

WASTEWATER

9.0 Government Legislation

9.1 Resource Management Act

The Resource Management Act (RMA) is concerned with ensuring that developments are sustainable and result in minimal adverse impacts on the environment. The RMA requires resource consents to be obtained for wastewater facilities, unless they come under the category “permitted activities”.

9.2 Health Act

The Health Act supports the RMA by seeking to control adverse effects caused by the inadequate management of on-site effluent disposal of domestic wastewater. Whereas the RMA focuses on the health of the environment, the Health Act focuses on public health. The Health Act is generally limited to the resolution of problems which have already occurred, involving taking proper steps to abate or remove the nuisance. The Medical Officer of Health has a lead role, given his/her responsibilities under the Health Act, to ensure the proper steps are taken by the territorial local authority to protect public health.

10.0 Wastewater Communities

10.1 Community Identification

The communities identified for the wastewater function are as listed below:

- i. Travelling public
- ii. Urban and Rural serviced
- iii. Urban and Rural non serviced
- iv. Industry & manufacturing
- v. Hospitality industry
- vi. Schools and Camp facilities
- vii. Sports facilities, Halls and Church's
- viii. Tramping huts (DoC)
- ix. Marae

Wastewater treated in the district is roughly divided 50/50 between council provided wastewater reticulation and treatment (Urban and Rural serviced); or on-site treatment and disposal methods such as septic tanks, with effluent disposal soakage systems (Urban and Rural non serviced).

Sludge from the on-site treatment systems is generally disposed by a private company at a facility.

There are seven council owned and operated sewerage treatment facilities in the Hauraki District, those being situated at Whiritoa, Waihi, Paeroa, Kerepehi, Turua, Ngatea and Waitakaruru.

10.2 Risk Assessment of Communities

10.2.1 Public Health Risks for Wastewater

The first step in any wastewater risk assessment is to identify the potential sources of risk to public health from on-site wastewater disposal systems.

Humans are at risk through inhalation, ingestion or skin contact, arising from:

- Accidental drinking of contaminated water
- Using untreated contaminated water as a potable water source
- Ingestion of contaminated recreational water
- Eating raw food crops contaminated with sewage
- Note: a further risk is coming into contact with people or animals involved with any of the above: this can be indirect such as when a seagull carries something that is contaminated on to a roof from which drinking water is collected.

Some additional public health risks (e.g. eating contaminated shellfish and direct human contact with sewage from disposal beds) and goes on to list the corresponding health impacts, i.e.:

- Loss to quality and years of life
- General loss of amenity to a community (e.g. recreational uses of water)
- Economic effects (e.g. adverse effects on tourism)
- Offensiveness of odours from systems

An assessment of the risks poised to communities by wastewater is summarised below. Details of each community's risks are under the relevant sections of this assessment dealing with the individual communities.

Risk = probability of an event occurring multiplied by the consequence of such an event

Probability rating:

- 5 = Very high
- 4 = High
- 3 = Medium
- 2 = Low
- 1 = Very low

Consequence rating:

- 5 = Catastrophic
- 4 = Major
- 3 = Medium
- 2 = Minor
- 1 = Nothing

Possible risks identified from a workshop of key staff relative to the Districts wastewater as a whole include:

- Septic tank failure
- Effluent field failure
- Overloading
- Spillage
- Seepage
- Contamination of a waterway
- Lack of maintenance
- Vegetation growth over effluent field
- Trade waste entering the septic tank
- Public health

Below is a summary of the perceived risks for each community that will be explained further in the assessment of water and sanitary services.

Community	Risk factor for current health impacts of discharges	Risk factor for current environmental impacts of discharges	TOTAL current risk factor	Risk factor for future health impacts	Risk factor for future environmental impacts	TOTAL future risk factor	Difference between existing and future risk
Travelling public	2.5	2.8	7	2	2	4	3
Urban and Rural serviced	1	2	2	1	2	2	0
Urban and Rural non-serviced	2.55	3.15	8	2	3	6	2
Industry	2.8	2.4	6.72	2.8	2.4	6.72	0
Hospitality industry	2.77	2.92	8.09	2.77	2.92	8.09	0
Schools and Camp facilities	2.27	2.73	6.2	2	2.73	5.46	0.46
Sports facilities, halls and church's	2.27	2.9	6.58	2.27	2.9	6.58	0
Tramping Huts (DoC)	1.4	2.3	3.22	1.4	2.3	3.22	0
Marae	3.3	2.7	8.91	3.3	2.7	8.91	0

From the table above, the highest risk communities are Marae, Hospitality Industry and urban & rural non-serviced. All risk factors have been assumed to the best of the Hauraki District Councils knowledge at this present time.