

APPROVED SEWAGE AND SANITATION FORMS

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 Design

Sewage Construction Permit

(Regulations 17 and 19)

(stamp) Take notice that the sewage system must comply with the report and site plan submitted with the application, and with all provisions of the Public Health (Sewage Treatment and Disposal) Regulations and all applicable approved
Signed: Date:
Authorised officer:
(village) for the building of class in accordance with the wastewater design report and site plan supplied with the application.
(land details) at
(name of owner) on
With reference to Sewage Construction Permit Application Nothe Public Heath Department of the Ministry of Health hereby permits the construction of a sewage system for:

This form has been approved for use by the Secretary of Health pursuant to section 33(1) of the Ministry of Health Act 2013

standards issued from time to time by the Ministry of Health, and to do

otherwise is an offence.

Abbreviated Wastewater Design Report

(Regulation 18)

Please note that this form is an abbreviated version of the Wastewater Design Report required by the Sewage and Sanitation Board as part of an application for a Sewage Construction Permit (SCP). If the information supplied in this form is insufficient for the Board to make a decision on whether to approve an application for an SCP, the registered wastewater designer will be required to provide the Board with further information.

ADDITION DETAILS

APPLICATION DETAILS
1. Name of registered wastewater designer:
2. Date form completed by designer:
3. Name of developer/owner of sewerage system for which the report is prepared:
4. Name and number of land title:
5. Tapere, village and district at which the development is taking place:
KEY SPECIFICATIONS OF PROPOSED WASTEWATER SYSTEM
6. Area available for land application and reserve area (m ²):
7. Number of bedrooms/people to be served [Note 1]:
8. List and number additional wastewater producing fixtures [see Note 2]:
9. Water supply [see Note 3]:
10. Daily Flow Allowance – per person [Note 4]:
11. Design daily wastewater volume (litres/day) [Note 5]:
12. Soil texture at land application area [see Note 6]:
13. Depth to groundwater table (m, state if estimated/measured):
14. Type of treatment system to be used [see Note 7]:
15. Make, model and registration number of treatment system:
16. Septic tank filter (make and model):
17. Effluent land application system to be used [see Note 8]:
18. Hydraulic loading (mm/day/m ²) [Note 8]:

- 19. Size of land application system [see Note 9]:
- 20. Spacing of dripline, emitters, and emitter drip rates for irrigation system (if applicable) [Note 10]:
- 21. Dosing volume if applicable (litres):
- 22. Separation distances from closest boundaries (m):
- 23. Separation distances from nearest well or bore (if applicable)(m):
- 24. Direction of groundwater flow:
- 25. Separation distance from surface water bodies (m) (see Note 11):
- 26. Attach designs of wastewater system and land application area (see Note 12):

Notes

- 1. Refer to Table 5 & 6 in Sewage Standards, Design and Construction for Occupancy Allowances and Wastewater Flow Allowances.
- 2. List and number wastewater producing fixtures additional to showers, toilets, kitchen/bathroom sinks and clothes washing machines.
- 3. Water supply will be either reticulated water supply or rainfall water only tanks.
- 4. Refer to Table 6 in Sewage Standards, Design and Construction for Flow Allowances. Multiple flow allowances may require additional information as per Note 5.
- 5. Multiple Flow Allowances or more complex calculations (>2000l/day) may require additional information in order to justify the Design Daily Wastewater Volume.
- 6. Soil textures-as classified in AS/NZS 1547:2012. Classes are: 1-Gravels and Sands 2-Sandy Loams 3-Loams 4-Clay Loams 5-Light Clays or 6-Medium to Heavy Clays. Evidence to support the soil classification shall/may be required.
- 7. Type of treatment system to be used this may be low flush or dry system, septic tank (primary treatment system), secondary treatment system or advanced treatment system.
- 8. Land application methods and loading rates to conform in accordance with AS/NZS 1547:2012. Effluent land application systems to be used may be AS/NZS 1547:2012 Trenches, Beds, evapotranspiration absorption bed (ETA Bed), evapotranspiration seepage bed (ETS Bed), mound, or subsurface irrigation. For sandy soils, a maximum irrigation rate of 8mm/day/m² is permitted for secondary quality effluent or greater.
- 9. Size of land application system physical and areal (or basal) dimensions of the application area in m and m^2 .
- 10. Spacing width between individual driplines (m), spacing of emitters on individual driplines (m), and individual emitter rate (l/p/hr).
- 11. Lagoon, streams, ponds, swamps.
- 12. Plan, profile, cross sectional and overview diagrams of the wastewater system and land application area (where applicable) to be supplied. More information may be requested in order to approve the proposed designs and plans.

