

Notice of Requirement Taupō District Council

453 Whareroa Road, Tongariro Ward

Whareroa: Wastewater Treatment Plant

27 February, 2025



Planz Consultants

Quality Assurance Statement:

Application Prepared By:

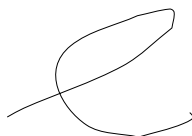
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Project Number: J17536

Document Status: Lodgement

Date: 27 February, 2025

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NOTICE OF REQUIREMENT FOR DESIGNATION PURSUANT TO S168 OF THE RESOURCE MANAGEMENT ACT 1991

1 Introduction

Pursuant to s168 of the Resource Management Act (**the Act / RMA**), Taupō District Council hereby gives notice of its requirement (**Notice**) for a new designation in the Taupō District Plan for the operation and maintenance of a wastewater treatment plan (**WWTP**) and associated infrastructure as described below. The designation will enable the infrastructure and facilities as associated with the existing WWTP but does not further nor authorise discharges.

Taupō District Council, as a local authority, is an approved requiring authority under s166 of the RMA. The designation is required to facilitate the ongoing maintenance works associated with the treatment of wastewater to the Whareroa Community.

2 Description of the site to which this notice applies

The proposed site to which this Notice applies is at 453 Whareroa Road, Tongariro. The property is legally described as Section 1 SO Plan 453358 under the Record of Title 593658.

The Notice relates to that part of the land described above as containing pre-existing WWTP facilities, oxidation ponds and irrigation area. That area is some 28,000m² of Section 1 SO Plan 453358.

The location (and details) of the site is shown in **Attachment A**, and a designation table in accordance with the format required by the National Planning Standards is provided as **Attachment B**. The Record of Title is provided in **Attachment C**.

The site is zoned General Rural Environment in the Taupō District Plan and is owned by the Taupō District Council.

The topography of the site is flat (496magl to 404magl). There are two modest oxidation ponds on the site of 2,600m² and 1,300m² respectively, and small buildings housing pumping stations. Treated wastewater irrigation is undertaken on some 1.3ha of land covered in pasture to the west of the property through a number of irrigation lines. An additional area of land for irrigation known as the 'expansion area' is currently available but is not irrigated nor is the subject of this Notice.

Landscaping fronting Whareroa Road consists of small-scale tree plantings and flax as located within the road reserve berm with glimpses from the road into the site and onto the raised oxidation ponds. The absence of structures and pasture conveys a largely rural character. The perimeter is demarcated by a wire and batten 'farm' fence.

Access to the site is via the Whareroa Waste Transfer Station as located immediately to the east which is also located on the same legal title (Section 1 SO Plan 453358). The waste transfer station site and facilities does not form part of the Notice. The access and crossing to

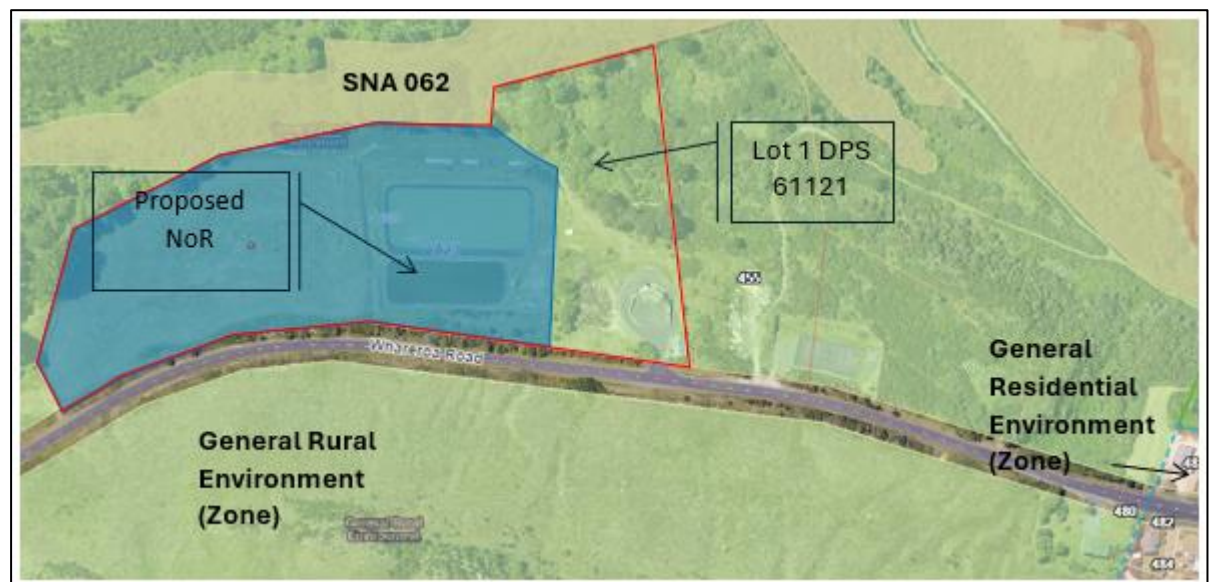
the Whareroa Waste Transfer Station is formed, with security gates located some 11m from the formed road reserve.

The property is identified as a 'known contaminated site' in terms of being an identified HAIL (Hazardous Activities and Industries List) site (Category G.6 Wastewater Treatment).

Immediately along the northern boundary is Significant Natural Area 062¹. The Notice does not overlay this area, nor the adjoining remnant vegetation located on the north-eastern extent of the wider property.

The nearest residential dwelling in the General Residential Environment (zone) is located some 350m to the east.

Figure 1: NoR and surrounds (modified from Taupō District Plan)



3 Nature of the proposed works

This Notice relates to a new designation for the **purpose** of the operation and maintenance of infrastructure for wastewater treatment.

This allows for the continuing operation of the existing WWTP, oxidation ponds, irrigation infrastructure and ancillary activities.

It is not anticipated that there will be substantial upgrades undertaken as associated with the WWTP, and existing Waikato Regional Consent 138347 controls and manages the existing discharges undertaken at the site through to 2039 and provides for the 'additional irrigation

¹ Taupō District Plan. Chapter 7.8 Schedule of Sites 'Te Kokomiko Point, Poukura Pa Bush, Wharf'

area' of 5.06Ha (which does not form part of this Notice). Regular maintenance works will be undertaken as required.

The designation is necessary to continue to provide wastewater treatment to the Whareroa community and provide additional capacity should this be required to meet demand.

4 Assessment of Effects

The designation allows for continued operation and maintenance of the existing WWTP. The effects associated with the operational and maintenance of the site are described below.

4.1 Construction effects

The WWTP and associated infrastructure is located on the site and is operating.

Any additional construction effects will largely come from maintenance activities, and increases in capacity and efficiency to address improvements in discharge quality as these are required to ensure ongoing compliance with Waikato Regional Consent 138347. The nature of such maintenance works and distance to any sensitive receivers is such that conditions to the designation are not required to further manage construction effects beyond those matters that would be considered pursuant to s176A.

4.2 Operational effects

The operation of the site involves pumping wastewater, oxidation ponds and associated treatment and irrigation. Wastewater treatment will continue to operate automatically.

Effects associated with the wastewater discharge and odour management will remain under the management regime established through Waikato Regional Council consent 138347.

The periodic visits by Taupō Council Officers to take water samples and confirm efficient operations will continue. These and other visits for proactive and reactive maintenance will continue on an infrequent basis as required and will not generate material transport trips on Whareroa Road.

There is no other material effects associated with the operation of the site.

5 Statutory considerations

s171(1) of the RMA sets out that when considering a Notice, a Territorial Authority must, as subject to Part 2, consider the effects on the environment of allowing the requirement, having particular regard to matters s171(a) – (d), as are considered below.

5.1 Section 171(1)(a) Relevant provisions

For completeness, s171(1)(a) of the RMA requires a consideration having regard to –

a) any relevant provisions of—

(i) a national policy statement:

(ii) a New Zealand coastal policy statement:

(iii) a regional policy statement or proposed regional policy statement:

(iv) a plan or proposed plan; and

National Policy Statements (NPS)

There are eight National Policy Statements. The only NPS of relevance is the NPS-Freshwater Management given the nature of the discharge and irrigation undertaken at the site. These remain under the management regime through Waikato Regional Council and will be managed by the existing resource consent which is due for renewal in 2036. The Notice and subsequent designation would not facilitate or alter the quality and volume of the discharge authorised by the Waikato Regional Council.

The Notice site is not classified as Highly Productive Land under clause 3.5(7) the NPS-Highly Productive Land. The Land Use Classification for the site is a combination of Land Use Capability Class 6 and 8².

There are no implications in terms of the requirements of the National Policy Statements to the designation.

National Environment Standards (NES)

As the site is recognised as a HAIL site the requirements of the NES-Assessing and Managing Contaminants in Soil to Protect Human Health prevail over a Designation³.

Waikato Regional Policy Statement (WRPS)

Part 3 – Topic EIT Energy, Infrastructure and Transport relates to the integration of land use planning with infrastructure.

² <https://waikatomaps.waikatoregion.govt.nz/Viewer/?map=3e5673e57fa24e89a30e54b7fb8511d5>

³ Section 43D(4)

Policy EIT-P1 seeks that the built environment is managed having particular regard to ensuring that the effectiveness and efficiency of existing and planning regionally significant infrastructure is protected.

Part 3 – Topic Urban Form and development relates to co-ordinating growth and infrastructure, including **Policy UFD-P2** which seeks that *‘the efficient and effective functioning of infrastructure ... is maintained, and the ability to maintain and upgrade that infrastructure is retained’*.

This Notice is considered to be consistent with the WRPS objectives and policies, specifically IM-O1(4), EIT-P1 and UFD-P2.

The designation of this site will enable the effective continued operation of the wastewater network to provide for the social and economic wellbeing of the Whareroa community.

Waikato Regional Plan

Made operative in September 2007, the Waikato Regional Plan does not contain rules specifically relating to infrastructure assets.

In terms of discharges, Section 3 – Water Module seeks to enable discharges to water with only minor effects, with Policy 3 seeking alternative land-based treatment systems being promoted. These matters are the subject of the relevant discharge resource consent 138347.

Odour discharges are also addressed within the Regional consent (**Attachment D**, Conditions 16 – 18) to respond to Part 3 / Air of the Waikato Regional Plan, including **AIR-O1(3)** and **AIR-P3** that seek to manage air quality in a way that avoids, where practicable, adverse effects on local amenity values from discharges of odour with objectionable effects to be managed at the property boundary.

Taupō District Plan

The Taupō District Plan seeks (**Objective 3n.2.1**) to enable the operation, maintenance and upgrading of network utilities (which extends to networks for the reticulation of wastewater), which ensuring that network utilities are designed and located to manage adverse effects on the environment and protect the health and safety of the community (**Objective 3n.2.2**). A specific policy (**Policy 3n.2.1(iii)**) requires regard be had to the contribution of network utilities to the functioning and wellbeing of the community.

The proposed designation site has been in operation for a number of years, and is located on land owned by the Taupō District Council. The site is located some distance from the nearest sensitive residential dwelling in Whareroa village to the east of the site, and largely reflects the rural character of the surrounding area.

