, water bores, springs (on-site and neighbouring properties)</td> <td></td> <td></td> </tr> <tr> <td>Surface water (measure from edge of feature, not middle):</td> <td></td> <td></td> </tr> <tr> <td> a) Roadside drains</td> <td></td> <td></td> </tr> <tr> <td> b) Watercourses</td> <td></td> <td></td> </tr> <tr> <td> c) Lakes and ponds</td> <td></td> <td></td> </tr> <tr> <td> d) Coastal Marine Area (MHWS)</td> <td></td> <td></td> </tr> <tr> <td> e) Wetlands</td> <td></td> <td></td> </tr> <tr> <td> f) Others (specify)</td> <td></td> <td></td> </tr> </tbody> </table>			Separation Distance from (nearest)	Treatment System Separation Distance (m)	Disposal Field Separation Distance (m)	Boundaries			Habitable buildings			Embankments / retaining walls			Groundwater -wells, water bores, springs (on-site and neighbouring properties)			Surface water (measure from edge of feature, not middle):			a) Roadside drains			b) Watercourses			c) Lakes and ponds			d) Coastal Marine Area (MHWS)			e) Wetlands			f) Others (specify)		
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	<p>3.5 Describe the general 'slope shape' (e.g. concave, convex etc)</p> <p>_____</p> <p>_____</p> <p>_____</p>																																						
	<p>3.6 Is the treatment and disposal system located in a flood plain?</p> <p><input type="checkbox"/> Yes (<i>show relevant flood levels on a site plan, i.e. one in five years and/or 20 year and/or 100 year and attach a flood plain assessment report</i>)</p> <p><input type="checkbox"/> No</p>																																						

ARC Accepts / Rejects	
	<p>3.7 Provide a description of neighbouring properties (land use, location and address, type and performance of neighbouring wastewater systems).</p> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
	<p>3.8 Describe the existing and proposed vegetation cover (extent, type and maturity).</p> <hr/> <hr/> <hr/> <hr/> <hr/>
	<p>3.9 What is the estimated rainfall and seasonal variation for the site? (Provide data source i.e. nearest rainfall station location).</p> <p>Minimum: _____</p> <p>Maximum: _____</p>
	<p>3.10 Describe all surface waters (including overland flow paths) and water supply <u>bores</u> present on the site and in the vicinity of the site (<i>indicate location on a Site Plan</i>).</p> <hr/> <hr/> <hr/>
	<p>3.11 Describe any cultural heritage features, including historic, waahi tapu and archaeological sites, on the site or environs and any investigation undertaken. (<i>If an archaeological assessment of the site has been done, attach as a separate report.</i>)</p> <p><i>The following may help you identify any cultural heritage features on your site:</i></p> <ul style="list-style-type: none"> • <i>Check the Auckland Regional Cultural Heritage Inventory (CHI) for historic or cultural heritage information.</i> • <i>The New Zealand Historic Places Trust has a register of historic places, archaeological sites, historic areas waahi tapu and waahi tapu areas.</i> • <i>The Auckland Regional Plan: Coastal (ARP:C) schedules one and two contains a list of protected and preserved historic and cultural heritage sites.</i> • <i>District Plans have schedules of protected cultural heritage items.</i> • <i>Appendix B of the Auckland Regional Policy Statement (ARPS) contains a list of significant natural heritage values and identifies sites and areas of special value to Tāngata Whenua.</i>