I	(name of designer) declare that I have
verified the information supplied in this	Wastewater Design Report and that the
sewage system described in this Wastewat	er Design Report is the appropriate design
for the proposed development illustrated in	the attached Building Plan on the property
named in 4, above.	

Signature	of	Desi	gner:
Date:			

For official use only SITE DETAILS 1. Permit number: 2. Soil type (according to soil map and onsite confirmation): 3. Is the site within the Lagoon Protection Zone?: 4. Date of site inspection: 5. Is there any slippage, erosion, inundation, overland flow or surface ponding at the land application area and reserve area?: SOIL CHARACTERISTICS AT PROPOSED LAND APPLICATION AREA 6. Grittiness: 7. Ribbon length (mm): 8. Structure: 9. Soil texture, colour and drainage characteristics: 10. Additional notes and comments: DECLARATION BY AUTHORISED OFFICER I have conducted a site inspection to verify the information provided in 6, 7, 9, 11, 12, 21, 22, 23, 24 and 25 in the attached Wastewater Design Report and have found all information to be true and correct. 11. Date of Declaration: 12. Name of authorised Officer: 13. Signature: DETAILS OF SEWAGE CONSTRUCTION PERMIT 14. Date Sewage Construction Permit issued: 15. Name of authorised officer that issued Sewage Construction Permit:

This form has been approved for use by the Secretary of Health pursuant to section 33(1) of the Ministry of Health Act 2013 *Public Health (Sewage and Wastewater Treatment and Disposal)*

16. Signature of authorised officer that issued Sewage Construction Permit:

Regulations 2014

To the Sewage and Sanitation Board Ministry of Health Rarotonga, Cook Islands

Application for Sewage Construction Permit (Regulation 18)

1. Date:
2. Name of Owner of Property:
3. Phone number of Owner:
4. Name of Applicant:
5. Phone Number of Applicant:
6. Name of Registered Wastewater Designer:
7. Phone number of Registered Wastewater Designer:
8. Name of Builder:
9. Phone Number of Builder:
10. Name of Registered Plumber/Drainlayer:
11. Phone Number of Registered Plumber/Drainlayer:
12. Land Title Name and Number:
13. Tapere:
14. Village:
15. Area of Property/Land(m ²):
16. If Applicable, number of bedrooms to be served in this development:
17. Number of People to be served in this development:
18. Class of Building(s) the system will serve (<i>circle</i>): residential house ,tourist accommodation rental, long term accommodation rental, office, bar, restaurant/café, school, factory, public toilet, storage shed, service station, retail store, laundry, gymnasium, laboratory, hospital, health clinic, entertainment centre, church, community hall, other (<i>specify</i>)

(print owner of sewage system) declare that al			
I also declare that I have consulted complete a wastewater design report that I shall be responsible for the aware that the system may not be Sanitary Inspector. Should I decide 10, I understand that I will need to risk being fined under the Public Disposal) Regulations 2014.	I a registered wastewater do ort which is attached to this cost of maintenance of this buried or covered until it ha to contract a different insta o apply for a new Sewage O	application. I declare sewage system. I am as been inspected by a ller to that indicated in Construction Permit or	
19. Signature			
20. Date	_		
Low Load System (up to 2,000 litre Moderate Load System (>2,000 litre High Load System (10,000 litres/da	es/day <10,000 litres/day)	\$55 \$200 \$500	
For	Official Use Only		
Application No: Fee Paid: Receipt No:			
Date Application Received:			
Signature of Recipient:			

To the Ministry of Health Rarotonga, Cook Islands

Request for Sewage System Inspection (Regulation 20)

1. Sewage Construction Permit Number:
2. Name of Owner:
3. Tapere and village where system is located:
4. Name and number of land where system is located:
5. Date and times installer and owner are available for inspection of sewage system:
6. I, (name of installer) declare that a sewage treatment
system has been constructed according to the terms and conditions of the above
mentioned Sewage Construction Permit and that the system is ready for inspection.
Signature:
Date:
For official use only
9. Date received:
(stamp)
10. Received by:
(name of receiving Officer)
11. Signature of receiving Officer:
12. Date and time of inspection agreed to with installer and owner:

Completion Certificate (Regulation 21)
With reference to the Sewage Construction Permit number:
and the sewage system inspected on:
and owned by:
I hereby declare that the sewage system has been inspected and found to have been constructed according to the approved design and in compliance with the Sewage Construction Permit.
Name of authorised officer:
Signed on behalf of the Sewage and Sanitation Board by:
Date:

This form has been approved for use by the Secretary of Health pursuant to section 33(1) of the Ministry of Health Act 2013

(stamp)

To the Sewage and Sanitation Board Ministry of Health Rarotonga, Cook Islands

Application for Registration of a Secondary or Advanced Treatment Unit (Regulation 9)

1. Application Number (official use only):			
2. Application Date:			
3. Applicant Details	Company name:		
	Contact person:		
	Address:		
	Ph no:		
	Fax no:		
	Email address:		
	Relevant websites:		
	Signature of contact person:		

- Note 1: Your application should not be more than ten pages <u>excluding</u> the Installation Manual, Operations and Maintenance Manual and independent certification documents. The Board reserves the right to reject an application that exceeds this limit.
- Note 2: Modification of a design following registration of that design will nullify the registration status of the design unless the Board is notified in writing of changes.
- Note 3: The independent certifier in 5a (if required) should be a qualified and independent wastewater engineer.
- Note4: Cook Islands effluent quality standards for secondary treatment units are: BOD_5 20mg/l, TSS 30mg/l, FC median of 10^2 cfu/100ml (with disinfection) or FC maximum of 10^4 cfu/100ml (without disinfection) TN 40mg/l.
- Note 5: Cook Islands effluent quality standards for advanced treatment units are: BOD₅ 10mg/l, TSS 10mg/l, FC median of 10 cfu/100ml, TN 15 mg/l, TP 5mg/l. Refer to the approved standards for more details on these requirements.

Note 6: All units must be in metric form

Item	Information required	Mark if provided
4. Make and Model	a. Make and model of treatment unit	Y/N
	b. Serial Number (if applicable)	Y/N
	c. Year of manufacture	Y/N
5. Certification and standards	a. Details of certification by an independent certifier;	Y/N
	b. Reference to engineering standards it conforms to	Y/N
	c. Is the treatment unit is a secondary treatment unit	Y/N
	d. Is the treatment unit an advanced treatment unit	Y/N

6. Treatment	Scientific and engineering description of the treatment processes from influent	Y/N
process 7. Treatment	to final effluent.	Y/N
performance ¹	a. Hydraulic design loading capacity;	1/19
performance	b. Typical performance details of the treatment unit in terms of effluent; BOD ₅ , suspended solids, faecal coliforms, nitrogen(NH4-N, NO ₃ -N, NO ₂ -N, TKN, and TN) and total phosphorus;	Y/N
	c. Maximum short-term peak hydraulic loading capacity of the treatment unit;	
	d. Temperature and humidity at which the treatment unit performs best.	Y/N
	It is significantly more credible for the performance data to have been provided by an accredited independent testing agency. If the performance information provided is based on climate conditions significantly different to the Cook Islands, assessment of likely performance in tropical conditions should be provided and this assessment should be based on the science of the treatment processes described in 1 above (Treatment process)	Y/N
8. Drawings	A full set of drawings showing the dimensions of the treatment unit, position of inlet, outlet, inspection ports and access hatches	Y/N
9. Resilience	Evidence of resilience to variability in influent loading (in terms of influent quantity and quality) should be provided.	Y/N
10. Installation	a. Description of site preparation requirements (this will depend on the existing conditions of the site)	Y/N
	b. Ease of installation	Y/N
	c. Has the system adequate anchorage to counter buoyancy uplift in conditions of high Groundwater?	Y/N
11. Alarm	a. Description of alarm system used	Y/N
system and	b. Action plan and impact of power failure	Y/N
failure	c. Emergency storage capacity	Y/N
procedure 12. Power	Details of the system's total daily power consumption;	Y/N
requirements 13. Nuisance	Details of the level of noise (in decibels) produced by the system:	
factors	a. Risk of odour	Y/N
	b. Risk of odour b. Risk of insect and pest breeding	Y/N
14. Servicing	Copy of the maintenance and servicing manuals provided to the property	Y/N
requirements	owner and servicing agent;	
•	Copy of serving contract with a qualified servicing agent	Y/N
15. Component suppliers	Names and addresses of companies that manufacture the tanks and land application system and any pumps, blowers or rotating disks if applicable;	Y/N
16. Guarantee	Guarantee/warranty details	Y/N
17. Referees	Contact details of independent referees.	Y/N

