



PUBLIC HEALTH SEWAGE (FORMS) REGULATIONS 2008

Sir F. Goodwin, KBE

Queen's Representative

ORDER IN EXECUTIVE COUNCIL

At Avarua, Rarotonga, this 4th day of **December** 2008

Present:

**HIS EXCELLENCY THE QUEEN'S REPRESENTATIVE
IN EXECUTIVE COUNCIL**

PURSUANT to Sections 41 and 42 of the Public Health Act 2004 the Queen's Representative, acting by and with the advice and consent of the Executive Council, makes the following regulations.

ANALYSIS

- | | |
|---------------------------|----------|
| 1. Title and commencement | Schedule |
| 2. Prescribed forms | |

REGULATIONS

1. Title and commencement – (1) These regulations may be cited as the Public Health Sewage (Forms) Regulations 2008.
(2) These regulations shall come into force on the 1st day of November 2008.

Price \$4.50

2. Prescribed Forms - The prescribed forms are as set out in the Schedule to these regulations.

Grover L. Harmon
Clerk of the Executive Council

These Regulations are administered by the Ministry of Health

BY AUTHORITY:
Cook Islands Government - 2008

SCHEDULE

**Sewage Construction Permit
(Regulation 18)**

With reference to Sewage Construction Permit Application No.....

the Public Health Department hereby permits the construction of a sewage system for:

_____ (name of owner)

on _____ (land details)

at _____ (village)

for a building of class _____ in accordance with the wastewater design report and site plan supplied with the application.

Name of Health Inspector: _____

Signed: _____ Date: _____ (stamp)

Abbreviated Wastewater Design Report
(Regulation 19 (2) & (3))

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

APPLICATION DETAILS	
1. Name of registered wastewater designer:	
2. Date form completed by designer:	
3. Name of developer/owner of sewage 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:	bedrooms/people
8. List and number additional wastewater producing fixtures (see notes ¹):	
9. Water supply (see notes ²):	
10. Design daily wastewater volume (litres/day):	
11. Soil texture at land application area (see notes ³):	
12. Depth to groundwater table after > 400mm/day rainfall (m, state if estimated/measured):	
13. Type of treatment system to be used (see notes ⁴):	
14. Make, model and registration number of treatment system:	
15. Septic tank filter (make and model):	
16. Effluent land application system to be used (see notes ⁵):	
17. Hydraulic loading (mm/day):	
18. Size of land application system (see notes ⁶):	
19. Spacing of emitters for irrigation system if applicable (mm):	
20. Dosing volume if applicable (litres):	
21. Separation distance from closest boundaries (m):	
22. Separation distances from nearest private wells if applicable(m):	
23. Direction of groundwater flow:	
24. Separation distance from surface water bodies (m)(see notes ⁷):	
25. Attach plan view schematic diagram of wastewater system (see notes ⁸):	

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 Wastewater 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 Designer _____

Date _____

¹ List and number wastewater producing fixtures additional to showers, toilets, kitchen/bathroom sinks and clothes washing machines. These may include dish washing machines, garbage grinders, bidets, swimming pools and spa pools

² Water supply will be either reticulated water supply or rainfall water tanks

³ Soil texture – as classified in AS/NZS 1547:2000. Classes are: 1-Gravels and sands 2-Sandy loams 3-Loams 4-Clay loams 5-Light clays or 6-Medium to heavy clays

⁴ 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

⁵ Effluent land application system to be used – may be soak hole (not permitted for new development within the lagoon protection zone), AS/NZS 1547 absorption trench, AS/NZS 1547 mound, AS/NZS 1547 evapotranspiration bed (ET Bed), AS/NZS 1547 evapotranspiration absorption bed (ETA Bed), AS/NZS 1547 subsurface irrigation

⁶ Size of land application system (soak hole area, trench length, irrigation system length, ET/ETA bed area, mound area in m²)

⁷ Lagoon, streams, ponds or swamps

⁸ Plan view schematic diagram of wastewater system showing wastewater flows, distribution box

For Official Use Only

SITE DETAILS

1. Permit Number:

2. Soil type (according to soil map):

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 and drainage characteristics:

10. Additional notes and comments:

DECLARATION BY SANITARY INSPECTOR

I have conducted a site inspection to verify the information provided in 6, 11, 12, 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 sanitary inspector _____

13.

Signature: _____

DETAILS OF SEWAGE CONSTRUCTION PERMIT

14. Date Sewage Construction Permit issued:

15. Name of inspector that issued Sewage Construction Permit:

16. Signature of inspector that issued Sewage Construction Permit:

**Application for Sewage Construction Permit
(Regulation 19)**

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 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>)

I, _____ (*print owner of sewage system*) declare that all information in 1 to 18 above is true and correct. I also declare that I have consulted a registered wastewater designer named in 6, to complete a wastewater design report which is attached to this application. I declare that I shall be responsible for the cost of maintenance of this sewage system. I am aware that the system may not be buried or covered until it has been inspected by a Sanitary Inspector from Public Health. Should I decide to contract a different installer to that indicated in 10, I understand that I will need to apply for a new Sewage Construction Permit or risk being fined under Regulation 39 of the Public Health (Sewage) Regulations 2008.