5.2 Section 171(1)(b) Adequate consideration given to alternatives

For completeness, s171(1)(b) of the RMA requires a consideration having regard to –

(b) whether adequate consideration has been given to alternative sites, routes, or methods of undertaking the work if—

(i) the requiring authority does not have an interest in the land sufficient for undertaking the work; or

(ii) it is likely that the work will have a significant adverse effect on the environment; and

Taupō District Council as owner of the site has financial interest in the site. In addition, it is not considered that the works associated with the designation will have significant adverse effects on the environment.

The site has been operating as a community WWTP for a number of years and is the subject of appropriate Regional Council consent to manage the nature, quality and quantity of the wastewater treatment.

In conclusion, no consideration of alternative sites has been given, and the effects of continued operation and maintenance will be negligible.

5.3 Section 171(1)(c) reasonably necessary

s171(1)(c) of the RMA requires consideration having regard to whether the work and designation are reasonably necessary for achieving the objectives of the requiring authority for which the designation is sought.

It is considered that the new designation, as a planning tool, is appropriate to allow the Taupō District Council, as Requiring Authority, to appropriately manage and control its asset to ensure a safe and secure wastewater treatment network is supplied for the Whareroa Community.

The alternative, as is the existing status quo is continued reliance on the Taupō District Plan rules and / or the resource consent process. It is considered that these options do not provide certainty or a long-term solution to effectively and efficiently address the ongoing use and maintenance of the existing WWTP. The designation is also necessary to include all of the Taupō District Council's wider network of water and wastewater infrastructure under the designation mechanism umbrella in the Taupō District Plan.

5.4 Section 171(1)(d) 'any other matter'

Improving resilience and reducing environmental impacts through appropriate maintenance and upgrades of infrastructure associated with WWTP Infrastructure is a primary objective of the Notice.

The Notice and associated works will assist the Taupō District Council in terms of managing the effects of wastewater, including ensuring appropriate levels of treatment and reducing nitrogen levels (noting that upgrades for Whareroa would unlikely provide for nitrogen removal, and that the offset for growth for additional nitrogen loadings would likely be achieved by additional nitrogen offset elsewhere in the Lake Taupō Catchment). Noting again that the Notice (and any subsequent Outline Plan as required pursuant to s176A of the RMA) does not extend to wastewater discharges or treatment. These remain the subject of Waikato Regional consent.

Broader engagement between the Taupō District Council and local iwi and hapu has identified common ground to secure improvements within the wastewater treatment train and to avoid wastewater (including treated wastewater) entering waterways in the district. Ongoing maintenance works associated with the Whareroa WWTP will be consistent with the approach undertaken by the Taupō District Council as facilitated at its largest wastewater plants (Taupō, Tūrangi and Mangakino) as well as smaller plants (Motuoapa and Whakamaru) to reduce nitrogen discharges into the Lake Taupō catchment and Waikato River.

It is acknowledged that Ngāti Tūwharetoa hold mana whenua and kaitiakitanga over the Central North Island including the Lake Taupō catchment and part of the Waikato River, Upper Waikato, Whanganui, Rangitikei and Rangitaiki catchments.

This approach is also consistent with key policy documents which are aimed at improving water quality throughout the District's catchments. These documents include Te Ture Whaimana o Te Awa o Waikato - Vision and Strategy for the Waikato River for the Waikato River catchment, Te Ara Whānui o Rangitāki – Pathways of the Rangitāki for the Rangitāki catchment, and Te Kaupapa Kaitiaki', a plan developed for the Taupō catchment.

6 Consultation

No consultation has been undertaken or is considered necessary.

7 Conclusion

Taupō District Council gives notice of its requirement to designate land related to an existing WWTP. The preceding assessment of effects concludes that the effects associated with the maintenance and operation of the facility will be minimal. Overall, it is concluded that the designation is consistent with the relevant statutory provisions and the principles and purpose of the RMA.

Attachment A: Whareroa WWTP (453 Whareroa Road, Tongariro)

Designation	Detail
Legal Description	Section 1 SO Plan 453358
Site Address	453 Whareroa Road, Tongariro
Landowner	Taupō District Council
Purpose of the Site	Operation and maintenance of infrastructure for wastewater treatment purposes.
Area of Designation	28,000m ² 
Site Plan (Existing)	
Site Plan (Proposed)	Depending on the extent of growth, could include the installation of a mechanical aerator, along with the installation of a third pond to buffer peak flows prior to irrigation. These upgrades would not provide for nitrogen removal.

Description of the activity	The following provides a description of the works and environment using s176A(3) as a basis. Consideration against the requirements of s171(1) is provided in the main report. General: Operating Wastewater facility <i>The height, shape, and bulk of the public work, project, or work:</i> The site incorporates two raised oxidation ponds of 2,600m² and 1,300m² respectively, and small buildings housing pumping stations. Wastewater irrigation is undertaken on land covered in pasture to the west of the property through a number of irrigation lines. Access to Whareroa Road is via a formed crossing on the adjoining Whareroa Waste Transfer Station, which does not form part of the NoR. <i>The location on the site of the public work, project or work:</i> The site is located some 350m to the west of the Whareroa village. The intersection of Whareroa Road with State highway 32 is some 8.5km to the east. <i>The likely finished contour of the site:</i> The contour, which is level with the exception of the two raised oxidation ponds, will not change. Should growth require an additional third pond to buffer peak flows, this will be of the same contour and general shape as the existing raised oxidation ponds. <i>Vehicular access, circulation and the provision for parking:</i> Activities will not generate material vehicle trips on the network. The site is accessed from Whareroa Road via the waste transfer facility as located directly to the west of the site. That access crossing is formed. There is considerable unformed parking and manoeuvring areas on site to accommodate the infrequent and low levels of vehicles generated by activities on the site. <i>The landscaping proposed:</i> No additional landscaping is required. The site contour, pastoral nature of the ground cover, limited structures on the site and the raised oxidation ponds are consistent with the surrounding rural character. There is limited small scale landscaping present within the berm of Whareroa Road which provides glimpses into the site.
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	Works associated with the maintenance of the WWTP will not result in the removal of any established landscaping. <i>Any other matters to avoid, remedy or mitigate adverse effects on the environment:</i> It is not anticipated that operational noise from the WWTP will increase from existing noise levels. There are no effects from arising from the site and activities that require further consideration. Odour will be managed through both the design and management of the treatment plant and separation to sensitive receivers as well as the requirements of the Waikato Regional consent (138347).
Established / Upgraded	The WWTP is pre-existing.
Relevant Resource Consents	Regional Consent 138347
Recommended Conditions	No
Zoning and Overlays	Zone: General Rural Environment Overlays: • NA

Attachment B: Designation Table

Whareroa Wastewater Treatment Facility	
Designation unique identifier	TDCXX
Designation Purpose	Wastewater Treatment Facility
Site Identifier	453 Whareroa Road, Tongariro
Lapse Date	Given effect to
Designation hierarchy under s177 of the Resource Management Act	Primary
Conditions	No
Additional information	n/a

Attachment C: Record of Title



**RECORD OF TITLE
UNDER LAND TRANSFER ACT 2017
GAZETTE NOTICE**

Search Copy




R.W. Muir
Registrar-General
of Land

Identifier **593658**
Land Registration District **South Auckland**
Date Registered 15 August 2012 07:00 am

Prior References
SA47A/409

Type	Fee Simple	Instrument	GN 9153957.1
Area	3.9909 hectares more or less		
Legal Description	Section 1 Survey Office Plan 453358		
Purpose	Local Purpose (Sewage Treatment) Reserve		

Registered Owners
Taupo District Council

Interests
Subject to the Reserves Act 1977

Extract from *New Zealand Gazette*, 29/7/2010, No. 92, p. 2453

Land Acquired for Local Purpose (Sewage Treatment) Reserve and Easement—Whareroa Road, Whareroa

Pursuant to the Public Works Act 1981, and to a delegation from the Minister for Land Information, Trevor Knowles, Land Information New Zealand:

(a) Pursuant to section 20, declares that, an agreement to that effect having been entered into, the land described in the First Schedule to this notice is hereby acquired for local purpose (sewage treatment) reserve and shall vest in the Taupo District Council;

(b) Pursuant to sections 20 and 28, declares that, an agreement to that effect having been entered into, a right to drain sewage in gross, with the rights and powers contained in Schedule 4 of the Land Transfer Regulations 2002, together with the following variations, is hereby acquired over the land described in the Second Schedule to this notice and shall vest in the Taupo District Council ("the Grantee") on the date of publication hereof in the *New Zealand Gazette*.

South Auckland Land District—Taupo District Council

First Schedule

Land Acquired for Local Purpose (Sewage Treatment) Reserve

Area ha	Description
3.9909	Part Lot 1 DPS 56581; shown as Lot 5 on LTS 71302 (part Computer Freehold Register SA47A/409).

Second Schedule

Easement to be Acquired

A right to drain sewage in gross over Part Lot 1 DPS 56581 marked "A" on LTS 71302 (part Computer Freehold Register SA47A/409 ("the Grantor")).

Rights and Powers Varied and Added

- Any terms used in this easement that are defined in the Land Transfer Regulations 2002 shall take those meanings.
- Where there is a conflict between the provisions of the Fourth Schedule to the Land Transfer Regulations 2002 and the modifications in this easement instrument, the modifications must prevail.
- Reference in clause 5(1) of the Fourth Schedule of the above Regulations to the Dominant Land shall be deleted for the purpose of this easement instrument.
- The Grantor covenants with the Grantee not to place any buildings, erect fences or other permanent structures on the Stipulated Course without the prior consent of the Grantee and the Grantor will not at any time commit or suffer any acts whereby the rights, powers, licences and liberties hereby granted to the Grantee may be interfered with or affected.
- The Grantee may drain sewage in any quantities.
- The Grantee's rights to the easement facility or facilities under this easement are exclusive.
- Nothing contained or implied by this easement shall be deemed to compel the Grantee to drain sewage along the stipulated course.
- Any rights or immunities from liabilities, powers and remedies which the Grantee may have or be entitled to by virtue of statute or at common law shall not be affected by the easement and the Grantee may exercise any such powers vested in it at common law or by statute independently of these grants of easements.

GN 9153957.1 Gazette N

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Title Diagram Gazette D

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Dated at Wellington this
T. KNOWLES, for the N.
(LINZ CFC/2006/11200)
6/2/12

Duplicate issued pursuant to Rule 7.12 of the
Maori Land Court Rules 2011 for registration
purposes.

Certified a correct copy.

sfkock
DEPUTY REGISTRAR



Produced to the Registrar of the Aotea District
Maori Land Court for noting pursuant to section
150A of Te Ture Whenua Maori Act 1993.
(376)

Deputy Registrar
30/ 8/ 2012

File A20
Title Notice 16903

Marie Waldren
Deputy Registrar
Aotea Maori Land Court
Whanganui

NOTICE NO: 5862

Extract from *New Zealand Gazette*, 28/6/2012, No. 73, p. 2082

Amending a Notice—Land Acquired for Local Purpose (Sewage Treatment) Reserve and Easement—Whareroa Road, Whareroa

Pursuant to section 55 of the Public Works Act 1981, and to a delegation from the Minister for Land Information, Ronald Alistair Jolly, Land Information New Zealand, hereby amends the notice dated the 23rd day of July 2010 and published in the *New Zealand Gazette*, 29 July 2010, No. 92, page 2453, by deleting the First and Second Schedules and substitute with the following:

"First Schedule

Land Acquired for Local Purpose (Sewage Treatment) Reserve

Area ha	Description
3.9909	Part Lot 1 DPS 56581; shown as Section 1 on SO 453358 (part Computer Freehold Register SA47A/409).