ARC Accepts / Rejects	
	<ul style="list-style-type: none"> • <i>Areas/places that are significant to Tāngata Whenua may only be identified during consultation.</i> <hr/> <hr/> <hr/> <hr/> <p><input type="checkbox"/> Assessment attached.</p>
	<p>3.12 Describe any natural heritage features e.g. indigenous vegetation and / or any significant ecological or geological features or features with significant natural heritage and/or conservation values e.g. volcanic cones, wetlands etc on the site or environs and any investigation undertaken.</p> <p><i>The following may help you identify any natural heritage features on your site.</i></p> <ul style="list-style-type: none"> • <i>Check the Natural Heritage Database (held by the ARC) – ask ARC staff.</i> • <i>Appendix B of the Auckland Regional Policy Statement (ARPS) identifies areas of significant natural heritage values. Volume two of the Plan Maps for the Auckland Regional Plan Coastal Protection Areas, schedule three of the ARP:C describes their values.</i> • <i>Schedule four of the ARP:C shows areas of significant conservation value as identified by the Ministry of Conservation.</i> • <i>Plan change nine of the ARPS and schedule three of the ARP:C identify sites that have geological, landscape or coastal heritage value, including volcanic cones and coastal protection areas.</i> • <i>Section 3.2 and 3.3 of chapter three of the PARP:ALW provide a description and management approach for wetland management areas and natural lake management areas respectively.</i> • <i>Schedule one of the PARP:ALW identifies significant wetlands which constitute the wetland management areas. Information on the boundaries is available from the ARC's Natural Heritage Information Database. The natural lake management area contains the identified lake and a 50m buffer strip around the lake.</i> • <i>Section 3.4 of chapter three of the PARP:ALW provides a description, criteria, and management approach for natural stream management areas.</i> <p><i>Maps series one of the PARP:ALW identifies wetland and natural lake management areas, and also illustrates natural stream management areas in and indicative manner.</i></p> <hr/> <hr/> <hr/> <hr/>

ARC Accepts / Rejects									
	<p>3.13 Describe any existing structures on the site.</p> <p>_____</p> <p>_____</p> <p>_____</p>								
	<p>3.14 Describe the geology of the subject property.</p> <p>_____</p> <p>_____</p> <p>_____</p>								
	<p>3.15 Is the activity site upstream/up gradient of an abstraction point for a registered drinking water supply that provides no fewer than 501 people with drinking water for not less than 60 days each year?</p> <p style="text-align: right;">Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>Tick Catchment below:</p> <p>Hoteo River upstream of Wilson Road (Wellsford – RDC) <input type="checkbox"/></p> <p>Maharangi River (Warkworth – RDC) <input type="checkbox"/></p> <p>Ohirangi Stream (Helensville – RDC) <input type="checkbox"/></p> <p>Mangakura Stream (Helensville – RDC) <input type="checkbox"/></p> <p>Those parts of the following rivers and their tributaries above their respective water supply dams (Watercare Services Ltd):</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">Waitakere River <input type="checkbox"/></td> <td style="width: 50%;">Nihotupu River <input type="checkbox"/></td> </tr> <tr> <td>Huia River <input type="checkbox"/></td> <td>Hays Creek Stream <input type="checkbox"/></td> </tr> <tr> <td>Cosseys Creek <input type="checkbox"/></td> <td>Wairoa River <input type="checkbox"/></td> </tr> <tr> <td>Mangatawhiri River <input type="checkbox"/></td> <td>Mangatangi River <input type="checkbox"/></td> </tr> </table> <p>These catchments are all illustrated in the Auckland Regional Policy Statement 1999 Map 5 sheets 1-2. "Water Quality – Degraded and Susceptible Areas".</p> <p>Tick aquifer below:</p> <p>Onehunga Mt Wellington Volcanic (Water care Services Ltd) <input type="checkbox"/></p> <p>Bombay Franklin Volcanic (FDC) <input type="checkbox"/></p> <p>Pukekohe Franklin Volcanic (FDC) <input type="checkbox"/></p> <p>Glenbrook Franklin Volcanic (FDC) <input type="checkbox"/></p>	Waitakere River <input type="checkbox"/>	Nihotupu River <input type="checkbox"/>	Huia River <input type="checkbox"/>	Hays Creek Stream <input type="checkbox"/>	Cosseys Creek <input type="checkbox"/>	Wairoa River <input type="checkbox"/>	Mangatawhiri River <input type="checkbox"/>	Mangatangi River <input type="checkbox"/>
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ARC Accepts / Rejects

These aquifers are all illustrated in the Proposed Auckland Regional Plan: Air, Land and Water Map series 2, maps 9 and 17-19 "Aquifer Management Areas".

If your activity is in one of the catchments or aquifers named above, then the "Resource Management (National Environmental Standards for Sources of Human Drinking Water) Regulations 2007 may affect your application. You should contact ARC staff for advice.

3.16 Complete the following table and append Bore Logs and/or Test Pit soil descriptions to application.

Bore Logs and/or Test Pit soil descriptions / format attached.