19. Signature _____ 20. Date _____

Permit Fees

Low Load System (up to 2,000 litres/day)	\$55
Moderate Load System (> 2,000 litres/day < 10,000 litres/day)	\$200
High Load System (10,000 litres/day or more)	\$500

For Official Use Only

Application No: _____ Fee Paid: _____ Receipt No: _____

Date Application Received : _____

Signature of Recipient: _____

Request for Sewage System Inspection
(Regulation 21 (2))

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, _____ (<i>name of installer</i>) declare that a sewage treatment system has been constructed according to the terms and conditions of the abovementioned Sewage Construction Permit and that the system is ready for inspection.
7. Signature: _____
8. Date: _____
For official use only
9. Date received: _____ (<i>stamp</i>)
10. Received by: _____ (<i>name of receiving officer</i>)
11. Signature of receiving officer _____
12. Date and time of inspection agreed to with installer and owner _____

Completion Certificate
(Regulation 22)

With reference to the Sewage Construction Permit number _____

and the sewage system inspected on _____

and owned by _____

I hereby declare that the sewage system so inspected, for which the said Sewage Construction Permit is issued, has been constructed according to the approved design and specifications of the Sewage Construction Permit.

Name of Health Inspector: _____

Signed: _____ Date: _____ (stamp)

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

1. Application Number (<i>official use only</i>): _____	
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 **excluding** the Installation Manual, Operations and Maintenance Manual and independent certification documents. Public Health 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 Public Health is notified in writing of changes.

Note 3: The independent certifier in 5a should be a qualified and independent wastewater engineer.

Note 4: Cook Islands effluent quality standards for secondary treatment units are: BOD₅ 20mg/l, TSS 30mg/l, FC median of 10 cfu/100ml (with disinfection) or FC median of 10⁴ 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 15mg/l, TP 5mg/l. Refer to the Cook Islands Public Health Sewage Code for more details on these standards.

Note 6: All units shall 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. Declaration as to whether the treatment unit is a secondary treatment unit or advanced treatment unit as defined in the Cook Islands Public Health Sewage Code	Y / N
6. Treatment process	Scientific and engineering description of the treatment processes from influent to final effluent.	Y / N

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7. Treatment performance ¹	<p>a. Hydraulic design loading capacity ;</p> <p>b. Typical performance details of the treatment unit in terms of effluent; BOD₅, suspended solids, faecal coliforms, nitrogen (NH₄-N, NO₃-N, NO₂-N, TKN, and TN) and total phosphorus;</p> <p>c. Maximum short-term peak hydraulic loading capacity of the treatment unit.</p> <p>d. Temperature and humidity at which the treatment unit performs best</p> <p>It is significantly more credible for the performance data to have been provided by an accredited independent testing agency.</p> <p>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).</p>	<p>Y / N</p> <p>Y / N</p> <p>Y / N</p> <p>Y / N</p>
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	<p>a. Description of site preparation requirements (this will depend on the existing conditions of the site).</p> <p>b. Ease of installation</p> <p>c. Has the system adequate anchorage to counter buoyancy uplift in conditions of high groundwater?</p>	<p>Y / N</p> <p>Y / N</p> <p>Y / N</p>
11. Alarm system and failure procedure	<p>a. Description of alarm system used;</p> <p>b. Action plan and impact of power failure;</p> <p>c. Emergency storage capacity;</p>	<p>Y / N</p> <p>Y / N</p> <p>Y / N</p>
12. Power requirements	Details of the system's total daily power consumption;	Y / N
13. Nuisance factors	<p>Details of the level of noise (in decibels) produced by the system;</p> <p>a. Risks of odour</p> <p>b. Risk of insect and pest breeding</p>	<p>Y / N</p> <p>Y / N</p>
14. Servicing requirements	<p>Copy of the maintenance and servicing manuals provided to the property owner and servicing agent;</p> <p>Copy of servicing contract with a qualified servicing agent</p>	<p>Y / N</p> <p>Y / N</p>
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

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

Name:		Postal Address:
Phone (work/cell):	Fax:	Email:

QUALIFICATIONS	
Year qualification received	Title of certificate and name and address of institution
e.g. 1992	e.g. National Certificate in Drainlaying (Level 4) – UniTec New Zealand, Carrington Rd, Mt Albert, Private Bag 92025, Auckland Mail Centre, Auckland 1142, New Zealand Ph: (649) 814 4321 Fx: 815-2907 Email: courses@unitec.ac.nz

EXPERIENCE		
Years	Name, License details and Contact Details (if available) of Supervisor	Name and Address of company/organization where you worked and your responsibilities
e.g. 1980-1986	e.g. Mr Joe Bloggs, License Number 0123-4567, NZPGD Board	e.g. Plumbing Services Ltd, 2018 Clear Bay Drive, Auckland, New Zealand- installation of plumbing for households.

DRAIN LAYING REGISTRATION DETAILS (IF APPLICABLE)	
Year	
License Number	
Type of License	
Name and Full Contact Details of Authority Issuing License	

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.	
3.	
If you are a member of an association of plumbers/drain layers please name the organization here:	
Notes: For persons who did not receive their drain laying qualification from an NZQA accredited institution 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 license	

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

File No.....
Registration No.....

Sewage and Sanitation Board
Cook Islands

Date.....

Company Name.....

First Point Contact.....

Contact Address.....
.....

Phone [Business Hours].....

Mobile.....

E Mail.....

Fax 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, steel fibre, additives, other]

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?]

File No.....
Registration No.....

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

Sewage and Sanitation Board
Cook Islands

Date.....

Company Name.....

Manufacturers Registration.....

First Point Contact.....

Contact Address.....

.....

Phone [Business Hours].....

Mobile.....

E Mail.....

Fax No.....

Supply

Full Set of Plans

To Indicate

- 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 1547:2000

- Watertightness
- Integrity
- Loading Top / Lateral / Handling
- Method of Identification
- QA Systems in place