Second Schedule

Easement to be Acquired

Description

A right to drain sewage in gross over Section 2 shown on SO 453358; marked "A" on SO 453358 (part Computer Freehold Register SA47A/409 ("the Grantor"))."

Dated at Wellington this 21st day of June 2012.

R. A. JOLLY, for the Minister for Land Information.
(LINZ CPC/2006/11200)

h3/920

Duplicate issued pursuant to Rule 7.12 of the Maori Land Court Rules 2011 for registration purposes.

Certified a correct copy.

[Signature]
DEPUTY REGISTRAR



Produced to the Registrar of the Aotea District Maori Land Court for noting pursuant to section 150.6 of Te Ture Whenua Maori Act 1993.
(3) (6)

[Signature]
Deputy Registrar
3 / 7 / 2012

File A20
Title Notice 17042

Marie Waldren
Deputy Registrar
Aotea Maori Land Court
Whanganui

NOTICE NO: 3920

Attachment D: Signed s42A Resource Consent 138347

Consent Evaluation Report

Applicant:	Taupo District Council	File No.:	60 54 64A
Address of Site:	Whareroa Rd, Whareroa	Project Code:	RC23826
Application Number:	APP138347		

1 Introduction

Taupo District Council (TDC) lodged an application with the Waikato Regional Council on 11 May 2017. The application consists of the following activities for which authorisation is sought:

Reference Id	Activity Subtype	Activity Description
APP138347.01.01	Discharge Permit: Land-Sewage	To discharge treated municipal wastewater to land and associated contaminants to air, from the Whareroa wastewater treatment plant.

The applicant has contracted consultants to assist in the preparation of the above applications and to assess the effects of the proposal. Any reference to “the applicant” in this report should be understood to signify the applicant and/or any consultant representing the applicant.

Supporting information was supplied for this application in the following documents:

1. “Taupo District Council Whareroa Wastewater Treatment Scheme - Application for Resource Consent to Waikato Regional Council” Opus International Consultants Ltd., May 2017 (Waikato Regional Council Doc Ref 10428437); and
2. “Whareroa Wastewater Treatment Plant Consent Replacement Application.” Taupo District Council, 13 November 2018 (Waikato Regional Council Doc Ref 13374457); and
3. “APP138347 Draft Conditions 5-12-2018” Taupo District Council, 19 December 2018 (Waikato Regional Council Doc Ref 13578130);

From this point the above documents will be referred to as the “AEE”.

The current discharge consent AUTH113031 that authorises the operation of the Whareroa wastewater treatment plant (WWTP) expires on 29 April 2028. The purpose of the replacement application is to seek the ability to alter the site management methodologies and in doing so align the operations with Taupo District Council’s other land disposal sites across the district. Once the replacement consent application is determined TDC intends to surrender AUTH113031.

The applicant sought a 20-year term for the replacement consent at the time of application.

2 Background and Description of Proposal

Community Setting:

Whareroa is located on the western shore of Lake Taupo, approximately 32 kilometres north of Turangi (by road) and 80-90 kilometres from Taupo, depending on the route (See Figure 1). The settlement is accessed from Whareroa Road, which extends east from State Highway 41 for approximately 2 kilometres. The community comprises approximately 155 lots currently connected to the network.

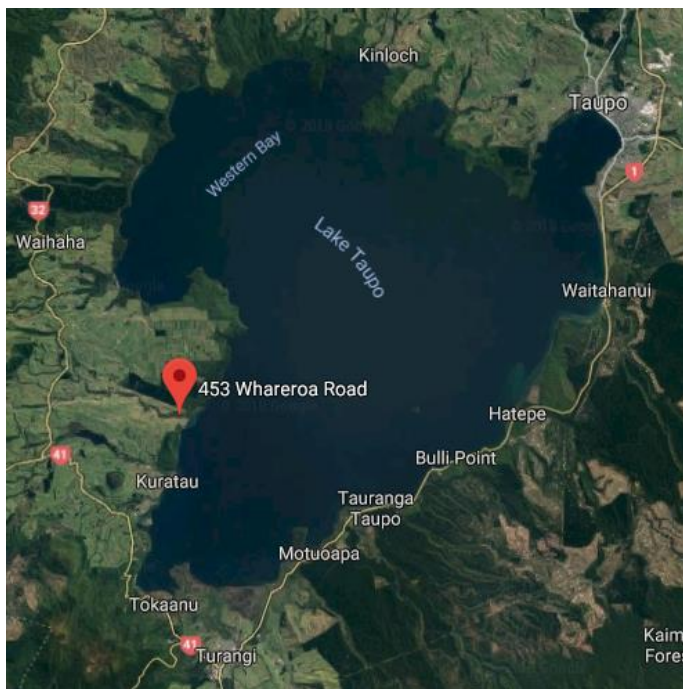


Figure 1: Whareroa General Location

The Whareroa settlement is predominantly a holiday settlement on the western side of Lake Taupo with peak occupancy during the summer holiday season. The Whareroa village area is completely reticulated with the wastewater being pumped to WWTP located at 453 Whareroa Road. Currently all the development is on the southern side of the Whareroa Stream. The area to the north of the stream has been identified as a future growth area and is currently the subject of a private plan change.

The Whareroa WWTP is on the northern side of the road on approach to Whareroa, next to the Whareroa Refuse Transfer Station. The irrigation area is located immediately to the west of the WWTP, with the future expansion area further to the west. The location of the Whareroa WWTP is shown in Figure 2 below.

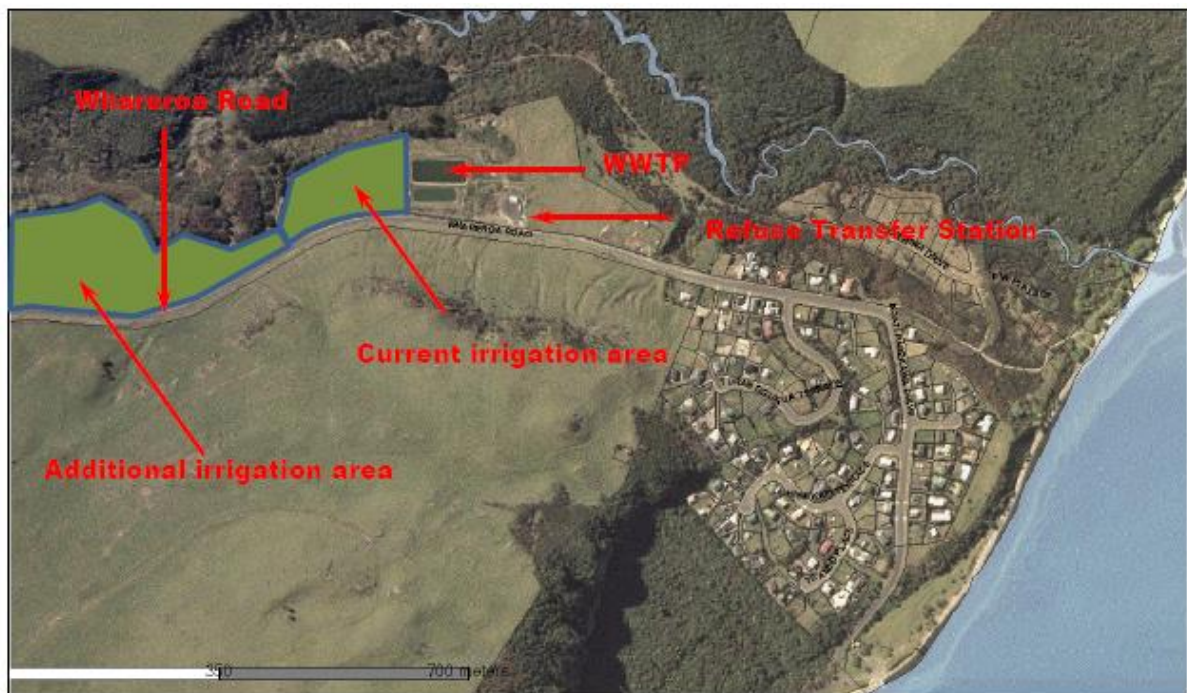


Figure 2: Whareroa Settlement and WWTP

The WWTP is located on a 3.9909 hectare lot legally described as Section 1 SO453358, while the additional irrigation area comprises 5.0621 hectares legally described as Section 3 SO453358. Both lots are owned by Taupo District Council. The surrounding land to the west and north is the Hauhungaroa Maori Land Block managed by Whareroa Station Incorporation.

Proposed Development:

Whareroa South:

The full development of Whareroa South will result in 202 connections – there are 47 vacant lots still to be developed.

Whareroa North:

A private plan change has been lodged with Taupo District Council to develop land north of Whareroa Stream, resulting in a potential further 170 lots.

2.1 Receiving Environment

The topography is flat to gently rolling and bordered by Whareroa Road to the south, a steep tree lined gully on the north, farmland and trees to the west and the recycling centre to the east. The immediate receiving environment for the Whareroa wastewater discharge is the soils underlying the disposal area. These have been subject to investigation which confirms the presence of free draining coarse pumiceous sands and gravels.

The closest mapped water course is the Whareroa Stream located approximately 180m to the north down a steep escarpment from the treatment plant and irrigation areas. The stream flows from west to east and enters Lake Taupo approximately 1000m east of the disposal area; within Te Hape Bay. The Whareroa Stream is classified as a Trout and Indigenous Fishery and a Priority Stock Exclusion watercourse under the Waikato Regional Plan.

Water supply to the settlement is provided via a water bore (72_237) and consent authorisation (121300) located at Ngati Parakewa Drive, on the foreshore of Lake Taupo. The water supply bore is 10.8m deep and has a static water level of 1.6m. The bore is located approximately 1000m south west of the wastewater disposal area at an elevation of 360m RL (approx.).

A monitoring bore was drilled in 2017 immediately down slope of the existing disposal area, with the WRC reference 72_9818. This bore is 40.5m deep and has a static water level of 34m, and an elevation of approximately 390m RL.

The ultimate receiving environment for the discharged wastewater is the underlying groundwater and eventually, Lake Taupo. The high quality and clarity of Lake Taupo is valued both locally and nationally. The water quality of the lake is changing in response to a variety of land uses within the lake catchment. Nutrient induced changes in the lake water, particularly those associated with nitrogen sources have been observed. The Waikato Regional Council has policies and rules in place to limit the negative impacts associated with manageable nitrogen in the lake catchment. The application addressed by this report is subject to these policies.

Scientific evidence collected over the past 30 years indicates that the water quality of Lake Taupo is declining. Urban development and intensification of the surrounding rural land has increased the amount of nitrogen entering the lake through groundwater, rivers and streams. The increase in nitrogen entering the lake has led to enhanced algal and phytoplankton growth in the lake, and an overall decline in water quality. Policy development recognised that in order to halt the continued decline in water quality, controls needed to be placed on land use activities within the Lake Taupo catchment that contribute to the nitrogen load entering the lake.

