



## STAFF REPORT

**TO:** Environment & Planning Subcommittee

**FROM:** Michael Durand – Co-Ordinator Natural Resources Consents

**REFERENCES:** RM070424 to RM070539 – Discharge of Domestic Wastewater

**SUBJECT:** **RUBY BAY DEVELOPMENTS LIMITED - REPORT EP07/10/03 -**  
Report prepared for Hearing commencing 9 October 2007

---

### 1. DESCRIPTION OF THE PROPOSED ACTIVITY

Ruby Bay Developments Limited has lodged a number of resource consent applications relating to a subdivision, residential development, community activity, earthworks, works in watercourses and associated wastewater and stormwater discharges in the Rural 3 Zone.

The following report assesses applications **RM070424 to RM070539** relating to the discharge of domestic wastewater from the proposed development. Consent applications addressing stormwater diversion, retention and discharge are assessed in a complementary report.

The proposed wastewater discharges assessed in this report are that are split into three groups: RM070424 has been applied for to authorise the discharge from a proposed community centre, and is a restricted discretionary activity. The remainder of the wastewater discharge permit applications are to service residential dwellings, but these have various statuses under the TRMP. Applications RM070429–539 are for allotments where the application is assessed as being either a controlled activity or a restricted discretionary activity. In most cases the discharge of wastewater on each allotment is a controlled or restricted discretionary activity. The trigger for restricted discretionary status is that the allotment is less than 2 ha in area. Four of the applications, RM070425–428 (proposed lots 22, 34, 35 and 41) have non-complying status because the TRMP requirement for a reserve land application area is not fully available on those allotments.

#### 1.1 Discharge Permit (Application RM070424)

To discharge secondary treated wastewater of a domestic nature to land by way of subsurface dripper line irrigation on proposed Lot 502 (Community Centre) of the subdivision.

#### 1.2 Discharge Permits (Application RM070425-RM070428)

To discharge up to 1,200 litres of secondary treated domestic wastewater per day to land by way of subsurface dripper line irrigation from residential dwellings on proposed Lots 22, 34, 35 and 41.

### 1.3 Discharge Permits (Application RM070429-RM070539)

To discharge up to 1,200 litres of secondary treated domestic wastewater per day to land by way of subsurface dripper line irrigation from residential dwellings on Lots 1-21, 23-33, 36-40, 42-104 and 200-213 (a total of 111 discharge permits).

### 1.4 Site Location and Description

The 147.003 hectare property is located between Dicker Road and Awa Awa Road, Tasman (see location maps in Appendix 2). The site is approximately three kilometres west of Ruby Bay and four kilometres northwest of Mapua.

The application area has a range of slopes of an undulating to rolling nature. Few areas have slopes over 15 degrees. The “easy contour” land with average slopes ranging from 5 to 9 degrees covers 49% of the area and over 63% of the proposed residential sites are situated on the “easy contour” land. Less than 37% of the proposed residential sites are on the broken contour range consisting of slopes with pockets of easier contour areas separated by steeper ridges and gullies. The subject site also includes moderate to steep areas of slopes between 10 to 20 degrees where the larger rural lots are proposed.

The subject site contains three main ridgelines with a number of minor lateral ridgelines running up to the major ridgelines. A main gully runs up through the middle of the site and contains a regionally significant wetland. The vegetation for the majority of the site is currently pasture and remnant pines from its past forestry use. Surrounding land uses include forestry, olive groves, pasture, apple orchards and lifestyle blocks.

### 1.5 Legal Description

Lots 1 and 7 DP 20366, Lot 13 DP 1706 and proposed Lots 1 and 2 of subdivision consent RM010679 (Certificates of Title NL13C/309, NL65/63, NL13C/305, Pt NL67/162 and Pt NL67/163). RM010679 amalgamates land owned by Carter Holt Harvey with properties east of Dicker Road that will be severed by the construction of the Ruby Bay by-pass.

## 2. PROPOSED TASMAN RESOURCE MANAGEMENT PLAN (PTRMP) ZONING, AREAS AND RULES AFFECTED

The application site is within the Wastewater Management Area. Rules affected and the status of each application are summarised below.

**Table 1: Status of applications under the TRMP**

<b>Proposed Lots</b>	Lot 502	Lots 22, 34, 35 and 41	Lots 200–211 and remainder
<b>Source of wastewater</b>	Community centre	Dwellings	Dwellings
<b>Application Nos.</b>	RM070424	RM070425 – RM070428	RM070429 – RM070539

<b>Affected Rule</b>	36.1.4(aa)	36.1.4(aa)	36.1.4(aa)
<b>Reason</b>	Disposal is proposed in imperfectly drained and / or poorly drained soils	Disposal is proposed in imperfectly drained and / or poorly drained soils	Disposal is proposed in imperfectly drained and / or poorly drained soils
<b>Affected Rule</b>	36.1.13A(a)	36.1.13A(a)(ii)	36.1.13A(a)(ii)
<b>Reason</b>	Discharge is not from a dwelling	100% reserve area is not available	For all lots within RM070429 – RM070539, except proposed lots 200–211 Discharge is proposed on a lot that is proposed to be less than 2 ha in area
<b>Applicable rules application Status</b>	36.1.14A <b>Restricted Discretionary</b>	36.1.16A <b>Non-complying</b>	36.1.13A and 36.1.14A <b>Controlled or Restricted Discretionary</b>

### 3. CONSULTATION, APPROVALS AND SUBMISSIONS

#### 3.1 Consultation

The application stated that consultation occurred with immediately adjacent neighbours to the site and the following organisations:

**Table 2: Consultation undertaken by the applicant**

<b>Name</b>	<b>Reasons</b>
Tasman District Council	Pre-application discussions with numerous staff
Transit NZ	By-pass issues
Department of Conservation	Wetland issues
QEII National Trust	Wetland issues
NZ Archaeological Association	Archaeological sites
Tangata whenua	Cultural impacts

#### 3.2 Submissions

##### 3.2.1 Summary of submissions commenting on wastewater matters:

**Table 3: Summary of submissions with respect to wastewater discharges**

<b>Submitter</b>	<b>Reasons</b>	<b>Comment</b>
Groenwegen	“(a) I do not believe that on site treatment would not be suitable [sic] for the density proposed. (b) For an inland development of this density nutrient removal – both. [sic] Phosphorous and Nitrogen – should be a requirement. (c) These plants are owner-operated – so limited skill – it is expected that a high proportion will always not be operated properly so that any disposal in the area will mean some inevitable seepage and contamination into the wetlands and ongoing contamination of groundwater. (d) Generally	Secondary treatment systems are generally effective at reducing nutrient concentrations in domestic wastewater prior to discharge. Advanced secondary treatment systems that involve multiple