To the Sewage and Sanitation Board Ministry of Health Rarotonga, Cook Islands

Name:

Year

Application for Registration as a Sewage System Installer and Servicing Agent (Regulation 7)

Postal Address:

Phone (work/ce	ll):	Fax:	Email:	
		QUALIFI	CATIONS	
Year qualification received			certificate and name and address of	
e.g. 1992		Uni Tec Private B Auckland Zealand	e.g. National Certificate in Drainlaying (Level 4) Uni Tec New Zealand, Carrington Rd, Mt Albert, Private Bag 92025, Auckland Mail Centre, Auckland 1142, New Zealand Ph: (649) 814 4321 Fax: 815- 2907 Email: courses@unitec.ac.az	
EXPE			RIENCE	
Years	Name, License details and Contact Details (if available) of Supervisor		Name and address of	
			company/organisation where you worked and your responsibilities	
e.g. 1980-	e.g. Mr Jo	e B loggs,	e.g. Plumbing Services Ltd, 2018 Clear	
1986	Lice	nse	Bay Drive, Auckland, New Zealand-	
	Number 0123-4567,		installation of plumbing for households.	

DRAIN LAYING REGISTRATION DETAILS (IF APPLICABLE)

NZPGD Board

Licences Number				
Type of License				
Name and Full Contact				
Details of Authority				
Issuing License				
I	RELEVANT	COURSES ATTENDED		
Year		Name of Course, trainers and location		
e.g. 2006-2007		e.g. Sewage and Sanitation Stages 1-3, CET,		
		Rarotonga		
FULL CONTACT DETAILS FOR THREE PROFESSIONAL AND/OR INDUSTRY				
REFEREES				
1.				
2				
2.				
2				
3.				
TC 1	<u> </u>			
If you are a member of	ot an associa	ation of plumbers/drain layers please name the		

organization here:

Notes:

For persons who did not receive their drain laying qualification from an NZQA accredited institute or an equivalent institution in Australia, they are to provide evidence of another equivalent qualification. The Cook Islands Sewage and Sanitation Board reserves the right to assess the applicant by requiring the applicant to sit an assessment paper and/or

Requesting an assessor to assess their work.

Persons who wish to become Registered Installers and Servicing Agents of Secondary/Advanced Treatment System must include in their application evidence of certification by the manufacturer of the Secondary/Advanced treatment system that the applicant is trained and qualified to install and service that system.

Please Attach:

- 1. Full contact details of the last three clients where you have done drain laying work
- 2. Notarized copies of qualifications, registration and current licence

To the Sewage and Sanitation Board Ministry of Health Rarotonga, Cook Islands

Application for Registration as a Septic Tank Manufacturer (Regulation 8)

	(Regulation 8)	
		File No: Registration No:
To the	e Sewage and Sanitation Board Cook Islands	
Date:		
Comp	oany Name:	
Conta	act person:	
Conta	act Address:	
Phone	e [Business Hours]:	
Mobi	le:	
E mai	il:	
Fax N	No	
	Primary Information	
1.	Type of Build Process [i.e. Rotary moulded, moulds, block, plaster and other	processes]
2.	Type of Materials used in Build Process [i.e. Plastic, concrete, mortar, blocks, reinforcing bar, sother]	teel fibre, additives
3.	Standards Used in Build Process	

[AS/NZS 1546.1 NZS 3106 etc]

- 4. Methods of Audit and Quality Control [Details of how self audit and quality control are achieved]
- 5. Structural: Testing and Performance Monitoring
 [Types of testing undertaken at what interval in new products
 Any long term monitoring of products installed]
- 6. Demonstrate Ability to Manufacture Long Term [What is your skill base within tank building area?]

Attach additional information if insufficient space is provided in this form.

To the Sewage and Sanitation Board Ministry of Health Rarotonga, Cook Islands

Application for Registration of a Primary Treatment Unit (Septic Tank) Design (Regulation 9)

To the Sewage and Sanitation Board Cook Islands			
Date:			
Company Name:			
Manufacturers Registration:			
Contact person:			
Business Address:			
Phone [Business Hours]:			
Mobile phone:			
E Mail:			
Fax No:			
The following must be supplied with this application:			

Full Set of Plans indicating all of the following:

Construction Material

Method of Construction

Design Capacity

Position of all In - Outlets

Access Points

Internal Walls / Baffles

Compliance of Design from AS/NZS 1546, AS/NZS 1547:2012
Watertightness
Integrity
Loading Top / Lateral / Handling
Method of Identification
QA Systems in place