2.2 Technical Aspects of the Proposal

Existing Treatment System:

The Whareroa Wastewater Treatment Plant was constructed in 1986. The Whareroa treatment process is as follows:

- a) Raw wastewater from Whareroa Village is pumped from two pump stations up to near the treatment plant and it is then gravity fed to the plant.
- b) The wastewater is then fed through a screen to remove gross solids.
- c) The wastewater then enters the lined oxidation ponds where solids and biochemical oxygen demand (BOD) are removed. The primary oxidation pond has a surface area of 1,300m² and the secondary pond an area of 2,600m².
- d) Pond treated effluent is then pumped out of the ponds to the disposal field.

The upper pump station consists of two pumps capable of pumping 10.3 l/s each and a 26m³ storage tank while the lower station consists of two pumps capable of pumping 6.2 l/s each and a 22m³ storage tank. The lower pump station pumps wastewater to the upper station from where it is pumped to the treatment plant – shown in Figure 3 below.



Figure 3: Whareroa Wastewater Treatment Plant (Pond 1 at left, Pond 2 at right)

Under the existing consent the treated effluent is required to be spray irrigated to 1.3ha of cropping land - see Figure 4. There is also a maximum limit of 1,500 m³ per discharge event at an application rate not exceeding 40mm/day at an average of 12 day intervals. The consent conditions also limit the crop on site to Lucerne and do not allow for irrigation if heavy rain is forecast five days following the start of an irrigation event.



Figure 4: Whareroa Irrigation Area – in Lucerne, 2017.

Wastewater Characteristics – Current and Proposed Scenarios:

Influent flow volumes, irrigation volumes and treated wastewater quality records have generally been kept in accordance with consent requirements with some technical faults causing loss of information. The influent data has been analysed by Jason Ewert of Great Lake Consulting Ltd. and used to determine the current and future loading characteristics described below, which were provided in November 2018 and supersede the details originally applied for and characterised in the AEE.

Nitrogen Benchmarking:

Whareroa wastewater treated effluent irrigation Benchmarking period 2001-2005

Area	Values	Notes:
Number of lots connected	134	134 of 150 lots connected
Irrigation volume, m3/day (average)	28	
Irrigation volume, m3/year	10,212	Ref 2005 Annual report average
Average effluent N concentration, g/m3	17.5	Average 17.5 g/m3 effluent N concentration for 01 -05 records (Ref 2005 Annual report)
Mass of N discharged, kgN/yr	179	Calculated N loading

Since this time, an additional 5.06 ha of land has been acquired for the purpose of expansion of the disposal area when required. This land, in accordance with the permitted activity provisions for farmland has the ability to apply 75kgN/ha (refer 3.10.5.1 of the Waikato Regional Plan). This equates to an additional loading rate of 379.5kg of N being permitted over the entire site. As such a baseline nitrogen loading rate of 558.5kg N per annum for the benchmarking period is considered applicable to the land to which the consent application relates.

Current and Proposed Nitrogen Loading:

Current and Future Growth – Existing Sections

Description	Current Situation	Future Growth – Existing Sections	Whareroa North PPC proposal
Number of lots connected	155	202	372
Irrigation volume, m3/day (average)	32.88	42.42	78.48
Irrigation volume, m3/year	12,001	15,483	28,645
Average effluent N concentration, g/m3	15.7 Ave past 5 years	25 conservative assumption	25 conservative assumption
Mass of N discharged, kgN/yr	188	387	716
Balance N application	370.5 below benchmark	171.5 below benchmark	157.6 above benchmark
% change	66% below	31% below	30% increase*

Summary:

The applicant, in November 2018 proposed to revise the initial application to the following:

- A maximum loading rate per hectare of 200kgN/ha with an allowance for one occurrence of 250kgN/ha/yr within every 5-year period (application originally sought 400 kgN/ha/yr). Additional irrigation area is to be periodically brought on line to manage the loads.
- Retention of a maximum daily application rate of 200m³/day (application originally sought to discharge 252m³/day).
- Proffer an offset condition for increased nitrogen loading –should the Whareroa North Private Plan Change be successful, with an equivalent transfer being required to be secured via WRC consents processes to ensure that there remains a 20% reduction over the long term. The maximum limit of 446kg N for the site is based on 80% of the above benchmark loading for the site of 558.5 kg N/year.

3 Status of Activities under the Plans

Section 15 of the Resource Management Act 1991 (RMA) states that no person may discharge any contaminant into water or onto or into land, or any contaminant from any industrial or trade premises into air, unless the discharge is expressly allowed by a rule in a regional plan, any relevant proposed plan, or by resource consent.

Under the operative Waikato Regional Plan, the following rule applies to the discharge of treated wastewater to into land from municipal wastewater treatment plant operations:

3.5.4.5 Discretionary Activity Rule – Discharges – General Rule

*Any discharge of a contaminant into water, or onto or into land, in circumstances which may result in that contaminant (or any other contaminant emanating as a result of natural processes from that contaminant) entering water, that is not specifically provided for by any rule, or does not meet the conditions of a permitted or a controlled activity rule in this Plan, is a **discretionary activity** (requiring resource consent).*

4 Consultation/Affected Party Approvals

The AEE indicates that initial consultation was undertaken with the following parties:

- Bay of Plenty District Health Board
- Tuwharetoa Maori Trust Board
- Whareroa Village Residents Association
- Proprietors of Hauhungaroa No. 6
- Lakes and Waterways Action Group Trust

Written approval was provided by Mike Keys on behalf of the Proprietors of Hauhungaroa No. 6 and Steve Davis on behalf of the Whareroa Village Residents Association

5 Process Matters

The application was lodged on 11 May 2017. The application was placed on hold under s92(2) to allow technical review on 24 May 2017. The preliminary results of the technical review were forwarded to the applicant, who undertook further analysis, culminating in the revised proposal as described in the letter of 13 November 2018. Draft conditions were proffered to Waikato Regional Council on 19 December 2018 and the decision to process the application as non-notified was made on 8 January 2019.

6 Statutory Considerations

The application was lodged on 11 May 2017 and consequently all RMA amendments apply. The matters to which the Waikato Regional Council as the consent authority must have regard to when considering applications are set out in Section 104 of the RMA.

Section 104 Consideration of Applications

In summary, subject to Part 2 the following matters in Section 104(1) of the RMA are relevant to the consideration of the proposal.

“(1) When considering an application for a resource consent and any submissions received, the consent authority must, subject to Part 2, have regard to –

- a) any actual and potential effects on the environment of allowing the activity; and*
- b) any relevant provisions of—*
 - i. a national environmental standard;*
 - ii. other regulations;*
 - iii. a national policy statement;*
 - iv. a New Zealand coastal policy statement;*
 - v. a regional policy statement or proposed regional policy statement;*
 - vi. a plan or proposed plan; and*
 - vii. any other matter the consent authority considers*

The following statutory instruments and policy documents have been considered in the evaluation of this application:

- Resource Management (National Environmental Standards for Sources of Human Drinking Water) Regulations 2007;
- The National Policy Statement for Freshwater Management 2014 (NPSFM);
- The Waikato Regional Policy Statement (WRPS);
- The Waikato Regional Plan (WRP); and
- The Ngati Tuwharetoa, Raukawa and Te Arawa River Iwi Waikato River Act, 2010

Due consideration has been given to Section 104 of the RMA. The actual and potential effects have been discussed in the sections below along with measures being taken to avoid, remedy or mitigate these effects.

Section 104(1)(a) provides that when considering a consent application, the consent authority must, subject to Part 2, have regard to the actual and potential effects on the environment of allowing the activity. Case law has determined that the "environment" must be read as the environment which exists at the time of the assessment and as the environment may be in the future as modified by the utilisation of permitted activities under the plan and by the exercise of resource consents which are being exercised, or which are likely to be exercised in the future. It does not include the effects of resource consents which might be sought in the future nor any past reversible effects arising from the consent being considered.

The area in the vicinity of the WWTP and disposal area has been modified. The site is surrounded by farmland and developed residential areas. Lake Taupo is a significant natural area. The quality of the local environment is high and in particular the very good quality of Lake Taupo water is of utmost importance when considering this application.

Section 104(2) provides that when forming an opinion about the actual or potential effects of the activity, the consent authority may disregard an adverse effect of the activity on the environment if the regional plan permits an activity with that effect.

In this case the permitted activity level of effects from the discharge to land is that allowed by permitted activity rule 3.5.7.6 of the WRP. This rule has an upper limit for secondary treated domestic wastewater of 3.0m³/day averaged over any one month.

In my opinion the permitted activity base level of effect accounts for very little given the discharge proposed is up to 200m³/day. Accordingly the PA base line level of effect is not discounted.

Section 105 Matters relevant to certain applications

Furthermore, in relation to any discharge permits, Section 105(1) requires that the consent authority must have regard to a number of additional matters as follows:

- “(1) If an application is for a discharge permit or coastal permit to do something that would contravene section 15 or section 15B, the consent authority must, in addition to the matters in section 104(1), have regard to—*
- (a) the nature of the discharge and the sensitivity of the receiving environment to adverse effects; and*
 - (b) the applicant's reasons for the proposed choice; and*
 - (c) any possible alternative methods of discharge, including discharge into any other receiving environment.*

Section 107 Restriction on grant of certain resource consents

Section 107(1) of the RMA restricts granting of certain discharge permits if, after reasonable mixing, the contaminants discharged are likely to give rise to any of the following effects in the receiving waters:

- (c) *the production of any conspicuous oil or grease films, scums or foams, or floatable or suspended materials;*
- (d) *any conspicuous change in the colour or visual clarity;*
- (e) *any emission of objectionable odour;*
- (f) *the rendering of fresh water unsuitable for consumption by farm animals;*
- (g) *any significant adverse effects on aquatic life.*

6.1 Assessment of Environmental Effect

I consider the main actual and potential effects from this proposal to be:

- Impacts on nearshore surface water quality;
- Impacts on groundwater;
- Impacts on soils;
- Odour; and
- Public health effects.

The following sections consider each of these effects:

The applicant has provided information about the proposed discharge on the water quality and ecology of the receiving environment and Lake Taupo. The application has been reviewed by Waikato Regional Council Scientists Mr Bill Vant (water quality and nearshore effects), Mr John Hadfield (hydrogeology and groundwater effects) and Mr Matthew Taylor (soil effects). These assessments were predicated on the original AEE.

6.1.1 Impacts on near shore surface water quality

Based on the 2017 AEE Mr Vant noted that the load of Nitrogen entering Lake Taupo from all sources at that time was about 1200 t/yr (AEE p. 21). Therefore, the Whareroa discharge is a small fraction (<0.1%) of the combined load (and is also a small fraction of the manageable load). The proposed 2017 conditions implied that the combined load of N entering the lake would increase – albeit by a small amount. For example, the current load of about 0.2 t/yr might increase to about 0.6 t/yr (which is also <0.1% of the total load to the lake). As a result, the change represented by the 2017 AEE and conditions was likely to have a small additional adverse effect on the lake.

On the basis of the revised conditions which restrict the discharge to a maximum of 20% less than the baseline load of the existing WWTP and farmland which has now been retired, I conclude that the small additional adverse effect predicted above is less than minor.

6.1.2 Impacts on groundwater quality

Similarly to above, Mr Hadfield assessed the 2017 AEE and concluded that WRC monitoring noted that considerable denitrification may be available depending on the flow path of groundwater. The applicant has proffered conditions requiring a groundwater monitoring programme be undertaken and I conclude that this will provide the necessary information regarding groundwater effects, and any unexpected significant effects can be addressed via review conditions.