Submitter	Reasons	Comment
	<p>on-site treatment plants • do not produce a very high quality wastewater, • do not include good nutrient removal, • are prone to intermittent failure or being badly operated by owners, • rely on sub surface dispersion fields, which on clay, require large areas and even then are not always successful. (e) It would make more sense to install a community treatment plant with high level treatment and nutrient removal. (f) there are very good economic technologies available so that treated water would be of high enough quality to allow safe controlled disposal or it could even be reused as a gray water [sic] supply for irrigation.”</p>	<p>passes of a filter medium are especially effective.</p> <p>Poor operation can also occur in the case of community wastewater systems. Whilst such systems may be more resilient to poor use, the absence of personal ownership may mean that ‘flush and forget’ mentality is more prevalent where dwellings are serviced by such systems.</p> <p>Other matters raised are discussed elsewhere in this report.</p>
Crosbie	<p>“My concerns with wastewater relate to the ability of the Moutere Clay to absorb the run-off from 115 new septic tank systems. [...] Many house owners on the smaller sections on this proposed development will find they don’t have enough room for the septic tank systems you [TDC] require of them.</p>	<p>Matters raised are discussed elsewhere in this report.</p>
Mitchell	<p>“The potential for pollution of waterways and the land disposal of treated wastewater. I am particularly concerned that the development will increase water pollution in the village of Tasman.”</p>	<p>Groundwater quality in Tasman village is currently degraded by contamination from the numerous, old, and possibly poorly maintained conventional septic tanks that service dwellings in the village itself. These systems discharge wastewater that is of poor quality relative to the systems proposed to service this subdivision. It is considered that discharges from these old systems, some of which utilise outdated design practices (such as soak holes for disposal), and which may not be fitted with basic treatment technologies (such as outlet filters), pose a significantly greater public health</p>

Submitter	Reasons	Comment
		<p>risk in Tasman village than do the systems proposed to service this subdivision.</p> <p>The contamination of waterways has been discussed elsewhere in this report.</p>
Nelson Marlborough District Health Board	<p>“The Public Health Service [...] believes that the developer should provide a centralised collection and treatment facility. Centralised management and disposal of treated wastewater has occurred in other subdivisions in the region. [...] Individual on-site wastewater disposal systems are only as good as the operator taking care of them [and] these systems require ongoing maintenance which can be neglected. [...] The Public Health Service considers that these systems must meet the requirements of the Australian New Zealand Standards (AS/NZS) 1547:2000 On-site domestic wastewater management.”</p>	<p>These matters are discussed elsewhere in this report.</p>
Eggeling and Edwards	<p>“Another question to be asked is: “Where will the grey waters run off to?” Wells being contaminated by septic tank wastewater and residents becoming unwell or sick. This could happen in the lower lands of <i>this</i> area by not addressing ‘wastewater’ disposal sufficiently. We recommend a “Wastewater and Wastewater / Sewerage Treatment Facility” capable of returning water to the local environment without impacting on the environment and natural “wetlands”.”</p>	<p>See comments regarding the submission by Mitchell.</p>
Hill	<p>“There are considerable local difficulties regarding the disposal of wastewater, particularly with residents lower in the water table in areas such as Tasman. [...] There is a significant danger of inadequately treated wastewater entering the water table. We feel that the development should be required to install a sewerage and wastewater treatment facility capable of returning water to the environment with no impact under a whole range of ground water conditions we experience locally.”</p>	<p>Matters raised are discussed elsewhere in this report.</p>
Hughes and Munro	<p>“What on-site systems are planned? Wastewater disposal has been recognised as very problematic in the poorly draining Moutere clay soils and there is incidence and complaints of contaminated groundwater in the Tasman Area. [...] Very large dispersal fields are required and the proposed size of the house lots (and their high density) is too small for safe percolation.</p> <p>“We submit that the developer should be required to install a single, state-of-the-art integrated wastewater treatment system sufficient to cope with the waste treatment requirements of the entire development without any of the problems referred to above. If this cannot be done it calls into question the basis of the entire application.”</p>	<p>Matters raised are discussed elsewhere in this report.</p>

#### 4. PRINCIPAL ISSUES

The principal issue associated with the applications are:

- a) Can the subdivision be adequately serviced in terms of domestic wastewater disposal such that the effects on groundwater and surface water quality will be no more than minor?

#### 5. STATUTORY PROVISIONS

The various discharges proposed in the application are controlled, restricted discretionary and non-complying activities in the Wastewater Management Area. The Council must consider the application pursuant to Section 104 of the Resource Management Act 1991.

The matters for the Council to consider in Section 104 are:

- Part II matters;
- the actual and potential effects on the environment of allowing the activity (Section 104 (1)(a));
- the relevant objectives and policies in the Tasman Regional Policy Statement, and the Proposed Tasman Resource Management Plan (Section 104 (1) (b));
- any other matter the Council considers relevant and reasonably necessary to determine the application (Section 104 (1)(c)).

##### 5.1 Resource Management Act Part II Matters

In considering an application for resource consent, the Council must ensure that if granted, the proposal is consistent with the purpose and principles set out in Part II of the Act.

**Section 5** sets out the **purpose** of the Act which is to promote the sustainable management of natural and physical resources. "Sustainable management" means:

*"Managing the use, development and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural well-being and for their health and safety while -*

- *sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and*
- *safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and*
- *avoiding, remedying, or mitigating any adverse effects of activities on the environment*

**Sections 6, 7 and 8** set out the **principles** of the Act:

**Section 6** of the Act refers to matters of national importance that the Council shall recognise and provide for in achieving the purpose of the Act. The matters relevant to this application are:

- The preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use and development.
- The protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna

**Section 7** of the Act identifies other matters that the Council shall have particular regard to in achieving the purpose of the Act. Relevant matters to this application are:

- 7(d) intrinsic values of ecosystems
- 7(f) maintenance and enhancement of the quality of the environment, and
- 7(g) any finite characteristics of natural and physical resources

**Section 8** of the Act shall take into account the principles of the Treaty of Waitangi (Te Tiriti o Waitangi). I understand that the applicant has consulted with iwi. I do not anticipate that there are any relevant issues for this application in respect of Section 8.

If consent is granted, the proposed activity must be deemed to represent the sustainable use and development of a physical resource and any adverse effects of the activity on the environment should be avoided, remedied or mitigated. *The critical issue of this consent is whether the proposal represents sustainable use of the rural land resource, whereby servicing and cumulative adverse effects are no more than minor.*

These principles underpin all relevant Plans and Policy Statements, which provide more specific guidance for assessing this application.