Note: All boreholes and test pits should be drilled in the location of the proposed disposal field and/or reserve area and their location marked on the appended site plan - a minimum of four boreholes or test pits is required for soil category assessment.

Boreholes or Test Pits	Date undertaken	Total Depth	Depth to groundwater	Topsoil depth	Soil Type
Number	(dd/mm/yy)	(m)	(m)	(m)	
e.g. BH1		1.5m	0.7	0.2	Silty-clay

3.17 Was **fill** material intercepted during the subsoil investigation?

Yes No (refer Q.4.2).

Describe the nature of the **fill** material.

ARC Accepts / Rejects	
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3.18 Based on results of subsoil investigation above, indicate the disposal field(s) soil category (based on dominant soil type in first 1m depth).

Soil Category	Description	Drainage	Tick
1	Gravel coarse sand	Rapid draining	
2	Coarse – medium sand	Free draining	
3	Medium-fine and loamy sand	Good drainage	
4	Sandy loam, loam and silt loam	Moderate drainage	
5	Sandy clay-loam, clay-loam and silty clay	Moderate to slow drainage	
6	Sandy clay, non-swelling clay and silty clay	Slow draining	
7	Swelling clay, grey clay, hardpan	Poorly or non-draining	

3.19 Is topsoil present? Yes No
 If so, topsoil depth _____ m.

3.20 From ground surface, what is the depth of the water table?

Winter		(m)	Measured <input type="checkbox"/>	
			Estimated <input type="checkbox"/>	
Summer		(m)	Measured <input type="checkbox"/>	
			Estimated <input type="checkbox"/>	

3.21 Describe and assess the immediate and ultimate receiving environments, including ecological characteristics and sensitivity to adverse effects.

4.0 Wastewater Production

4.1 What is the water supply source for the property:
 Rain water (roof collection) Storage tank capacity _____ m³
 Public / Community supply
 Private supply from bore / spring
 If an ARC consent is held for this bore, provide consent no. _____

ARC Accepts / Rejects																										
	<p>4.2 What are the facilities where wastewater is generated?</p> <p><input type="checkbox"/> Domestic residential dwelling(s).</p> <p><input type="checkbox"/> Commercial.</p> <p><input type="checkbox"/> Public Facilities.</p>																									
	<p>4.3 If a commercial or public facility e.g. hotel, school, function centre - describe the facility (<i>i.e. existing on the site or proposed</i>):</p> <p>_____</p> <p>_____</p> <p>_____</p> <p><input type="checkbox"/> Attached in separate report. (<i>tick if relevant</i>)</p>																									
	<p>4.4 Provide calculations of the proposed daily flow rate using the table below.</p> <p>Commercial and Public Facilities Refer to Table 6.2, TP58 (2004) for how daily design rate can be calculated. If accurate meter readings are available, provide copies of flow records.</p> <p>Domestic Residential Dwellings calculate the maximum daily discharge volume of wastewater to be discharged (refer TP58 (2004) Table 6.1 and 6.2). If accurate meter readings are available, provide copies of flow records.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">Facility Type</th> <th style="width: 15%;">State number of bedrooms for residential</th> <th style="width: 30%;">Design Occupancy (maximum no. of people per facility – including guest and staff for commercial facilities)</th> <th style="width: 20%;">Design Flow Allowance (litres/person/day)</th> <th style="width: 20%;">Design Flow Rate (litres/ day)</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td colspan="3">Total Daily Design Flow</td> <td> </td> <td>Litres/day</td> </tr> </tbody> </table>	Facility Type	State number of bedrooms for residential	Design Occupancy (maximum no. of people per facility – including guest and staff for commercial facilities)	Design Flow Allowance (litres/person/day)	Design Flow Rate (litres/ day)																Total Daily Design Flow				Litres/day
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	<p>4.5 Floor plans are required. (Please attach)</p> <p>If floor plans are not attached, provide reasons why not below:</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>																									