The release of nitrates directly to groundwater can raise concentrations to levels with a potential to exceed drinking water standards. The Ministry of Health drinking water standard for nitrate in water is 11g/m³ nitrate nitrogen. Ammonia, which is highly soluble and easily leached into groundwater, is toxic to aquatic life. Both nitrates and phosphates in soil or groundwater can reach water bodies such as streams, ponds and lakes. These nutrients can stimulate increased plant and algae growth and when present in natural water are significant factors in eutrophication. The die-off of additional vegetation or algal growth in the water; a result of the increased nutrient load, is then decomposed by bacteria that

absorb oxygen in the water. This in turn has a significant impact on the degradation of water quality, and alters sensitive aquatic ecosystems.

Groundwater levels intersected in the monitoring bore adjacent to the irrigation area were in the order of 34m depth which is expected to provide opportunity for additional bacterial and pathogen die-off in unsaturated conditions along with mechanical filtration of contaminants prior to reaching groundwater.

6.1.3 Impacts on soils

Mr Taylor held concerns regarding the 2017 AEE in respect to the proposed nitrogen loading rates to be discharged on the irrigation areas. Mr Taylor confirmed in an internal WRC meeting that he would consider 200 kgN/hectare/year an acceptable loading rate on the basis of sites with similar soils. As the applicant has proffered this loading rate (with occasional exceptions to allow for development of new irrigation areas), then I conclude the impacts on soils from the N load are expected to be less than minor.

Wastewater from domestic sources does not generally contain heavy metals and environmentally harmful compounds in concentrations likely to lead to soil contamination or problems that would render the soil unusable. It is considered that chemicals should be diluted and removed in the treatment system or renovated by the microbial action in the soil itself. Potential soil erosion as a result of the discharge is addressed by proffered conditions requiring regular inspections of the irrigation area and remedying of any problems observed. I consider that the discharge is unlikely to have any significant effects on the soils.

6.1.4 Odour

There is potential for odour from the following sources:

- The inlet screen and screenings collection system;
- The oxidation ponds, if inadequate aeration or failure of the aeration system results in anaerobic conditions; and
- The irrigation system.

No odour complaints have been received by Waikato Regional Council in relation to the Whareroa WWTP over the period of the current consent.

I consider that the potential effect of odours from the WWTP is likely to be no more than minor. A general condition stating that odour should not cause an objectionable effect beyond the property boundary, as per the permitted baseline, is recommended.

6.1.5 Public health effects

Wastewater discharges may contain very high concentrations of pathogens which may have human health related effects if people are exposed to the effluent. In terms of human health risk, the following issues are addressed:

- Drinking water contamination: as noted above the nearest water supply bore is approximately 1,000 metres east from the irrigation area, at an elevation approximately 30m lower than the irrigation area. Groundwater travel direction is thought to be to the north towards the Whareroa Stream rather than east towards the lake. Given the extent of unsaturated soil available prior to encountering groundwater, it is considered unlikely that significant numbers of pathogens from the wastewater irrigation area will survive to reach groundwater and then represent any significant contamination of the water bore after travelling 1000m.
- Aerosol production and inhalation: The irrigation system utilises sprinkler heads which minimise production of aerosols. The irrigation area is fully fenced and sign-posted to ensure public have no access to the site. Consent conditions proffered require that spray drift is avoided.
- Surface water contamination: The applicant indicates that the irrigation area is surrounded by cut-off drains to minimise the potential for overland flow onto or across the irrigation area. Conditions have been proffered which limit the conditions under which irrigation can occur and

require no ponding or overland flow of wastewater to avoid any runoff effects. The Whareroa Stream is located over 180m away and it is expected that given the high soakage capacity of the soils, overland flow to the stream is highly unlikely.

Overall, it is concluded that the potential adverse effects of the discharge on public health will be effectively avoided and mitigated by the proffered conditions of consent.

6.2 Policy Statements, Plans and Regulations

Section 104 of the Resource Management Act outlines those matters that the consent authority is to have regard to when considering an application for a resource consent, subject to Part 2.

Outlined below are the relevant matters within Section 104 and a discussion of how the applications at hand are regarded in relation to these matters. Please note that only the relevant sections or parts of sections, of statutory documents as applicable to this resource consent application have been discussed in this report.

6.2.1 Section 104(1)(b)(i) National environmental standards

As of 4 September 2018, there are six NESs that have come into effect - the National Environmental Standards for Air Quality (where various standards have been in effect since October 2004); Sources of Human Drinking Water; Electricity Transmission Activities; Telecommunication Facilities; Assessing and managing contaminants in soil to protect human health; and Plantation Forestry.

The relevant standards to this application are discussed below.

Resource Management (National Environmental Standards Relating to Certain Air Pollutants, Dioxins and Other Toxics) Regulations 2004 (including amendments 2005)

Government has released national environmental standards for ambient air quality (NESAQ) that specify concentration limits and in some instances allowable exceedances of those limits.

Regulation 17 of the NESAQ places restrictions over the granting of resource consents that authorise the discharge of PM₁₀ into airsheds that breach the ambient air quality. The "Rest of the Region" airshed is not considered to breach the ambient air quality standard therefore Regulation 17 of the NESAQ does not apply. Instead Regulation 18 applies.

Regulation 18 is repeated below:

- 18 Resource consents for PM₁₀ discharges before 1 September 2013 if concentration in airshed does not breach standard
- (1) *This regulation applies to an application for a resource consent to discharge PM₁₀ into an airshed –*
 - (a) *where the concentration of PM₁₀ in the airshed does not breach its ambient air quality standard; and*
 - (b) *if the application is made before 1 September 2013.*
 - (2) *A consent authority must decline an application for a resource consent to which subclause (1) applies if the discharge to be permitted by the resource consent is likely, at any time, to cause the airshed to exceed the ambient air quality standard for PM₁₀.*

The discharge to air associated with the WWTP is expected to have negligible effect on PM₁₀ concentrations both locally and on an airshed wide basis. Therefore I do not expect that the proposal will result in the ambient air quality standard for PM₁₀ to be exceeded in the "Rest of the Region" airshed or within the vicinity of the WWTP. Therefore the NESAQ does not restrict the granting of this consent.

National Environmental Standard for Sources of Human Drinking Water

The National Environmental Standard for Sources of Human Drinking Water commenced on 20 June 2008. This standard is a regulation enacted by an Order in Council, under section 43 of the RMA. The regulation requires that a regional council must not grant a water or discharge permit for an activity that will occur upstream of a drinking water abstraction point if specific criteria at the point of abstraction are exceeded. The matters to be considered as part of an assessment are dependent on the permit being sought and the level of effects on any drinking water supplier located downstream or down gradient of the activity.

Under this regulation a regional council may also impose a condition of consent on any resource consent application requiring the consent holder to notify, as soon as reasonably practical, the registered drinking-water supply operators and the regional council if the activity leads to an event that, or as a consequence of an event, results in a significant adverse effect on the quality of the water at the abstraction point.

The discharge is located within the 2 kilometre buffer radius of the Taupo District Council managed Whareroa drinking water supply – G00378. Given the assessment of effects above, I consider it unlikely that the Whareroa WWTP discharge would cause a significant adverse effect on the quality of groundwater at the water supply take location. I do not consider it necessary to include a notification consent condition.

6.2.2 Section 104(1)(b)(ii) Other regulations

There are no other regulations relevant to this application.

6.2.3 Section 104(1)(b)(iii) a National policy statement

The National Policy Statement Freshwater Management 2014 came into effect on 1 August 2014. The policy statement sets out objectives and policies that direct local government to manage water in an integrated and sustainable way while providing for economic growth within set water quantity and quality limits.

The freshwater objectives seek to safeguard the life-supporting capacity, ecosystem processes and indigenous species, including their associated ecosystems of fresh water (Objective A1). This is to be achieved quantitatively through the sustainable management of taking, using, damming or diverting of fresh water, and qualitatively through the sustainable management of the use and development of land and of the discharges of contaminants.

The NPS requires regional councils to develop standards to safeguard the life supporting capacity of water bodies, with the objective that water quality will be maintained or improved (Objective A2). This will involve protection of high quality water bodies and implementation of methods to improve degraded water bodies. In the interim, when considering consent applications regional councils must have regard for any effects (actual or cumulative) that contaminants contained in the discharge may have on freshwater and fresh water ecology. The principle of adopting best practicable options in order to minimise effects is included in the decision making process under this policy.

I have had regard to the relevant objectives and policies within the National Policy Statement Freshwater Management 2014. I consider that given the proposed maintenance of the existing 20 percent reduction of nutrient load to land and my assessment of minor effects of the activity should the consent be granted it would not be contrary to this National Policy Statement.

6.2.4 Section 104(1)(b)(iv) a New Zealand Coastal Policy Statement

I do not consider the New Zealand Coastal Policy Statement applicable to the application.

6.2.5 Section 104(1)(b)(v) Regional Policy Statements

The Regional Policy Statement is a high-level broad-based document containing objectives and policies the purpose of which is to provide an overview of the resource management issues of the region and to achieve integrated management of the natural and physical resources of the Region. Council's new RPS was made operative on 20 May 2016.

The key issues in the RPS relating to this proposal are the state of resources (Issue 1.1), the relationship of tangata whenua with the environment (Issue 1.5), and the health and well being of the Waikato River catchment (Issue 1.6). There are a number of overlapping objectives relevant to this proposal. These are listed as follows:

Objectives

- Integrated management (Objective 3.1);
- Resource use and development (Objective 3.1A)
- Decision making (Objective 3.2);
- Health and wellbeing of the Waikato River (Objective 3.3);
- Ecosystem services (Objective 3.7);
- Relationship of tangata whenua with the environment (Objective 3.8);
- Sustainable and efficient use of resources (Objective 3.9);
- Air quality (Objective 3.10);
- Mauri and values of fresh water bodies (Objective 3.13);
- Ecological integrity and indigenous vegetation (Objective 3.18);
- Amenity (Objective 3.20);
- Values of soil (Objective 3.24).

Policies

- Integrated management (4)
- Air (5)
- Built environment (6)
- Approach to identifying fresh water body values and managing fresh water bodies (8.1)
- All fresh water bodies (8.3)
- Catchment-based intervention (8.4)
- Waikato River Catchment (8.5)
- Landscape, natural character and amenity (12)
- Soils (14)

Policies and methods – matters of significance to Maori

Objective 3.8 seeks to recognise the relationship tangata whenua have with natural and physical resources. This is achieved by ensuring that the relationship tangata whenua have with their ancestral lands, water, sites, waahi tapu and other taonga is recognised and provided for in resource management decisions (Policy 4.3.2), and that particular regard is given to the role tangata whenua have as kaitiaki (Policy 4.3.3). Another objective (Objective 3.13) expects that tangata whenua concerns relating to the mauri and health of fresh water are recognised and provided for. This is achieved by ensuring decisions about the discharge of contaminants are made in a way that recognises and provides for the mauri of water.