## **5.2 Tasman Regional Policy Statement**

The Regional Policy Statement seeks to achieve the sustainable management of land, water and coastal environment resources. Objectives and policies of the Policy Statement clearly articulate the importance of protecting land resources from inappropriate land use and development.

Because the Proposed Tasman Resource Management Plan was developed to be consistent with the Regional Policy Statement, it is considered that an assessment under the Proposed Plan will satisfy an assessment against Policy Statement principles.

## **5.3 Tasman Resource Management Plan**

The most relevant Objectives and Policies to this application are contained in:

- Chapter 33

This chapter articulates Council's key objectives:

Details of the assessment of the proposed activity in terms of these matters are addressed through the assessment of actual and potential effects in paragraphs 6.1–6.4 below and analysis and discussion on the relevant policies and objectives in paragraph 6.5 of this report.

## 6. ASSESSMENT

### 6.1 Background to the Proposed Activity

The applicant's proposals for the collection, treatment and discharge of domestic wastewater to land are described in detail in the report by Ormiston Associates Ltd (dated May 2007). The report's co-author (AW Ormiston) is a co-author of the Auckland Regional Council document Technical Publication 58 (On-site Wastewater Systems: Design and Management Manual)<sup>1</sup>. That manual is, along with AS/NZS1547:2000<sup>2</sup>, widely used by on-site wastewater system designers and auditors (e.g regional and unitary Councils). The proposals and site assessment are summarised below. Note that section 6.1 of this report summarises matters raised by the applicant; this writer's critique of this report and design parameters is provided in sections 6.2 and 6.3.

#### *Overview*

The 115 residential allotments have been proposed to be serviced by individual on-site wastewater treatment and disposal systems. These types of wastewater systems treat both blackwater (i.e. toilet waste) and greywater (i.e. all other wastewater) in a combined wastewater stream, and the treated wastewater is discharged to a dedicated land application area within the boundaries of each allotment. The discharge will occur to a land application area through a network of pressure-compensating drip irrigation lines lying on the surface and buried with mulch or bark, or buried at up to 100 mm depth in the top soil. The size of the land application area is typically dependent upon the volume of wastewater to be discharged and the hydraulic capacity of the soil (i.e. the rate at which soil can absorb the discharged wastewater). The former is determined by the maximum possible occupancy of the dwelling, and the latter is dependent upon the soil type and sometimes other physical features of the site.

#### *Design brief and site assessment*

The assessment and design brief was to provide a recommendation for wastewater treatment and disposal for a four bedroom house (occupancy 6 persons) with roof water supply on each residential allotment. Particular regard was to be given to soils and site constraints for each allotment, groundwater issues (i.e. proximity and potential for contamination by wastewater) and the fate/impact of nutrients in the environment.

Site inspection methods involved a walkover inspection and visual assessment, and the excavation of twenty-one test pits (to up to 2.8 m depth) distributed evenly around the property. Soils were assessed by an engineering geologist using methods described in TP58 and AS/NZS1547:2000.

---

1. Ormiston, A.W. & Floyd, R.E. (2004). On-site Wastewater Systems: Design and Management Manual. Auckland Regional Council Technical Publication No. 58 (TP58). Third Edition.

2. AS/NZS1547:2000 On-site domestic-wastewater management. Standards New Zealand



The soils on the property are derived from the underlying Moutere Gravels. Soils were found to be typically category 4–5 and were described as being imperfectly drained to poorly drained. Historically, landuse on the property was forestry operations, which have lead to severe damage to the surficial soil structure. This damage includes the mixing of top soil with underlying soils, and in some areas the total removal of top soil.

Groundwater was not encountered in any of the test pits.

#### *Wastewater flows*

A design flow volume of 200 litres per person per day was assumed. This is a conservative volume for dwellings with standard water producing fixtures. The report suggests that this volume should be revised accordingly if 'upmarket' or 'extra wastewater' producing facilities are proposed to be installed. This can be checked at building consent stage. The report also recommends that water conservation devices be installed to minimise water use and disposal area requirements.

As such, the total daily wastewater flow has been assumed as six people × 200 litres = 1,200 litres per day.

#### *On-site wastewater treatment*

The systems proposed are of a type that is expected by the TRMP in the Wastewater Management Area, being capable of treating wastewater to at least 'secondary standard'. Two main types of system are mentioned in the report, being (a) septic tanks including an wastewater filter and sand or textile filter (known as 'advanced secondary treatment' systems), and (b) aeration treatment systems (a type of secondary treatment system).

Advanced secondary treatment systems comprise a septic tank for the anaerobic treatment of the wastewater and removal of solids and grease, followed by a large chamber containing a sand filter or textile filter, over which a timer-controlled pump doses wastewater in controlled volumes and at pre-determined intervals. Conditions are aerobic in this chamber. It is stated that the most effective systems of this type re-circulate the wastewater through the sand or textile filter up to five times. Such systems are very effective at removing nutrients, pathogens, total suspended solids (TSS) and at reducing the 5-day biochemical oxygen demand (BOD<sub>5</sub>) of the discharged wastewater. Some domestic sand filter systems operate with a single pass (i.e. do not recirculate the wastewater) and as a result these are less effective at removing nutrients. It is stated that advanced secondary systems are generally resilient to fluctuations in occupancy and flow caused by, for example, holiday occupancy.

Typical wastewater quality from advanced secondary systems is stated as being <15 mg/L BOD<sub>5</sub>; <15 mg/L TSS; ~30 mg/L N; and >99% reduction in faecal coliforms.

Secondary treatment systems generally are 'aerated systems' which operate using a septic tank followed by a second chamber, in which air is injected through the wastewater by a blower system. This aeration chamber oxygenates the wastewater and provides conditions for the growth of aerobic bacteria that treat the wastewater.

Other types of secondary treatment systems, such as vermiculture systems, are also available and produce wastewater of a similar standard.

Water quality from aerated systems is typically more variable than from advanced systems: ~20 mg/L BOD<sub>5</sub>; ~30 mg/L TSS; 25–60 mg/L N; and  $3 \times 10^3$  per 100 ml faecal coliforms.

Pump chambers are recommended to have no less than 24 hrs emergency storage and a high water level alarm.

Secondary treatment systems are recommended to have a 120 micron disk filter installed prior to the irrigation lines to prevent clogging and prolong the life of the irrigation lines. Such filters are advantageous though not necessarily required for advanced secondary treatment systems.

Maintenance contracts are recommended to be taken and retained with the system supplier.

#### *On site wastewater land application*

The following possible site constraints are highlighted to be taken into account at the final design stage prior to building consent application: soil type, slope angle, groundwater separation, proximity of bores, proximity of surface water, surface water overland flow paths, slope stability, boundaries and proximity of buildings, reserve areas and proposed land use of the primary land application area.