ARC Accepts / Rejects						
	<p>4.6 If residential, will the house be permanently occupied / in use all year round?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not applicable (<i>go to Q.1.9.12</i>)</p>					
	<p>4.7 If residential, have all potential bedrooms been considered in the daily design flow rate? (Refer TP58 (2004)).</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No (<i>go to Q.1.9.11</i>) <input type="checkbox"/> Not applicable</p> <p>If NO, specify room(s) and provide justification for not including it as a potential bedroom.</p> <table border="1" data-bbox="331 656 1404 943"> <thead> <tr> <th data-bbox="331 656 603 719">Room(s)</th> <th data-bbox="603 656 1404 719">Justification for Exclusion</th> </tr> </thead> <tbody> <tr> <td data-bbox="331 719 603 943"></td> <td data-bbox="603 719 1404 943"></td> </tr> </tbody> </table>	Room(s)	Justification for Exclusion			
Room(s)	Justification for Exclusion					
	<p>4.8 Other Treatment System:</p> <table border="1" data-bbox="331 1102 1251 1279"> <tr> <td data-bbox="331 1102 774 1279"> <p>Water recycling – what per cent?</p> <p><input type="checkbox"/> Attach details of how the wastewater is proposed to be recycled, disinfected and re-used</p> </td> <td data-bbox="774 1102 1251 1279"></td> </tr> </table>	<p>Water recycling – what per cent?</p> <p><input type="checkbox"/> Attach details of how the wastewater is proposed to be recycled, disinfected and re-used</p>				
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	<p>4.9 Is there any proposal to buffer peak wastewater flows?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If YES, then provide an explanation and calculations of how that is proposed to be undertaken in the attached proposed / report. (Include details of extent of peak flow period/event, additional storage capacity and buffered flow design discharge period.)</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>					

ARC Accepts / Rejects																	
	<p>4.10 List the types of water saving fixtures in place or proposed to be installed. <i>(Note: Copies of installation documentation will be required as a condition of the ARC consent).</i></p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="text-align: center;">Fixture Type</th> <th style="text-align: center;">Flowrate</th> </tr> </thead> <tbody> <tr> <td>Toilet flush</td> <td style="text-align: center;">/ flush</td> </tr> <tr> <td>Handbasin faucets</td> <td style="text-align: center;">litre/min</td> </tr> <tr> <td>Laundry / Washing Machine</td> <td style="text-align: center;">litres/full cycle</td> </tr> <tr> <td>Dishwashing Machine</td> <td style="text-align: center;">litres/full cycle</td> </tr> <tr> <td>Showerhead</td> <td style="text-align: center;">litre/min</td> </tr> <tr> <td>Sink Faucets</td> <td style="text-align: center;">litre/min</td> </tr> <tr> <td>Other</td> <td></td> </tr> </tbody> </table>	Fixture Type	Flowrate	Toilet flush	/ flush	Handbasin faucets	litre/min	Laundry / Washing Machine	litres/full cycle	Dishwashing Machine	litres/full cycle	Showerhead	litre/min	Sink Faucets	litre/min	Other	
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Other																	
	<p>4.11 If design flow allowances proposed differ to that provided for in TP58 (2004), justify in detail below (i.e. grey water - re-use or removal of bath etc).</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p><input type="checkbox"/> Attached in separate report. <i>(tick if relevant)</i></p>																
	<p>4.12 Are the following water production fixtures in place or proposed to be installed?</p> <p>Garbage grinder/waste disposal unit <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Spa bath <input type="checkbox"/> Yes <input type="checkbox"/> No</p>																
	<p>5.0 Wastewater Treatment System</p>																
	<p>5.1 Proposed level of wastewater treatment?</p> <p><input type="checkbox"/> Primary <input type="checkbox"/> Secondary <input type="checkbox"/> Advanced secondary</p> <p><input type="checkbox"/> Tertiary</p>																

ARC Accepts / Rejects																					
	<p>5.2 Grease Traps: <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <table border="1"> <thead> <tr> <th>Number of Grease Traps</th> <th>Types</th> <th>Capacity of Grease Traps (litres)</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td colspan="2">Total Capacity</td> <td> </td> </tr> </tbody> </table>	Number of Grease Traps	Types	Capacity of Grease Traps (litres)							Total Capacity										
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	<p>5.3 Primary Treatment</p> <p><input type="checkbox"/> Septic Tank(s) <input type="checkbox"/> Pre-treatment Tank(s)</p> <table border="1"> <thead> <tr> <th>Number of Tank(s)</th> <th>Type of Tank(s) and Brand Name(s) (e.g. concrete/ fibreglass / plastic)</th> <th>Capacity of Tank(s) (litres)</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td colspan="2">Total Capacity:</td> <td> </td> </tr> </tbody> </table>	Number of Tank(s)	Type of Tank(s) and Brand Name(s) (e.g. concrete/ fibreglass / plastic)	Capacity of Tank(s) (litres)													Total Capacity:				
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	<p>5.4 Is a septic tank outlet filter to be installed? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If YES, specify the type of the effluent outlet filter performance standard and if possible reference the performance report</p> <p>_____</p> <p>_____</p> <p>_____</p>																				