The applicant has undertaken consultation with tangata whenua prior to and following lodgement of consent applications. I am of the opinion that the relationship tangata whenua have with the site and surrounding environs has been recognised. I consider that the applicant's proposal to maintain a nutrient load reduction, along with the land discharge methodology which I understand is consistent with Maori principles regarding wastewater management, addresses tangata whenua concerns regarding the discharge. Mana whenua through the Proprietors of Hauhungaroa No. 6 have provided written approval.

Policies and methods – Fresh water

In accordance with direction from the NPSFM, the RPS approaches the management of fresh water bodies (8.1) with a view to integrated catchment management, identification of fresh water body values, and establishment of fresh water body objectives, limits and targets, all via a collaborative approach. For all fresh water bodies (8.3) the RPS expects that the effects of activities will be managed to maintain or enhance the identified values by reducing microbial and nutrient contamination (8.3 a iii)), and where appropriate, protection and enhancement of riparian habitat. I consider that the proposed maintenance of a 20 percent reduction in nitrogen loading, more efficient and comprehensive site management, and monitoring plans as proposed by the applicant, will contribute towards the maintenance and enhancement of the values of the Whareroa surrounds as required by Policy 8.3.

In terms of point source discharges (8.3.1) the RPS notes that regional plans shall control point source discharges of contaminants onto or into land where the contaminant may reach water, in a way that seeks to achieve the relevant targets for the water body and provides for mitigation or offsetting of adverse effects where effects cannot be avoided or remedied.

Policies and Methods – Catchment based intervention, Waikato River Catchment

Policy (8.4) makes provision for identifying high issue catchments including the Waikato River and Lake Taupo that require specific intervention to address the adverse effects of activities and land use changes. It enables specific policies for priority catchments such those now in place for Lake Taupo.

Methods 8.4.1 (Identify catchments for specific intervention) and 8.4.3 (Nutrient sensitive freshwater bodies), are very relevant in respect of discharges that occur in the Taupo Catchment.

Lake Taupo is identified as a category two lake having high condition and high vulnerability. Category two lakes tend to have water quality that has been impacted in some way by either catchment land use and/or introduced plants and/or animals. They make up a very small group of lakes that retain relatively clear water, macrophyte-dominated state. Due to a variety of existing or potential stressors they are considered to be very vulnerable to a change in state from clear water and vegetated to one that is algal-dominated and devoid of submerged macrophytes.

The Waikato River Catchment policy (8.5) recognises Te Ture Whaimana o Te Awa o Waikato – the Vision and Strategy for the Waikato River as the primary direction-setting document for the Waikato River and develop an integrated, holistic and co-ordinated approach to implementation.

The Vision and Strategy for the Waikato River through the Ngati Tuwharetoa, Ruakawa, and Te Arawa River Iwi Waikato River Act, 2010 has no direct bearing on the Whareroa WWTP application as the Act applies to areas of the Waikato River catchment below Huka Falls. The subject application is for a discharge that occur solely within the Lake Taupo catchment which is above the falls. The discharge however does eventually enter Lake Taupo which is the source of the Waikato, and so some minor cumulative input is recognised.

I consider that the wastewater discharge is not inconsistent with these policies and methods. As noted above expansion to the irrigation areas are proposed and will be required through the conditions of consent.

Polices and Methods air

Air quality in the Waikato Region is generally perceived to be high, but can be adversely affected by point source or cumulative discharges to air. Relevant policies in the RPS target the management of discharges to air (5.2) via regional plans and the assessment of unacceptable risk. Policy 5.3 seeks to manage adverse effects on amenity, particularly beyond the property boundary.

I consider that the discharge of contaminants to air proposed is consistent with the RPS.

Policies and Methods – soil

Policy (14.3) set out to ensure that accumulation of contaminants in soils are minimised and does not cause a reduction in the range of existing and foreseeable uses of the soil resource. Method (14.3.1) Control discharges to land, states that regional plans shall control discharges to land to ensure the accumulation of soil contaminants does not reduce the range of existing and foreseeable uses of the soil resource.

I consider that the discharge to land as proposed will not have adverse effects on the soils and so is consistent with the RPS.

6.2.5.1 Summary

It is not anticipated that there will be significant adverse environmental effects as a result of the proposed activity. I consider that the activity is consistent with the above objectives and policies of the RPS.

6.2.6 Section 104(1)(b)(vi) Regional Plan

The Waikato Regional Plan (WRP) contains specific policies and implementation methods to achieve the purpose of the RMA and address the significant resource management issues for the region identified in the Regional Policy Statement. The WRP objectives and policies relevant to this proposal are outlined below.

Management of Water Bodies

Objective 3.1.2 sets out the desired endpoint for management of water bodies in the Region, including net improvement of water quality across the region, the avoidance of significant adverse effects on aquatic ecosystems, concentrations of contaminants leaching from land use activities to shallow groundwater and surface waters do not reach levels that present significant risks to human health or aquatic ecosystems, and that significant and cumulative adverse effects on the relationship tangata whenua as Kaitiaki have with water and their identified taonga. Relevant water management policies following on from *Objective 3.1.2* seek to characterise the water body based on the characteristics for which they are valued and enhance or maintain those characteristics through a mixture of regulatory and non-regulatory means.

Lake Taupo is classified as a “Contact Recreation”, “Significant Indigenous Fishery and Fish Habitat” and “Significant Trout Fishery and Trout Spawning Habitat” water body in the Waikato Regional Plan. The purpose of the classification system is to maintain or enhance existing flow regimes, water quality, and/or riparian and aquatic habitat based on the characteristics and values of the water body. As discussed in this report, I am of the opinion that the proposed discharges will not have significant adverse effects on water quality or aquatic ecosystems of Lake Taupo, over the course of the proffered and accepted consent duration of 20 years for the wastewater discharge consent.

Discharges to Land and Water

Objective 3.5.2 focuses on discharges onto land and into water that could have adverse effects on water quality and aquatic habitat. This includes the discharge of treated wastewater onto land at the site. Similar to *Objective 3.1.2*, this objective seeks to manage discharges to ensure that contaminants entering surface water do not have adverse effects on human health and aquatic ecosystems. Policies of relevance include the following:

Policy 2 states that discharges to water which have more than minor effects shall be controlled through resource consents to ensure that adverse effects on surface water bodies that are inconsistent with the Water Classification Standards are avoided as far as is practicable and otherwise remedied or mitigated.

Policy 3 acknowledges that the discharge of wastewater onto land is the preferred alternative to direct discharges to water, where soil conditions and topography allow, and where adverse effects are less than those from a direct discharge to water. Applying wastewater to land allows available nutrients, minerals, and water to be reused in a beneficial manner.

Policy 4 states that discharges to land shall be managed to ensure maximum reuse of nutrients and water contained in the discharge, avoid adverse effects on surface water bodies, and avoid contamination of soil, water and air.

Policy 5 states that discharges onto land shall not compromise potential uses of the groundwater or adverse effects on surface water.

WRP Section 5.2.2 sets out Council's objectives with respect to discharges of wastes onto land. The Objective is:

Discharges of wastes and hazardous substances onto or into land undertaken in a manner that:

- a) does not contaminate soil to levels that present significant risks to human health or the wider environment*
- b) does not have adverse effects on aquatic habitats, surface water quality or ground water quality that are inconsistent with the Water Management objectives in Section 3.1.2*
- c) does not have adverse effects related to particulate matter, odour or hazardous substances that are inconsistent with the Air Quality objectives in Section 6.1.2*
- d) is not inconsistent with the objectives in Section 5.1.2*
- e) avoids significant adverse effects on the relationship that tangata whenua as Kaitiaki have with their taonga such as ancestral lands, water and waahi tapu*
- f) remedies or mitigates cumulative adverse effects on the relationship that tangata whenua as Kaitiaki have with their identified taonga such as ancestral lands, water and waahi tapu.*

With respect to this consent application, I consider that Parts a, b, c, e, & f of Objective 5.2.2 are relevant. An explanation of those sections of Objective 5.2.2 which are relevant to the wastewater consent application is set out below:

The objective acknowledges that discharges onto land are a necessary facet of resource use in the Waikato Region and, subject to environmental standards, should be allowed to occur.

Part a) acknowledges that the discharge of chemicals onto or into land should not contaminate soils beyond specific threshold levels at which soil versatility declines and other adverse effects begin to occur. These thresholds represent the point at which the risks to human health or the wider environment from soil contamination become significant. If soils are contaminated above these levels, they will be considered unsafe for their current uses and the range of existing and foreseeable uses of the soil will be restricted. I consider that the proposed wastewater irrigation will not contaminate soils to the extent where the soil will become useable for normal agricultural or horticultural purposes for the consent duration of 20 years.

Parts b) and c) recognise the interconnected nature of the environment so that when managing discharges onto or into land, effects on water and air quality must also be taken into account. The effect of the irrigation on groundwater, surface water and air has been assessed in Section 6.1 of this report. Adverse effects on these resources are likely to be minor, if the irrigation is carried out in accordance with the recommended consent conditions.

Parts e) and f) acknowledge the relationship that tangata whenua as Kaitiaki have with their land over which they hold mana whenua. Activities involving discharges onto or into land need to avoid significant adverse effects on the relationship of tangata whenua with their identified taonga such as ancestral lands, water, and waahi tapu. The term 'significant adverse effects', are those effects that if allowed to occur, would destroy a site or taonga that is of such importance to tangata whenua as Kaitiaki that its loss or degradation is assessed to be unacceptable and unable to be remedied or mitigated. I consider that there will be no such significant adverse effects as a result of the irrigation.

Lake Taupo Catchment Policy

The policy originally referred to as 'Variation 5,' developed for the protection of New Zealand's iconic Lake Taupo, was informed by several decades of scientific research, stakeholder discussions, and community input. Prior to the policy, scientific evidence gathered over the past 30 years indicated that the water quality of Lake Taupo was slowly declining due to increased nitrogen inputs entering the Lake through groundwater and rivers, as a result of development and intensification of surrounding land.

In 2005, Council notified the policy for the protection of Lake Taupo. In June/July 2011, after 4 years of Council and Environment Court hearings and negotiations between key parties, Variation 5 was finalised and adopted by Council. Described as first-of-type policy, Variation 5 largely focuses on the management of non-point (diffuse) discharges from farming, through nitrogen discharge limits (or allowances) and a nutrient trading scheme. Recognising the contribution of nitrogen from wastewater sources, the policy also includes provisions for municipal and on-site wastewater discharges within the Taupo Catchment.

Lake Taupo wastewater policies and rules

The policy for Lake Taupo also addresses nitrogen outputs from urban areas, namely wastewater discharges. These provisions broadly aim to reduce and control nitrogen outputs from wastewater systems in the catchment.

Key provisions in relation to wastewater discharges in the Taupo catchment include a policy which has established a 20% nitrogen reduction objective to be achieved by 2020 through plant upgrades and/or the reticulation of un-sewered communities.

I accept the information provided in the letter of 13 November 2018 and reproduced in section 2.2 of this report. This confirms that the current discharge represents a nitrogen load of 66% below that benchmarked and that full development of Whareroa South would still achieve the nitrogen reduction objective at 31% below the benchmark. Should the Whareroa North Private Plan Change occur, the mass of nitrogen discharged may exceed both the 20% objective and the benchmark itself. To account for this possibility, the 20% objective is included in the proffered consent conditions which limit the nitrogen load discharged to 446 kgN/year (80% of the benchmarked 558.5kgN/year), with the additional note that this load may be offset through nitrogen trading, that is, the purchase and/or transfer of nitrogen from other sources within the Lake Taupo catchment.