A site plan indicating areas suitable for on-site disposal was provided.

The report acknowledges that the TRMP expects a maximum loading rate of 2 mm per day (2 litres per square metre per day), and in light of the soil characteristics found during site investigations, supports this view. Therefore the land application areas are designed for the discharge of 1,200 litres per day at a rate of 2 litres per square metre per day, and are therefore 600 square metres in area.

The TRMP requires that a reserve area equivalent to 100% of the primary land application area be available for wastewater disposal if needed in the event of system failure and clogging of soils. Part of this reserve area may also be used in the event of an extension to the dwelling in question and subsequent need for the discharge of larger volumes of wastewater.

#### *Community Centre*

It is acknowledged in the report that specific designs for the community centre have not been developed at this stage. It is proposed that, accordingly, the wastewater system is designed at a later stage. It is suggested that there is sufficient land area on the community centre allotment to accommodate the land application area for this wastewater system. The report is explicit that a system of similar quality to those described above is proposed (i.e. a secondary treatment system or an advanced secondary treatment system).

## General

The report admits that it does not provide sufficient design detail for the individual building consent applications that will be needed for each dwelling, should resource consent be granted. The reader should note that, at that stage, detailed wastewater system designs will need to be seen by the Council staff and these will need to be consistent with any resource consent granted and with the Australian / New Zealand Standards for On-site domestic wastewater management (AS/NZS1547:2000).

## 6.2 Consideration of Effects in the Application

The Auckland Regional Council's publication TP58 suggests that the following matters should be given particular regard to when designing on-site wastewater systems. Table 4 indicates the extent to which these matters have been covered in the applications for resource consent, and whether or not the possible environmental effect is considered by Council to be more than minor.

**Table 4: Matters considered in the assessment of potential adverse effects on the environment.**

Matters considered in application?		Adverse environmental effect more than minor?		
		RM070424 (community centre; non-complying)	RM070425-28 (non-complying lots)	RM070429-539 (controlled and restricted discretionary lots)
Conservative approach at design stage	Y/N	N	N	N
Robust treatment system	Y	N	N	N
High level of treatment	Y	N	N	N
Mitigation measures to protect against failure	Y	C	C	C
Conservative hydraulic loading rates	Y	N	N	N
Measures to ensure even distribution of wastewater disposal	Y	N	N	N
Protection of land disposal area with stormwater cut off drains*	Y	N	N	N
Description of the soil types and categories on the property	Y	N	N	N
Description of the land application area	Y	N	N	N
Separation from surface water	Y	N	N	N
Separation from groundwater	Y	N	N	N
Separation from surface water bores	Y	N	N	N
Determination of potential flood risk	Y	N	N	N
Provision for reserve allocation	Y	N	N	N
Provisions to discourage access*	N	N	N	N
Odour effects	Y	N	N	N
System management plan	Y	C	C	C
System maintenance contract	Y	C	C	C
Education of system users	Y	C	C	C

Notes:

Y – Yes ; N – No

C – Not addressed in the application, but to be addressed by consent conditions, which should ensure that effects are no more than minor;

\* These matters are not always discussed explicitly at resource consent application stage. They are dependent to a large degree on the particular make and model of wastewater system to be installed; many manufacturers' systems comprise alarms, power back-up and other systems to prevent failure and associated environmental effects.

In the application considerable regard has been given to most of the matters listed in Table 4. Matters that were not considered fall into three categories: (i) those that are more suitable to be dealt with at the final design stage at the time of the building consent application; or (ii) matters that are specific to the make and model of wastewater system that is eventually installed; and (iii) matters that are usually covered by consent conditions.

Therefore there are no outstanding matters that would mean a proper assessment of the activity's adverse effects cannot be made.

### **6.3 Assessment: Discussion of Key Potential Environmental Effects**

Before providing an explicit assessment of the key potential environmental effects associated with the proposed domestic wastewater discharges, some general comments on the application should be made as follows:

#### *Comments on Applicant's Wastewater Report*

The Council's expectations of new domestic wastewater discharges in the Wastewater Management Area are that treatment will be at least to secondary standards, and that the discharge occurs to a dedicated land application area via a dose loading system to pressure-compensating dripper irrigation lines, at a rate not exceeding 2 mm per day. These expectations have been satisfied by the applicant.

The design brief given to the applicant's consultants was realistic with regard to providing an assessment for a 4 bedroom home for each allotment. The design flow volume was very conservative given that water for each dwelling will be provided by roof supply (which tends to invoke a more conservative attitude towards water use).

The reader should note that larger houses can be built but the Consent Holder will need to apply for a variation to their resource consent.

The site inspection methods and soil assessment methods used are considered to be appropriate and the soil types identified were consistent with the Council's understanding of soils in this area.

The discussion of the types of wastewater treatment available was accurate, and the discussion of their various limitations was reasonable. The wastewater system types that are proposed for the subdivision are suitable for the intended use and are widely available. Maintenance contracts, alarm systems, emergency storage and other mitigation factors recommended in the report are also widely available and will help to minimise any adverse environmental effect of wastewater discharge to land. The details provided on the typical quality of wastewater produced by these systems were also realistic. The proposed installation of disk filters to prolong the life of the irrigation lines is also sensible and supported.

Other matters that were not discussed in detail in the application but are worthy of discussion here are (i) reserve areas, and (ii) alternative treatment and disposal systems, which are discussed here:

#### *Reserve Land Application Areas*

Reserve land application areas are expected to be available under Rules 36.1.13A and 36.1.14A. The purpose of the reserve area is two-fold. First, to allow for the dripper irrigation lines to be re-laid in uncontaminated soil should the soils in the primary land application area become clogged. The main circumstance under which this would happen is the development of anaerobic conditions in the soil, leading to the excessive growth of slimes. Industry experience suggests that the occurrence of this is both rare, and usually able to be remedied. Clogging, if it occurs, is usually concentrated around the dripper lines themselves; their removal followed by rotary hoeing of the soils leaves the primary land application area ready for the installation of new dripper lines. Therefore, following the failure of the wastewater system, it is unlikely that the reserve land application area would need to be used. Notwithstanding this, it should be stressed that the reserve area should always be made available and the land should not be used for permanent structures that would prevent its future use, as the possible future need for a reserve can never be ruled out.

The second reason for the provision of a reserve area is to allow for the expansion of the primary land application area. This might be necessary for a variety of reasons including an extension to the dwelling and subsequent increase in the volume of wastewater to be discharged. Another possible reason is that the hydraulic capacity of the soil was overestimated at the time of system design, and it is discovered that a lower rate of wastewater discharge needs to be applied.