ARC Accepts / Rejects																						
	<p>5.5 Secondary / Advanced Secondary Treatment:</p> <table border="1" data-bbox="403 383 1319 947"> <thead> <tr> <th data-bbox="403 383 716 472">Type of Treatment System</th> <th data-bbox="716 383 983 472">Brand / Model</th> <th data-bbox="983 383 1319 472">Total capacity of the Treatment Plant (m³)</th> </tr> </thead> <tbody> <tr> <td data-bbox="403 472 716 589">Aerated Wastewater Treatment System (AWTS)</td> <td data-bbox="716 472 983 589"></td> <td data-bbox="983 472 1319 589"></td> </tr> <tr> <td data-bbox="403 589 716 649">Intermittent sand filter</td> <td data-bbox="716 589 983 649"></td> <td data-bbox="983 589 1319 649"></td> </tr> <tr> <td data-bbox="403 649 716 710">Recirculating sand filter</td> <td data-bbox="716 649 983 710"></td> <td data-bbox="983 649 1319 710"></td> </tr> <tr> <td data-bbox="403 710 716 799">Recirculating textile filter/packed bed reactor</td> <td data-bbox="716 710 983 799"></td> <td data-bbox="983 710 1319 799"></td> </tr> <tr> <td data-bbox="403 799 716 889">Membrane Bio Reactor (MBR)</td> <td data-bbox="716 799 983 889"></td> <td data-bbox="983 799 1319 889"></td> </tr> <tr> <td data-bbox="403 889 716 947">Other</td> <td data-bbox="716 889 983 947"></td> <td data-bbox="983 889 1319 947"></td> </tr> </tbody> </table>	Type of Treatment System	Brand / Model	Total capacity of the Treatment Plant (m ³)	Aerated Wastewater Treatment System (AWTS)			Intermittent sand filter			Recirculating sand filter			Recirculating textile filter/packed bed reactor			Membrane Bio Reactor (MBR)			Other		
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ARC Accepts / Rejects	
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5.8 Other Components: *(tick the appropriate boxes where applicable)*

24 hours emergency peak flow storage _____ litres.

Alarms - visual and/or audible alarm (*circle relevant alarm*). Provide details of alarm:

If you do not propose to install any of the above components, justify why not below:

- Remote Telemetry Unit (RTU)
- Data logger
- Wastewater meter
- Disc filter

If you do not propose to install any of the above components, justify why not below:

Maintenance Contract.

5.9 If a pump is being used, provide the following information:

Calculations included in attached report (Ref: _____).

Total design head	(m)
Pump chamber working/operating volume	(litres)
Pump chamber emergency storage volume	(litres)

ARC Accepts / Rejects	
	<p>5.10 Discuss in detail the specifications of the proposed treatment plant (attach further supporting documentation and product information if necessary and provide a reference to where specifications are provided in attached material).</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>
	<p>5.11 Provide details on why this system is proposed for this site and what alternatives were considered and why they were not adopted.</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>
	<p>5.12 What is the expected quality of treated wastewater being discharged into the disposal field?</p> <p>5.12.1 Biochemical Oxygen Demand (BOD₅) _____ mg/l</p> <p>5.12.2 Total Suspended Solids (TSS) _____ mg/l</p> <p>5.12.3 Faecal coliforms (FC) _____ cfu/100ml</p> <p>5.12.4 Total Nitrogen (TN) _____ mg/l</p>
	<p>5.13 Give details of the performance data that is the basis for the above expected quality claims.</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>