6.2.6.1 Summary

Overall, I consider that the granting of this application would not, in my opinion, be inconsistent with the objectives and policies of the Waikato Regional Plan. Section 3 of this report summarises the relevant rules contained in the Waikato Regional Plan relevant to this proposal.

6.2.7 Section 105 analysis

In terms of alternative methods of disposal of wastewater, the applicant has concluded that land disposal of treated wastewater is currently the best practicable option given the potential adverse effects and cultural concerns of an alternative discharge to water. Land disposal also provides the ability to reuse nutrients present in the wastewater stream.

I have had regard to the receiving environment and the applicant's reasoning for the continued use of irrigation and therefore I am satisfied that the proposal is consistent with s105 of the RMA

6.2.8 Section 107 analysis

The discharges to land and water under consideration within this application have the potential to cause the effects in receiving waters listed in s107. However I accept that the conditions of consent developed throughout the process will avoid, remedy or mitigate these potential effects.

6.3 Other Matters

Ngati Tuwharetoa Environmental Iwi Management Plan 2003:

The Ngati Tuwharetoa Environmental Iwi Management Plan (NTEIMP) establishes the Ngati Tuwharetoa environmental baselines and provides tools that will help hapu/whanau and the tribe as a whole to achieve and protect those baselines. The plan details goals, issues and policies/baselines within associated with kaitiakitanga, partnership, Te Waipuna Ariki (water), Papatuanuku (land), Nga Wahi Tapu (sacred places), Tauranga Ika (fisheries), Ahi Tamou-Nga Ngawha (geothermal), Te Ha Ranginui (airspace), and Nga Otaota Me Nga Aitanga Kararehe (flora and fauna). I consider that the proposal is consistent with the outcomes and aspirations of the Ngati Tuwharetoa Environmental Iwi Management Plan.

6.4 Ngati Tuwharetoa, Raukawa, and Te Arawa River Iwi Waikato River Act 2010

The application is outside the area covered by this Act.

6.5 Protected Customary Rights and/or Customary Marine Titles (Marine and Coastal Act 2011 (Takutai Moana))

The application is outside of the area covered by this Act.

6.6 Relevant Part 2 Considerations

Under section 104(1) of the RMA, when considering an application for resource consent the consent issuing authority must have regard to Part 2 of the RMA. Part 2 sets out the purpose and principles of the RMA. Relevant Part 2 considerations (section 5 – 8) are outlined below.

- Purpose (5)
- Matters of National Importance (6)
- Other Matters (8)
- Treaty of Waitangi (9)

Each section has been considered in relation to this application. I have had particular regard to the importance of Lake Taupo as a matter of national importance and the fact that the wastewater plant is within the rohe of Ngati Tuwharetoa. I have had particular regard to the fact the discharge occurs in a catchment of National Importance with specific policies in place to improve the high quality water of Lake Taupo. The Vision and Strategy for the Waikato River has also been regarded as the discharge is a small but never the less a cumulative input into the wider river catchment.

I conclude that the activities proposed are not contrary to Part 2 matters.

7 Discussion/Conclusion

Taupo District Council has applied for a resource consent associated with the discharge of treated wastewater from the Whareroa Wastewater Treatment Plant. The proposal is a discretionary activity and accordingly has been considered under section 104B of the RMA.

Section 104B states:

“After considering an application for resource consent for a discretionary activity or non-complying activity, a consent authority –

- (a) may grant or refuse the application; and*
- (b) if it grants the application, may impose conditions under section 108.”*

During this assessment, I have considered the following:

- Effects of the proposed activities;
- Consistency of the activities with relevant policies and plans; and
- Consistency of the activities with Part 2 of the RMA.

As discussed in section 6.1 of this report the actual and potential effects of the proposed activities are considered to be minor. If the activity is undertaken in accordance with the proposed conditions, the proposed activity will be consistent with Waikato Regional Council's policies and plans, and with matters under Part 2 of the RMA.

Waikato Regional Council technical staff have assessed the proposal in terms of actual and potential environmental effects. The conclusions of the technical reviews indicate that the discharge is likely to have an adverse effect on surface water quality, groundwater quality, and soils that is minor or less than minor.

The application has been assessed in the context of each of the matters set out in Part 2 of the RMA. I consider that generally the application has had regard to the matters set out in each of these sections.

I have assessed the application against the objectives and policies within the Regional Policy Statement, Regional Plan, and the Ngati Tuwharetoa Environmental Iwi Management Plan. I consider that the application does not compromise the objectives and policies within these documents.

I have assessed the application against section 105(1) and 107 of the RMA. I am satisfied, from the advice received from Waikato Regional Council technical staff, that the discharge is unlikely to have any significant adverse effect on the water quality within Lake Taupo and that the grant of this consent is not precluded by section 107 of the RMA.

I consider that the proposal provides for positive effects on the regional economy, and the overall wellbeing of the local community.

In weighing these considerations, it is my opinion that it would better achieve the purpose of the Act as defined in section 5 of the RMA, to **grant** consent to enable the continued operation of the Whareroa Wastewater Treatment Plant.

The applicant has proffered and I have proposed a number of conditions of consent to safeguard the life-supporting capacity of water and ecosystems, and to avoid or mitigate any adverse effects of the activities on the environment.

The applicant stated a preferred duration of 20 years for the wastewater discharge consent. I concur that this is an appropriate term, in line with many other municipal wastewater discharges and recommend a term of 20 years with an expiry date of 31 January 2039.

8 Monitoring

Waikato Regional Council has a statutory obligation under section 35 of the RMA to monitor the effects of resource consents being exercised in its region. Waikato Regional Council staff or authorised agents will monitor the wastewater treatment plant and discharge to land during operation. It should be noted that if a condition(s) of consent is not complied with, the wastewater treatment plant or discharge may receive an elevated level of monitoring until Waikato Regional Council is satisfied that the consents are being exercised in accordance with consent conditions.

A range of consent conditions have been proposed either by the applicant or by council staff and these are summarised below:

- Limits on volume and N load to be discharged

- Limits on conditions under which irrigation may occur
- Water quality and quantity monitoring:
 - Discharge quality on a fortnightly basis
 - Discharge volume, influent volume and flow rate on a daily basis
- Receiving environment (groundwater and soils) monitoring and reporting
- Reporting of wastewater quality and volume on a quarterly basis, to ensure that if any problems are occurring on site, Waikato Regional Council is aware of these in a timely fashion.
- Annual summary reporting of treatment plant performance.
- The preparation and updating of an Operation and Management Plan is also covered by conditions.
- Conditions relating to the recording and reporting of complaints associated with any odour or the discharge have been included.
- Should any unforeseen adverse effects as a result of this activity become apparent through monitoring, a review clause allows conditions of consent to be reconsidered.

9 Recommended Decision

I recommend that in accordance with s104B resource consent application APP138347 be granted in accordance with the duration and conditions prescribed in the attached Resource Consent Certificate for the following reasons:

- The activities will have no more than minor actual or potential adverse effects on the environment
- The activities are not contrary to any relevant plans or policies
- The activities are consistent with the purpose and principles of the Resource Management Act 1991



Trisha Simonson
Consultant
On behalf of Resource Use

Date: 24 January 2019

10 Decision

That the resource consent application is granted in accordance with the above recommendations.



Hugh Keane
Team Leader
Resource Use Directorate

Date: 24 January 2019

Acting under authority delegated subject to the provisions of the Resource Management Act 1991 which at the time of decision had not been revoked

RESOURCE CONSENT CERTIFICATE

Resource Consent: AUTH138347.01.01

File Number: 60 54 64A

Pursuant to the Resource Management Act 1991, the Regional Council hereby grants consent to:

Taupo District Council
Private Bag 2005
Taupo Mail Centre
Taupo 3352

(hereinafter referred to as the Consent Holder)

Consent Type: Discharge Permit

Consent Subtype: Discharge to land

Activity authorised: To discharge treated municipal wastewater to land and associated contaminants to air, from the Whareroa wastewater treatment plant.

Location: Whareroa Rd - Whareroa

Map reference: NZTM 1840359 E 5695308 N

Consent duration: This consent will commence on the date of decision notification and expire on 31 January 2039.

Subject to the conditions overleaf:

CONDITIONS

General:

1. The wastewater treatment and disposal system shall be designed, operated and maintained in general accordance with:
 - (i) "Whareroa Wastewater Treatment Scheme - Application for Resource Consent to Waikato Regional Council" Opus International Consultants Ltd., May 2017 (Waikato Regional Council Doc Ref 10428437); and
 - (ii) "Whareroa Wastewater Treatment Plant Consent Replacement Application" Taupo District Council, 18 November 2018 (Waikato Regional Council Doc Ref 13374457)subject to the resource consent conditions below, which shall prevail should any inconsistency occur between the conditions and the application documents.
2. The consent holder shall pay the Waikato Regional Council any administrative charge fixed in accordance with section 36 of the Resource Management Act 1991, or any charge prescribed in accordance with regulations made under section 360 of the Resource Management Act 1991.

Discharge quantity

3. The maximum volume of treated wastewater discharged to the ground must not exceed 200 cubic metres per day (200 m³/day).

Discharge quality

4. The consent holder must ensure that the quality of the treated wastewater discharged to the ground will result in compliance with the following limits:
 - a) The annual total nitrogen loading rate (based on average fortnightly TN sampling results x daily irrigation volume x total irrigable land area) must not exceed 250kg TN per year per hectare for the year commencing 1 July and ending 30 June, for one year in every five years (consecutively);

Note: Part a) of this condition is to allow for the opportunity to expand irrigation areas when discharge flows reach the upper limits of the land area and does not authorise non-compliance with part b) for any other reason.

 - b) At all other times, the annual total nitrogen loading rate (based on average fortnightly TN sampling results x daily irrigation volume x total irrigable land area) must not exceed 200kg TN per year per hectare for the year commencing 1 July and ending 30 June;
 - c) The daily loading rate must not exceed 15 mm depth of wastewater per day based on total irrigated area;
 - d) The annual total nitrogen load discharged must not exceed 446 kilograms TN per year for the year commencing 1 July and ending 30 June.

Note: The annual load limit specified in part d) of this condition may be increased by offset by the consent holder securing an equivalent nitrogen offset within the Lake Taupo catchment and providing evidence of such to Waikato Regional Council.

5. The land disposal area must be increased as necessary to ensure ongoing compliance with the requirements of condition 4 and in accordance with the requirements for ensuring an appropriate Operations and Management Plan for the site.

6. No later than 2 years from commencement of this consent, the application of treated wastewater to land at Whareroa Road must not occur when any of the following environmental conditions exist:

Description	No irrigation conditions
Rainfall Intensity	>0.5mm/minute for greater than 20 minute duration
Wind Speed	exceeds 12 metres per second (at a height of 1.2 metres above ground).
Frost/temperature	<-5 degrees

7. Wastewater shall be applied in a manner that complies with the following conditions:

- a) Avoids overland flow of wastewater to any neighbouring property, flowing watercourse, drainage ditch which contains water, or permanent pond
- b) Avoids detectable spray drift beyond the boundaries of the property
- c) Ensures distribution as evenly as practicable over the irrigation areas in use
- d) Avoids significant ponding.