The provision for a 100% reserve area could not be provided on the proposed lots 22, 34, 35 and 41 owing to their size. On these allotments upwards of 50% reserve is available, however. Their status under the TRMP is non-complying, but in practical terms it is suggested here that the absence of a complete reserve area is not necessarily a significant problem.

#### *Alternative Treatment and Disposal Systems*

Elsewhere in the district and the country, many large subdivisions such as that proposed here have been serviced by community wastewater treatment systems sometimes known as “decentralised systems” or “cluster systems”. These systems have various formats, but common factors include a central treatment system that serves all the dwellings, and a series of land application areas that are usually located in common land allotments. The systems tend to be owned by a body corporate or similar entity, and sometimes the systems are eventually vested to the local authority.

Decentralised systems treat wastewater with similar technologies and to a similar quality to individual on-site systems. However, some are able to produce wastewater of a consistently good quality, whereas some on-site systems are vulnerable to fluctuations in wastewater quality caused by changes in occupation rates, influent rates and any inappropriate substances flushed into the system.

In response to a request for further information on the application, Ormiston Associates Ltd provided an overview of the relative advantages and disadvantages of a decentralised system over individual on-site systems for the proposed development. Their arguments against the installation of a decentralised system can be summarised as follows:

- The quality of wastewater discharged from a decentralised system would be the same as that from an on-site system using the same technology.
- Decentralised systems tend to discharge the wastewater into one or a small series of large land application areas. It is possible that the discharge would be concentrated into one catchment, where the potential for adverse environmental effects is greater than with individual on-site systems, where the discharge is spread more evenly over the wider topography of the proposed subdivision. Such land application areas may also be unavailable for public use and the treated wastewater cannot be used for beneficial irrigation on domestic allotments.
- Property owners are expected to (and it is argued that they do) take responsibility for the wellbeing of their own on-site system, but this is not the case for decentralised systems.
- Problems with decentralised systems may require significant financial backing before they can be resolved, and it is argued that body corporate structures may not always be able to respond to such needs.
- A failure of a large treatment plant's land application area could result in a rapid and significant adverse environmental effect.
- There is a greater risk of stormwater and groundwater infiltration into decentralised systems.

Their report concluded that "decentralised and individual on-site systems both have advantages and disadvantages, [... however ...] the potential environmental effects from a decentralised system compared to individual on-site is likely to be the same or very similar."

In the writer's view these comments are well-considered and valid. On-site systems and decentralised systems both pose potential environmental problems. On-site systems that are designed conservatively, are properly maintained and use appropriate mitigation measures (alarms etc.) are arguably the best option for wastewater treatment and disposal on the proposed allotments. Should consent be granted, the writer recommends consent conditions that would make appropriate maintenance, high standards of wastewater quality, and good mitigation measures enforceable by the Council.

#### *Key Potential Environmental Effects*

The key potential environmental effects associated with domestic wastewater discharges on the proposed allotments are as follows:

- Impact on surface water quality

- Impact on groundwater quality
- Impact on soils
- Impact on amenity values

Adverse impacts on surface water, groundwater and soils themselves can be avoided through appropriate design and site assessment. Aside from the type of wastewater system itself, which has been discussed at length already, one of the most important aspects of wastewater design to be considered in detail is the soil into which wastewater is to be discharged. Wastewater receives 'treatment' by bacteria in the soil following its discharge from the wastewater system. The discharge should occur at a rate within the hydraulic capacity of the soil (i.e. at a rate at which the soil can physically absorb and transmit the water). If the discharge is maintained below this rate then typically the soils remain aerobic (air spaces are present within the soil), and so the water is treated by aerobic bacteria. If the rate of discharge is too high then these air spaces may be lost (the soil becomes saturated). Under these conditions the anaerobic bacteria multiply in the soil and these typically emit an offensive odour. Furthermore, some of the discharged wastewater may reach the surface. Neither of these outcomes are intended or desirable.

This situation is best avoided by the installation of a wastewater system that is suitable for the site, and in particular, discharges the treated wastewater at an appropriate rate for the soil type. These key design parameters have been met in the applicant's wastewater design report.

Adverse impacts on surface water quality should be avoided because each wastewater system will have been properly designed and maintenance schedules will be enforced, should consent be granted. None of the land application areas are proposed to be located closer than 20 metres from any waterbody, and all are, at this stage, deemed to be appropriately sized for the proposed dwellings. Should consent be granted, any changes to wastewater volumes and disposal field locations away from this basic design (1,200 litres per day) will need to be approved by the Council through a variation to the resource consent. At that stage, the suitability of the site and revised land application area design would be examined in detail.

As has been discussed above, the writer's view is that the proposed wastewater systems are appropriate for the site, the design flow volumes are suitable for typical dwellings and the irrigation rates are suitable for the proposed volumes of water and the soil types present. Therefore, it is not expected that there be any adverse effect on the soils, surface water nor groundwater that could be considered more than minor.

#### **6.4 Permitted Baseline**

Under Section 104 (2) of the Resource Management Act the Council may use the "permitted baseline" test to assess the proposal. Under this principle the proposal is compared with what could be done as permitted activities under the relevant Plan.

There is no permitted activity status for new discharges in the Wastewater Management Area.

## 6.5 Relevant Objectives and Policies of the PTRMP

The following Policies and Objectives have been considered relevant for this proposal:

Objectives and Policies
<p>33.4.0 Objective</p> <p><b>On-site disposal of domestic waste-water, which avoids, remedies or mitigates adverse effects on groundwater or surface water quality, habitats, human health and amenity values.</b></p> <p>Policies</p> <p>33.4.1 To ensure householders are aware of the potential adverse effects that may be created by discharges from on-site wastewater disposal systems, and of methods of avoiding, remedying or mitigating them.</p> <p>33.4.2 To ensure that the adverse effects, particularly the cumulative adverse effects, of on-site disposal of domestic wastewater on water quality and aquatic habitats, including coastal water, and on human health or amenity in the Wastewater Management Area are avoided, remedied or mitigated by:</p> <p>(a) controlling the use of on-site systems in areas where there are significant limitations to sustainable on-site disposal of domestic wastewater including:</p> <ul style="list-style-type: none"> <li>(i) low or very low permeability clay soils;</li> <li>(ii) rapidly draining coastal soils;</li> <li>(iii) areas of high groundwater tables;</li> <li>(v) steeply sloping sites, especially on south facing slopes;</li> <li>(v) unstable terrain;</li> <li>(vii) proximity to surface water bodies;</li> <li>(vi) high density of existing and new on-site systems and the cumulative impact of such discharges in terrain that has significant limitations to on-site disposal;</li> </ul> <p>(b) requiring comprehensive site and soil assessments to identify any site limitations;</p> <p>(c) requiring a high level of performance for design, construction, installation, operation and maintenance for new on-site disposal systems;</p> <p>(d) ensuring adequate buffers between disposal fields, water bodies, and the coast, especially Waimea and Mapua Inlets;</p> <p>(e) reducing the risk to human health arising from pathogens in the wastewater entering into water;</p> <p>(f) ensuring the net Nitrogen losses from land in the Wastewater Management Area to be subdivided do not result in adverse effects on aquatic habitats as a result of discharges of domestic wastewater;</p> <p>(g) ensuring stormwater management accounts for potential effects on on-site disposal fields;</p> <p>(h) ensuring that the potential adverse effects, especially cumulative effects of further residential development, are taken into account in considering any application to subdivide land in the Wastewater Management Area.</p> <p>33.4.2A To require regular programmed maintenance of on-site wastewater treatment and disposal systems to minimise risk of system failure and reduce risk of adverse environmental effects.</p> <p>33.4.2B To encourage consideration of wastewater treatment systems that service a cluster of households (subject to any site limitations) to:</p> <ul style="list-style-type: none"> <li>(a) take advantage of opportunities for high technology advanced wastewater treatment solutions at cluster scales;</li> <li>(b) reduce risks of system failure and cumulative adverse effects of single on-site systems;</li> <li>(c) enable Council to develop effective and cost efficient systems for monitoring on-site wastewater systems.</li> </ul> <p>33.4.2C To ensure that legal, practical, financial and enforceable responsibility is established for the operation and maintenance of any on-site wastewater treatment and disposal system, especially where such systems service a cluster of dwellings, taking into account both day-to-day operation and maintenance of such systems as well as provision for depreciation and replacement of equipment and of systems.</p> <p>33.4.4 To avoid, remedy or mitigate the adverse effects of discharges of domestic wastewater, including cumulative effects, particularly those in the Special Domestic Wastewater Disposal Areas.</p>



## **7. SUMMARY**

### **7.1 Principal Issues**

The principal issue is whether the proposed subdivision can be adequately serviced in terms of domestic wastewater disposal so the effects on the environment will be no more than minor.

### **7.2 Statutory Provisions**

The applications collectively are controlled, discretionary and non-complying activities in the Wastewater Management Area. The Council must consider the application pursuant to Section 104 of the Resource Management Act 1991.

- **Part II matters -**
- **Objectives and Policies of the Proposed Tasman Resource Management Plan -**
- **Actual and Potential Environmental Effects –**
- **Other Matters –**

### **7.3 Overall Conclusion**

Overall the writer's assessment is that the actual adverse effects on the environment are minor and the proposal is generally consistent with the objectives and policies, and matters of discretion in the Tasman Resource Management Plan.

## **8. RECOMMENDATION**

The recommendation to grant or decline these applications for discharge permits is dependent upon the Committee's decision whether or not to grant the subdivision consent.

Having considered the application in detail, having visited the site, and drawing on experience of current wastewater discharges in the Wastewater Management Area, it is the writer's view that the adverse environmental effects of the proposed activity will be no more than minor, and that there is no reason why resource consent for the discharge of wastewater to land should not be granted subject to the following recommended conditions.

It is also recommended that, should consent be granted, the large number of discharge permits be organised and maintained as follows: For resource consents RM070429–539 (the controlled and restricted discretionary consents for domestic lots) a schedule should be compiled, listing the consent numbers and consent holders and this should be maintained by the Council. Any Consent Holders that are successful in applying for variations to their consent conditions shall be struck off the list and their consent shall be cancelled, and they shall be issued with a new resource consent document in their name with new consent conditions attached.

Consents RM070424–428 (discharge permits for the four non-complying lots and the community centre) should be issued with individual resource consent documents.

Note that, should consent be granted, Ruby Bay Developments will be the consent holder for these discharge permits collectively. Once allotments are sold, transfer of ownership of these consents will need to be actioned as appropriate. It is anticipated that the community association will be the Consent Holder of the discharge permit for the community centre.

## **9. RECOMMENDED CONDITIONS**

### **9.1 Domestic Lots (RM070425–539)**

#### **General Conditions**

1. The design, construction and operation of the domestic wastewater treatment and disposal system shall be in accordance with the design report prepared by Ormiston Associates Ltd submitted in support of the applications for resource consent numbers RM070424–RM070539, unless inconsistent with the conditions of this consent, in which case the conditions shall prevail.
2. The maximum daily discharge volume shall not exceed 1,200 litres per day and shall occur in the location shown on Plan A dated 27 September 2007 (attached).

#### **Advice note:**

The daily discharge volume is that anticipated from a three–four bedroom house which, for wastewater design purposes, has a maximum occupancy of six persons. Any increase in the number of bedrooms and/or the inclusion of potential bedrooms (e.g. offices, rumpus rooms) proposed to be built will need to be authorised by a variation to this resource consent under Section 127 of the Act.

#### **Treatment and Disposal System**

3. The maximum loading rate at which the wastewater is applied to land shall not exceed 2 millimetres per day (2 litres per square metre per day). The land application area shall be no less than 600 square metres in area and incorporate at least 600 lineal metres of pressure-compensating drip irrigation line. The emitters in the drip irrigation line shall be spaced no more than 0.6 metres apart along the line and each shall emit wastewater at a rate of no more than 1.6 litres per hour. Lateral lines shall be laid at no more than 1 metre spacing.
4. The treated wastewater entering the land application area, as measured at the sampling point required to be installed in accordance with Condition 11, shall comply at all times with the following limits:
  - (a) the five day biochemical oxygen demand (BOD<sub>5</sub>) in any single sample shall not exceed 30 grams per cubic metre; and
  - (b) the concentration of total suspended solids (TSS) in any single sample shall not exceed 45 grams per cubic metre.

5. The wastewater treatment system shall be fitted with a remote telemetry alarm system that alerts the contracted service provider of, as a minimum, high water level in any of the system chambers, and any pump failure.
6. There shall be no ponding of wastewater on the ground surface, nor any direct discharge or run-off of wastewater to surface water.
7. The construction and installation of the wastewater treatment plant and disposal system shall be carried out under the supervision of a person who is suitably qualified and experienced.