ARC Accepts / Rejects									
6.0	Wastewater Disposal System								
	<p>6.1 Indicate the proposed loading method:</p> <table border="1" style="margin-left: 40px;"> <tr> <td style="width: 50%;">Gravity</td> <td></td> </tr> <tr> <td>Dosing Siphon</td> <td></td> </tr> <tr> <td>Pump / timer dose loading</td> <td></td> </tr> <tr> <td>Loading demand dose</td> <td></td> </tr> </table>	Gravity		Dosing Siphon		Pump / timer dose loading		Loading demand dose	
Gravity									
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Pump / timer dose loading									
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	<p>6.3 Identify the loading rate proposed above and state the reasons for selecting this loading rate with reference to TP58 (2004).</p> <p><input type="checkbox"/> Basal Loading rate _____ mm/day</p> <p><input type="checkbox"/> Areal Loading rate _____ mm/day</p> <p>Explanation: _____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>								
	6.4 Disposal Method: Shallow Irrigation (PCDI, LPED, LPP)								
	6.4.1 What is the total area of the irrigation field? _____ m ²								
	6.4.2 What is the irrigation line spacing? _____ m								
	6.4.3 What are the drip emitters spacings? _____ m								
	6.4.4 What is the dripline emitter discharge rate? _____ litre/hr (1.0, 1.6, 2.3 etc)								
	6.4.5 What brand are the irrigation lines? _____								
	6.4.6 What is the available reserve wastewater disposal area? _____ m ² _____ per cent								

ARC Accepts / Rejects	
	6.5 Disposal Method: Soakage Trench / Bed / Mound System
	6.5.1 What are the dimensions of the proposed soakage trench / beds / mounds? Width _____ mm Depth _____ mm
	6.5.2 What is the total length of all the soakage trenches / beds / mounds? _____ m
	6.5.3 What is the basal area of all trenches / beds / mounds? _____ m ²
	6.5.4 What is the available reserve disposal area? _____ m ² _____ per cent
	6.5.5 Provide detailed calculation(s) for the soakage trench / bed / mound system: _____ _____ _____ _____
	6.6 What vegetation will be provided within disposal area?: <input type="checkbox"/> Planted <input type="checkbox"/> In Lawn <input type="checkbox"/> Bush area <input type="checkbox"/> Existing <input type="checkbox"/> New <input type="checkbox"/> Other <i>(A list of suitable plant species can be found in TP58 (2004) - refer Appendix G)</i>
	6.7 Are surface/sub surface cut off drains/bunds proposed? <input type="checkbox"/> Yes <input type="checkbox"/> No If YES , discuss these mitigation measures in detail below _____ _____ _____ _____ _____ If NO , why not? _____ _____ _____ _____

ARC Accepts / Rejects	
	<p>6.8 If disposal fields are to consist of multiple zones, discuss how is even loading to be achieved? <i>(Provide reference to where this is covered in detail in the attached AEE report.)</i></p> <hr/> <hr/> <hr/> <hr/>
	<p>6.9 Is there a potential for any short circuit pathways?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If YES, discuss how this will be addressed.</p> <hr/> <hr/> <hr/> <hr/>
	<p>7.0 Actual and Potential Effects of the Proposed Activity on the Environment and Proposed Mitigation - identify and assess the actual or potential effects of the proposed activity on the environment.</p>
	<p>7.1 Have all the actual and potential adverse effects including separation distances and those arising from effects on water quality, public health and the receiving environment, been considered in this application form for the proposed activity?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If YES, explain how they have been considered below:</p> <hr/> <hr/> <hr/> <hr/> <p>If NO, consider and discuss them below:</p> <hr/> <hr/> <hr/> <hr/>