Note: significant ponding is deemed to occur where waste water remains on an area of more than 10 square metres after 24 hours of being irrigated or causes an adverse effect on grass growth.

Site Management

8. The consent holder must develop and retain an Operations and Management Plan for this site. This Plan shall be prepared by a suitably qualified and experienced person and shall detail how the treatment and disposal system is to be operated and maintained to ensure compliance with the conditions of this consent. As a minimum the Plan shall include the following matters:

- a) A comprehensive description of the treatment and disposal facility,
- b) Chain of command, responsibility and notification protocols including operation and maintenance of the transfer pipeline to the site,
- c) Operational management of the irrigation system;
- d) A description of maintenance and improvements undertaken to the treatment plant and disposal system,
- e) A description and schedule of the routine inspection, monitoring and maintenance procedures to be undertaken to ensure effective plant operation;
- f) Procedures for recording routine maintenance and all repairs that are undertaken
- g) Reporting procedures including an annual monitoring report,
- h) Contingency measures to address unusual events,
- i) Procedures for improving and/or reviewing the Operations and Management Plan.
- j) Measures to:
 - i. ensure the renovation of contaminants and uptake of nutrients from the wastewater is maximised and the extent of nutrient, and in particular nitrogen, leaching to groundwater is minimised
 - ii. ensure the sustainability of the soil resource and
 - iii. maintain the soil's natural infiltration capacity and structure as much as practicable

This Plan shall be lodged with Waikato Regional Council for approval in a technical certification capacity within six months of commencement of this consent, and shall be reviewed and updated every five years and as required as a result of any changes in plant operation or management. An electronic copy of the management plan shall be provided to Waikato Regional Council within 10 working days of a request to do so.

9. The wastewater scheme must be operated, maintained and managed by appropriately experienced personnel in accordance with the Operations and Management Plan pursuant to condition 8 of this consent.
10. The consent holder must ensure contractors are made aware of the conditions of this resource consent and shall take all reasonable steps to ensure contractors are able to comply with those conditions.
Note: An example of a reasonable step to ensure contractors are able to comply with the conditions is to require them to be fully conversant with the Operations and Management Plan required by Condition 8.
11. There must be no overland flow of wastewater from any part of the treatment plant or disposal system.
12. The land disposal area must not be grazed by stock, and crop grown in the irrigation area must be harvested and removed from the irrigation area.
13. The consent holder must inspect the property at a minimum of monthly intervals and as soon as practicable after heavy rainfall events, to record the presence or not of erosion rills or gullies, tomos, seepages, or any other physical change to the property which may impact on the irrigation area or accelerate nutrient losses, and shall keep records of those inspections.
14. Any erosion control works recommended as a result of the inspections required by condition 13 must be undertaken at the expense of the consent holder to the satisfaction of Waikato Regional Council.
15. The consent holder shall maintain and keep a Complaints Register for all complaints made about the treatment and discharge operations received by the consent holder. The Register shall record:
 - a) The date, time and duration of the alleged event/incident that has resulted in the complaint;
 - b) The location of the complainant when the alleged event/incident was detected;
 - c) The possible cause of the alleged event/incident;
 - d) The weather conditions and wind direction at the site when the event/incident allegedly occurred, if significant to the complaint;
 - e) Any corrective action undertaken by the consent holder in response to the complaint.

The Register shall be made available to the Waikato Regional Council at all reasonable times. Complaints which may indicate non-compliance with the conditions of this resource consent shall be forwarded to the Waikato Regional Council within 5 working days of the complaint being received.

Odour Management

16. The operation, management and maintenance of the Whareroa Wastewater Treatment and Disposal Scheme must not result in any objectionable odours which have an adverse effect at or beyond the boundary of the properties on which the treatment plant and disposal areas are located.
17. There must be no discharge of airborne contaminants as a result of the activities authorised by this resource consent to the extent that it causes an adverse effect at or beyond the boundary of the properties on which the treatment plant and disposal areas are located.
18. If an emission of odour occurs that has an objectionable or offensive effect (in accordance with condition 16 above), the consent holder shall provide a written report to the Waikato Regional Council within ten days of being notified of such by the Waikato Regional Council. The report shall specify:

- a) the cause or likely cause of the event and any factors that influenced its severity;
- b) the nature and timing of any measures implemented by the consent holder to avoid, remedy or
- c) mitigate any adverse effects; and
- d) the steps to be taken in future to prevent recurrence of similar events.

Wastewater monitoring

19. The consent holder must continuously monitor the flow rate of wastewater entering and leaving the treatment plant and must record the total daily influent and irrigation event discharge volumes.
20. The quality of the treated wastewater discharged into the ground must be determined by the consent holder. To this end the consent holder must monitor the following parameters: total nitrogen (TN), ammoniacal-nitrogen (NH₄-N), nitrate-nitrogen (NO₃-N), total phosphorus (TP) suspended solids (SS), 5 day carbonaceous biochemical oxygen demand (cBOD₅), *Escherichia coliform bacteria* (*E.coli*) and chloride (Cl) to the satisfaction of the Waikato Regional Council. The monitoring programme must measure:
 - (i) the concentrations of these parameters in the effluent measured at fortnightly intervals,
 - (ii) minimum and maximum daily concentrations, and monthly average concentrations based on fortnightly monitoring intervals,
 - (iii) minimum and maximum daily mass loads, and monthly average mass loads based on fortnightly monitoring intervals,
 - (iv) the mass of total nitrogen discharged from the plant per annum, based on the average fortnightly mass load and discharge flow, or part thereof at the time of reporting.
21. The consent holder shall define a sampling location or locations and the sampling method or methods to be used for monitoring the parameters in condition 20. The location(s) and method(s) used for the sampling shall be to the satisfaction of the Waikato Regional Council acting in a technical certification capacity.
22. All wastewater quality analyses shall be undertaken by an IANZ accredited or equivalent laboratory. All methods used shall be appropriate for the wastewater analyses undertaken.

Receiving environment monitoring and reporting

23. The consent holder must develop and retain a monitoring programme to evaluate the environmental effects of this effluent discharge. This programme shall be undertaken to the satisfaction of Waikato Regional Council and shall include the following:
 - (i) Groundwater quality and contaminant migration monitoring, which shall comprise a minimum of one down-gradient monitoring piezometer,
 - (ii) Monitoring of groundwater samples taken from the piezometers shall be carried out on a quarterly basis. The groundwater samples shall be analysed for nitrate-nitrogen (NO₃-N), nitrite-nitrogen (NO₂-N), Ammoniacal-nitrogen (NH₄-N), conductivity (COND), *Escherichia coliform bacteria* (*E.coli*) and chloride (Cl),
 - (iii) Groundwater levels shall be monitored in the monitoring piezometers on a quarterly basis.
24. To the satisfaction of Waikato Regional Council the consent holder must undertake soil testing annually at the same time each year as recommended by the New Zealand Fertiliser Manufacturers Association. Soil testing will also be undertaken before sowing and cultivation to ensure there is sufficient time to apply and incorporate fertilisers to address any deficiencies (if required). The soil will be analysed for macro and micro nutrients, pH, cation exchange capacity and organic matter. Analyses shall be undertaken on composite samples on each site and sampling depths of 0-75 mm and 75-100 mm.

Reporting

25. The consent holder must forward the results of the monitoring undertaken pursuant to conditions 19 and 20 to the Waikato Regional Council, via electronic means, on a quarterly basis.
26. The results of the monitoring described by conditions 23 and 24 of this consent shall be provided to the Waikato Regional Council annually by 30 September, in an agreed analysed report and data form unless otherwise agreed to in writing by Waikato Regional Council.
27. The consent holder shall provide to the Waikato Regional Council a written report by 30 September each year, addressing the following:
 - (i) A summary of all monitoring results required by conditions of this resource consent for the year ending 30 June;
 - (ii) Critical analysis of the monitoring data collected and comments on any emerging trends;
 - (iii) Comment on compliance with the conditions of this resource consent;
 - (iv) Comment on the performance and adequacy of the disposal system, matters of compliance;
 - (v) Comment on the effects of the discharge on ground and surface water;
 - (vi) Any reasons for non-compliance or difficulties in achieving compliance with the conditions of this resource consent and a description of and a summary of the efficacy of any remedial works undertaken; and
 - (vii) Any other issue considered relevant to the consent holder.
28. The consent holder must notify the Waikato Regional Council within 24 hours (where practicable) of the consent holder becoming aware of any occasion when the limits specified in conditions 3 and 4 of this resource consent being exceeded, or any accidental discharge, plant breakdown or other circumstance which is likely to result in the limits of this consent being exceeded. The consent holder shall, within 10 working days of the incident occurring, provide a written report to the Waikato Regional Council, identifying the non-compliance, possible causes and steps to ensure future compliance, which may include but not be limited to an investigation of the treatment plant operation and capabilities, bore monitoring and the implementation of remedial action to prevent recurring non-compliance.

Review

29. The Waikato Regional Council may during 2024, 2029, and 2034 serve notice on the consent holder under section 128(1) of the Resource Management Amendment Act 1991, of its intention to review the conditions of this resource consent for the following purposes:
 - i) To review the effectiveness of the conditions of this resource consent in avoiding or mitigating any adverse effects on the environment from the exercise of this resource consent and if necessary to avoid, remedy or mitigate such effects by way of further or amended conditions; or
 - ii) To review the adequacy of and the necessity for monitoring undertaken by the consent holder and specifically to review the frequency of record keeping and the method of record collection for the purposes of determining the most appropriate method and frequency; or
 - iii) To add or amend consent conditions in light of monitoring results and/or changed environmental conditions, to require the holder of this resource consent to adopt the best practicable option to remove or reduce adverse effects on the surrounding environment.

Note: Costs associated with any review of the conditions of this resource consent will be recovered from the consent holder in accordance with the provisions of section 36 of the Resource Management Act 1991.

In terms of s116 of the Resource Management Act 1991, this consent commences on 24 January 2019.

Statutory Advice Notes

- In accordance with section 125 RMA, this consent shall lapse five (5) years after the date on which it was granted unless it has been given effect to before the end of that period.
- This resource consent does not give any right of access over private or public property. Arrangements for access must be made between the consent holder and the property owner.
- This resource consent is transferable to another owner or occupier of the land concerned, upon application, on the same conditions and for the same use as originally granted (s.134-137 RMA). The transfer of water, including changes of location, may occur as provided for in Chapter 3.4 of the Waikato Regional Plan, subject to the requirements of those rules.
- The consent holder may apply to change the conditions of the resource consent under s.127 RMA.
- The reasonable costs incurred by Waikato Regional Council arising from supervision and monitoring of this/these consents will be charged to the consent holder. This may include but not be limited to routine inspection of the site by Waikato Regional Council officers or agents, liaison with the consent holder, responding to complaints or enquiries relating to the site, and review and assessment of compliance with the conditions of consents.
- Note that pursuant to s332 of the RMA 1991, enforcement officers may at all reasonable times go onto the property that is the subject of this consent, for the purpose of carrying out inspections, surveys, investigations, tests, measurements or taking samples.
- If you intend to replace this consent upon its expiry, please note that an application for a new consent made at least 6 months prior to this consent's expiry gives you the right to continue exercising this consent after it expires in the event that your application is not processed prior to this consent's expiry.