That person shall provide a written certificate or producer statement to the Council's Co-ordinator Compliance Monitoring prior to the exercise of this resource consent. This certificate or producer statement shall include sufficient information to enable the Council to determine compliance with Conditions 1 and 3 and shall also confirm the following:

- a) that all components of the wastewater system (including the treatment plant and the land application area) have been inspected and installed in accordance with standard engineering practice and the manufacturer's specifications;
  - b) that all components of the wastewater system are in sound condition for continued use for the term of this resource consent.
8. The Consent Holder shall submit a set of final "as-built" plans to the approval of the Council's Co-ordinator Compliance Monitoring, showing the location of all components of the wastewater treatment and disposal system. For the purpose of this condition, the Consent Holder shall ensure that the "as-built" plans are drawn to scale and provide sufficient detail for a Council monitoring officer to locate all structures identified on the plans, with particular regard to the sampling point (required to be installed in accordance with Condition 11).
  9. No large grazing stock (such as sheep, cattle or horses) shall be allowed access to the land application area at any time. In the event that such stock are held elsewhere on the property, suitable fences shall be installed around the land application area to prevent access by such animals.
  10. The reserve land application area equivalent to 100% of the primary land application area [or  $x\%$  in the cases of RM070425–428] shall be kept free from permanent buildings or any other developments that would prevent its future use for the discharge of domestic wastewater.
  11. A sampling point to allow collection of a sample of the treated wastewater shall be provided at a point located after the final pump-out chamber and before the point where the wastewater discharges to the land application area.

## Maintenance and Monitoring

12. Samples of the treated wastewater shall be taken at 6, 12 and 24 months following the exercise of this consent. The samples shall be tested for BOD<sub>5</sub> and TSS by an accredited environmental testing laboratory. Results of these tests shall be forwarded to Council's Co-ordinator Compliance Monitoring within 10 working days of the results of each test being received by the Consent Holder.

The samples required by this condition shall be taken at times where the wastewater treatment and disposal system is being used in a typical fashion. Typical fashion means that the occupancy, at the time of sampling and during the preceding 48 hours, varies by no more than 1 person from the number of people that normally reside in the dwelling. The samples shall be taken using appropriate procedures as directed by the accredited environmental testing laboratory and shall be transported to the laboratory under chain of custody.

13. The Consent Holder shall enter into, and maintain in force at all times, a written maintenance and monitoring contract with an experienced wastewater treatment plant operator, or a person trained in the wastewater treatment operation by the system designer, for the ongoing maintenance of the treatment and disposal systems. This operator or person shall be able to receive telemetered system alarms (see Condition 5) and respond to them on-site within 24 hours.

The contract shall specify the frequency of treatment plant inspections and maintenance during the term of this resource consent and shall include an inspection and maintenance schedule that is in accordance with the conditions of this consent.

A signed copy of this contract shall be forwarded to the Council's Co-ordinator Compliance Monitoring prior to the exercise of this consent.

14. Notwithstanding Condition 13, the wastewater treatment and disposal system shall be inspected and serviced not less than every six months and a copy of the service provider's maintenance report shall be forwarded to the Council's Co-ordinator Compliance Monitoring within two weeks of each inspection. The inspection report shall include, but not be limited to, the following information:
  - a) the date the inspection was undertaken and the name of the service provider;
  - b) a list of all components of the treatment and disposal systems that were inspected and the state of those components;
  - c) any maintenance undertaken during the visit or still required, and a timetable for the expected completion of this work;
  - d) a description of the appearance of the filter/s and tanks;
  - e) the location and source of any odour detected from the system; and

- f) a description of the appearance of the land application area (ponding, vegetation growth etc).

### **Review of Consent Conditions**

- 15. The Council may, during the month of November each year, review any or all of the conditions of the consent pursuant to Section 128 of the Resource Management Act 1991 for all or any of the following purposes:
  - a) to deal with any adverse effect on the environment which may arise from the exercise of the consent that was not foreseen at the time of granting of the consent, and which is therefore more appropriate to deal with at a later stage; and/or
  - b) to require the Consent Holder to adopt the best practical option to remove or reduce any adverse effects on the environment resulting from the discharge; and/or
  - c) to review the contaminant limits, loading rates and/or discharge volumes and flow rates of this consent if it is appropriate to do so; and/or
  - d) to review the frequency of sampling and/or number of determinands analysed if the results indicate that this is required and/or appropriate.
  - e) to require consistency with any relevant Regional Plan, District Plan, National Environmental Standard or Act of Parliament.

### **Expiry**

- 16. This resource consent expires on 1 November 2022.

### **Advice Notes**

- 1. Officers of the Council may also carry out site visits to monitor compliance with resource consent conditions.
- 2. It is strongly recommended that household water reduction fixtures be included in the house design in order to ensure that the discharge volume limit is met. The measures and fixtures should be in accordance with AS/NZS 1547:2000 and Auckland Regional Council's Technical Publication 58.
- 3. The Consent Holder shall meet the requirements of the Council with regard to all Building and Health Bylaws, Regulations and Acts. Building consent will be required for these works.
- 4. Access by the Council or its officers or agents to the property is reserved pursuant to Section 332 of the Resource Management Act.
- 5. All reporting required by this consent shall be made in the first instance to the Tasman District Council's Co-ordinator Compliance Monitoring.

6. Council draws your attention to the provisions of the Historic Places Act 1993 that require you in the event of discovering an archaeological find (eg, shell, midden, hangi or ovens, garden soils, pit, depressions, occupation evidence, burials, taonga) to cease works immediately, and tangata whenua, the Tasman District Council and the New Zealand Historic Places Trust shall be notified within 24 hours. Works may recommence with the written approval of the Council's Environment & Planning Manager, and the New Zealand Historic Places Trust.
7. This resource consent only authorises the activity described above. Any matters or activities not referred to in this consent or covered by the conditions must either: 1) comply with all the criteria of a relevant permitted activity rule in the Proposed Tasman Resource Management Plan (PTRMP); 2) be allowed by the Resource Management Act; or 3) be authorised by a separate resource consent.

## **9.2 Community Centre (RM070424)**

### **General Conditions**

1. The Consent Holder shall submit a complete wastewater system design report for the approval of the Council's Co-ordinator Compliance Monitoring prior to the exercise of this resource consent. This design and the construction and operation of the wastewater treatment and disposal system shall be in accordance with the design report prepared by Ormiston Associates Ltd submitted in support of the applications for resource consent RM070424, unless inconsistent with the conditions of this consent, in which case the conditions shall prevail.

#### **Advice Note:**

The wastewater system designer should be involved from an early stage with other parties responsible for the design of the community centre. Design flow volumes, design and sizing of the land application area(s) and reserve land application area(s) need to be undertaken in concurrently with, for example, landscaping designs and planning of the community centre facilities.