ARC Accepts / Rejects	
	<p>7.2 Discuss any potential effects any fill may have on the wastewater disposal system and confirm what mitigation measures are proposed to prevent any adverse effects.</p> <hr/> <hr/> <hr/> <hr/>
	<p>7.3 Provide information about the effluent quality .Comment and discuss in detail its impact on the receiving environment and any mitigation proposed.</p> <hr/> <hr/> <hr/> <hr/>
	<p>7.4 Where slopes are steep (>15 degrees) comment below on the potential for environmental effects and any mitigation measures proposed:</p> <hr/> <hr/> <hr/> <hr/>
	<p>7.5 Discuss any adverse effects on any cultural heritage features e.g. archaeological sites, waahi tapu and/or any natural heritage features e.g. wetlands, indigenous vegetation, volcanic cones (as identified in questions 3.11 and 3.12) and any mitigation proposed.</p> <hr/> <hr/> <hr/> <hr/>
	<p>7.6 Discuss any adverse effects of the activity on any abstraction point for a registered drinking water supply as required by sections 6, 7 and 8 of the Resource Management (National Environmental Standards for sources of Human Drinking Water) Regulations 2007. <i>For more detail on catchments and aquifers refer to question 3.15.</i></p> <hr/> <hr/> <hr/> <hr/>

ARC Accepts / Rejects	
	<p>7.7 Alternative Locations and Methods</p> <p>As part of your Assessment of Effects on the Environment, it may be appropriate to consider if there are alternative methods of discharge, including discharge into any other receiving environments which may have lesser adverse effects.</p> <p>The level of detail required may depend on the scale of activity. Contact the ARC for advice on what sort of information you should provide.</p> <p>_____</p> <p>_____</p> <p>_____</p> <p><input type="checkbox"/> Report describing consideration of alternatives attached (<i>tick if relevant.</i>)</p>
	<p>8.0 Consultation</p>
	<p><i>Where consultation has taken place with Iwi and/or any other interested persons, details of the consultation undertaken, including the views of those consulted and your response to their concerns/issues must be provided. Copies of any correspondence confirming this consultation should be attached to this form.</i></p> <p>List below those parties consulted, their address and/or phone number, any concerns they have expressed and your response to this (attach additional list and/or supporting information where appropriate).</p>
	<p>8.1 Name _____ Position _____</p> <p>Postal Address _____</p> <p>Site Address _____</p> <p>Their concerns _____</p> <p>_____</p> <p>_____</p> <p>Your response _____</p> <p>_____</p> <p>_____</p> <p style="text-align: right;">Correspondence Attached <input type="checkbox"/></p>

ARC Accepts / Rejects		
	8.2	Name _____ Position _____ Postal Address _____ Site Address _____ Their concerns _____ _____ _____ Your response _____ _____ _____ Correspondence Attached <input type="checkbox"/>
	8.3	Name _____ Position _____ Postal Address _____ Site Address _____ Their concerns _____ _____ _____ Your response _____ _____ _____ Correspondence Attached <input type="checkbox"/>
	9.0 Affected Persons	
	9.1	If you have identified any persons likely to be adversely affected by this proposal/application then fill out the "Written Approval of Affected Parties" Form.
	9.2	Signed Approval Form attached <input type="checkbox"/>
	9.3	Reasons why you consider they are affected: _____ _____ _____

ARC Accepts / Rejects	
	9.4 Signed Plans attached <input type="checkbox"/>
	9.5 Provide details if anybody refused to give their written approval. Name _____ Position _____ Postal Address _____ Site Address _____ Their concerns _____ _____
	10.0 Monitoring - discuss if monitoring is required and how it will be carried out.
	10.1 Provide details of the monitoring and maintenance requirements including, but not limited to, the following: <i>(Note: A maintenance agreement is mandatory)</i>
	10.1.1 Pump out frequency. _____ _____ _____
	10.1.2 Treated wastewater quality monitoring. _____ _____ _____ _____
	10.1.3 Discharge flow monitoring. _____ _____ _____ _____
	10.1.4 Recommended maintenance and monitoring requirements. _____ _____ _____ _____

ARC Accepts / Rejects	
	<p>10.2 What contingency measures have been proposed to alert the owner/occupier or maintenance provider of malfunctions in the system and what mitigation measures are proposed in the design to minimise any adverse effects?</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>
	<p>10.3 Provide name and title of who will prepare the Management Plan:</p> <p>_____</p> <p>Will the Management Plan be submitted to the ARC before commencing discharge on the site?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>
	<p>10.4 Provide a flow diagram of the wastewater flow from the facilities showing the stages of treatment to the disposal field, including any recycled flows. An example of the flow diagram is in Appendix one of this application form.</p> <p><input type="checkbox"/> Flow diagram attached.</p>

Example of a Flow Diagram for a Wastewater – Appendix 1