### **Treatment and Disposal System**

2. The maximum loading rate at which the wastewater is applied to land shall not exceed 2 millimetres per day (2 litres per square metre per day) and wastewater shall be discharged via a network or networks of pressure compensating drip irrigation lines. The emitters in the drip irrigation line shall be spaced no more than 0.6 metres apart along the line and each shall emit wastewater at a rate of no more than 1.6 litres per hour. Lateral lines shall be laid at no more than 1 metre spacing.
3. The treated wastewater entering the land application area, as measured at the sampling point required to be installed in accordance with Condition 10, shall comply at all times with the following limits:

- a) the five day biochemical oxygen demand (BOD<sub>5</sub>) in any single sample shall not exceed 30 grams per cubic metre; and
  - b) the concentration of total suspended solids (TSS) in any single sample shall not exceed 45 grams per cubic metre.
4. The wastewater treatment system shall be fitted with a remote telemetry alarm system that alerts the contracted service provider of, as a minimum, high water level in any of the system chambers, and any pump failure.
  5. There shall be no ponding of wastewater on the ground surface, nor any direct discharge or run-off of wastewater to surface water.
  6. The construction and installation of the wastewater treatment plant and disposal system shall be carried out under the supervision of a person who is suitably qualified and experienced.

That person shall provide a written certificate or producer statement to the Council's Co-ordinator Compliance Monitoring prior to the exercise of this resource consent. This certificate or producer statement shall include sufficient information to enable the Council to determine compliance with Condition 1 and shall also confirm the following:

- a) that all components of the wastewater system (including the treatment plant and the land application area) have been inspected and installed in accordance with standard engineering practice and the manufacturer's specifications;
  - b) that all components of the wastewater system are in sound condition for continued use for the term of this resource consent.
7. The Consent Holder shall submit a set of final "as-built" plans to the approval of the Council's Co-ordinator Compliance Monitoring, showing the location of all components of the wastewater treatment and disposal system. For the purpose of this condition, the Consent Holder shall ensure that the "as-built" plans are drawn to scale and provide sufficient detail for a Council monitoring officer to locate all structures identified on the plans, with particular regard to the sampling point (required to be installed in accordance with Condition 10).
  8. No large grazing stock (such as sheep, cattle or horses) shall be allowed access to the land application area at any time. In the event that such stock are held elsewhere on the property, suitable fences shall be installed around the land application area to prevent access by such animals.
  9. The reserve land application area equivalent to 100% of the primary land application area shall be kept free from permanent buildings or any other developments that would prevent its future use for the discharge of domestic wastewater.
  10. A sampling point to allow collection of a sample of the treated wastewater shall be provided at a point located after the final pump-out chamber and before the point where the wastewater discharges to the land application area.

## Maintenance and Monitoring

11. Samples of the treated wastewater shall be taken at 6, 12 and 24 months following the exercise of this consent. The samples shall be tested for BOD<sub>5</sub> and TSS by an accredited environmental testing laboratory. Results of these tests shall be forwarded to Council's Co-ordinator Compliance Monitoring within 10 working days of the results of each test being received by the Consent Holder.

The samples required by this condition shall be taken at times where the wastewater treatment and disposal system is being used in a typical fashion. The samples shall be taken using appropriate procedures as directed by the accredited environmental testing laboratory and shall be transported to the laboratory under chain of custody.

12. The Consent Holder shall enter into, and maintain in force at all times, a written maintenance and monitoring contract with an experienced wastewater treatment plant operator, or a person trained in the wastewater treatment operation by the system designer, for the ongoing maintenance of the treatment and disposal systems. This operator or person shall be able to receive telemetered system alarms (see Condition 4) and respond to them on-site within 24 hours.

The contract shall specify the frequency of treatment plant inspections and maintenance during the term of this resource consent and shall include an inspection and maintenance schedule that is in accordance with the conditions of this consent.

A signed copy of this contract shall be forwarded to the Council's Co-ordinator Compliance Monitoring prior to the exercise of this consent.

13. Notwithstanding Condition 12, the wastewater treatment and disposal system shall be inspected and serviced not less than every six months and a copy of the service provider's maintenance report shall be forwarded to the Council's Co-ordinator Compliance Monitoring within two weeks of each inspection. The inspection report shall include, but not be limited to, the following information:
  - a) the date the inspection was undertaken and the name of the service provider;
  - b) a list of all components of the treatment and disposal systems that were inspected and the state of those components;
  - c) any maintenance undertaken during the visit or still required, and a timetable for the expected completion of this work;
  - d) a description of the appearance of the filter/s and tanks;
  - e) the location and source of any odour detected from the system; and
  - f) a description of the appearance of the land application area (ponding, vegetation growth etc).



## **Review of Consent Conditions**

14. The Council may, during the month of November each year, review any or all of the conditions of the consent pursuant to Section 128 of the Resource Management Act 1991 for all or any of the following purposes:
  - a) to deal with any adverse effect on the environment which may arise from the exercise of the consent that was not foreseen at the time of granting of the consent, and which is therefore more appropriate to deal with at a later stage; and/or
  - b) to require the Consent Holder to adopt the best practical option to remove or reduce any adverse effects on the environment resulting from the discharge; and/or
  - c) to review the contaminant limits, loading rates and/or discharge volumes and flow rates of this consent if it is appropriate to do so; and/or
  - d) to review the frequency of sampling and/or number of determinands analysed if the results indicate that this is required and/or appropriate.
  - e) to require consistency with any relevant Regional Plan, District Plan, National Environmental Standard or Act of Parliament.

## **Expiry**

15. This resource consent expires on 1 November 2022.

## **Advice Notes**

1. Officers of the Council may also carry out site visits to monitor compliance with resource consent conditions.
2. It is strongly recommended that household water reduction fixtures be included in the community centre design in order to ensure that the discharge volume limit is met. The measures and fixtures should be in accordance with AS/NZS 1547:2000 and Auckland Regional Council's Technical Publication 58.
3. The Consent Holder shall meet the requirements of the Council with regard to all Building and Health Bylaws, Regulations and Acts. Building consent will be required for these works.
4. Access by the Council or its officers or agents to the property is reserved pursuant to Section 332 of the Resource Management Act.
5. All reporting required by this consent shall be made in the first instance to the Tasman District Council's Co-ordinator Compliance Monitoring.

6. Council draws your attention to the provisions of the Historic Places Act 1993 that require you in the event of discovering an archaeological find (eg, shell, midden, hangi or ovens, garden soils, pit, depressions, occupation evidence, burials, taonga) to cease works immediately, and tangata whenua, the Tasman District Council and the New Zealand Historic Places Trust shall be notified within 24 hours. Works may recommence with the written approval of the Council's Environment & Planning Manager, and the New Zealand Historic Places Trust.
  
7. This resource consent only authorises the activity described above. Any matters or activities not referred to in this consent or covered by the conditions must either: 1) comply with all the criteria of a relevant permitted activity rule in the Proposed Tasman Resource Management Plan (PTRMP); 2) be allowed by the Resource Management Act; or 3) be authorised by a separate resource consent.

Michael Durand  
**Co-Ordinator Natural Resources Consents**

