Consent Evaluation Report

Applicant:	Watercare Services Limited	**File No.:**	60 01 51A
Address of Site:	Meremere Wastewater Treatment, SH 1, Meremere	**Project Code:**	RC25465
Application Number:	APP142286		

1 Introduction

Watercare Services Limited ("the applicant") has applied for resource consent to discharge treated municipal wastewater to the Waikato River, with associated discharges to ground (via pond seepage) and to air, via an in-river diffuser structure.

The applicant has supplied the following documents in support of the application ("the AEE"):

- Application for Resource Consent; Proposed Meremere Wastewater Scheme, September 2020 (doc#17273352)

The applicant has engaged Beca Ltd. to assist with AEE preparation; any reference to the applicant in this report should be understood to signify the applicant and/or any consultant representing them.

Reference Id	Activity Subtype	Activity Description
AUTH142286.01.01	Land - sewage	Discharges associated with the operation of the Meremere Wastewater Treatment Plant
AUTH142286.03.01	Bed - structure	Continued occupation of the Wastewater Treatment Plant outfall structure in the Waikato River

Resource consent application APP139177 was lodged on the 2 February 2018, greater than six months before the expiry date of resource consents AUTH105031.01.03 (wastewater discharge), AUTH105032.01.01 (air discharge) AUTH105033.01.01 (structure) which authorised the operation of the WWTP; this application is subject to a a37A(5)(a) timeframe extension, and has not been withdrawn. The WWTP therefore continues to operate under the expired resource consents with s124(1) authorisation.

This application supersedes APP139177, and the applicant is seeking a 35-year consent term.

The applicant initially sought separate consents for discharges to water (AUTH142286.01.01) and to air (AUTH142286.02.01), however during the consent evaluation process these were combined into one.

2 Background and Description of Proposal

2.1 Background

Municipal wastewater from the Meremere township is reticulated to the existing wastewater treatment plant (WWTP) located adjacent to Island Block Road. Treatment currently comprises:

- Inlet – via a 230mm diameter pumped main, through an inlet meter. No screening is currently in place.
- Oxidation pond – covering an area of approximately 8,100m^3, with an average depth of 1.35m, for a total storage volume of approximately 10,900m^3. The pond is baffled to avoid short circuiting and outlet is controlled by an actuated valve to maximise pond retention time.
- Wetland – flows from the oxidation pond pass through a small, engineered wetland, into a storage pond.
- UV disinfection – wastewater passes through a UV disinfection unit and meter prior to disposal to the Waikato River from a submerged diffuser. Disposal is currently only authorised between the hours of 10pm and 5am.

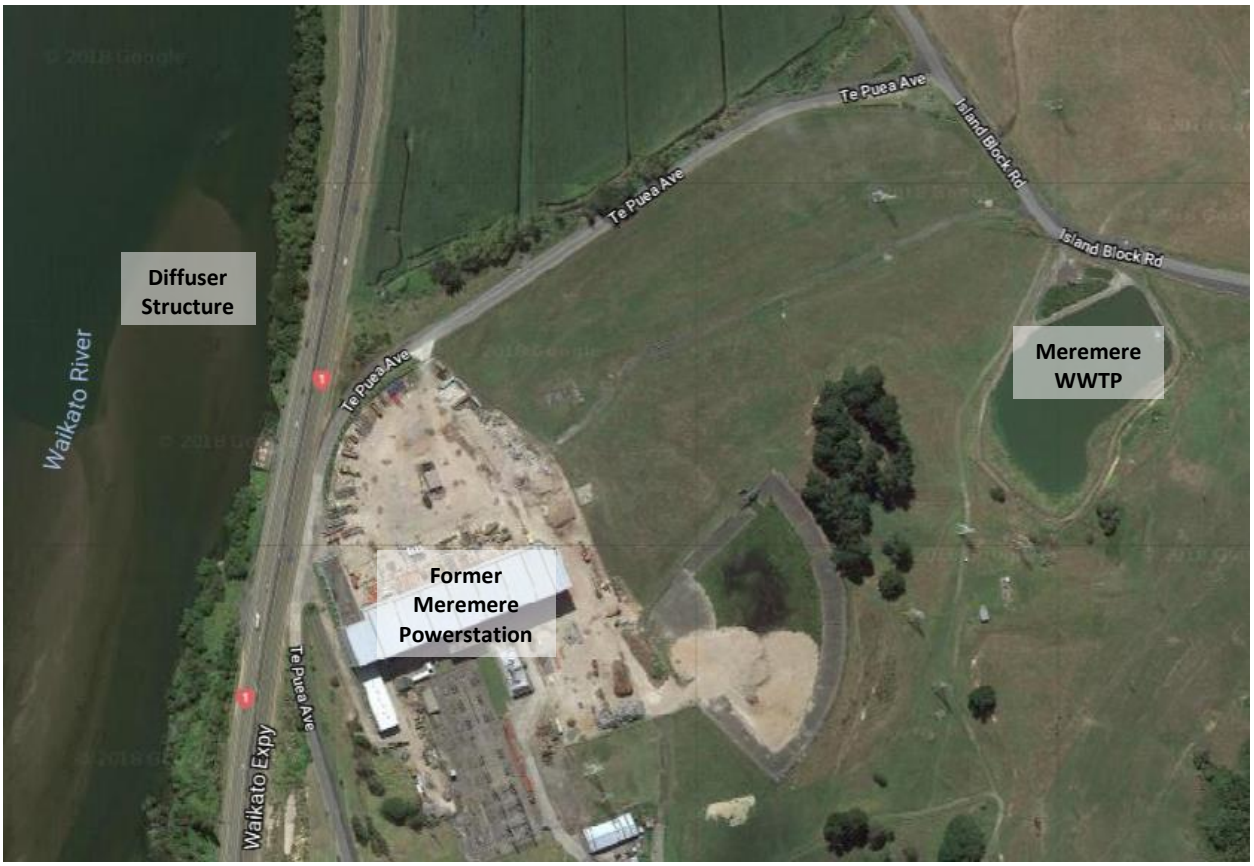

Figure 1: Location of Meremere wastewater treatment plant

2.2 Compliance History

The WWTP has a history on non-compliance with the limits of AUTH105031.01.03, with four consecutive compliance audits finding the WWTP to be in significant non-compliance. On-going exceedances of the authorised suspended solids, ammoniacal nitrogen, total Kjeldahl nitrogen and daily volume limits have been identified. Additionally, discharges outside of the authorised times have been reported and the artificial wetland was not constructed to the required size.

In April 2019, Waikato District Council were served with an Abatement Notice under s322(1)(a)(i) of the Resource Management Act 1991, requiring that the unlawful discharges cease by 31 December 2019.

2.3 Consideration of Alternative Options

As detailed within the AEE, the applicant has investigated possible alternative wastewater solutions:

Land irrigation

Given the volume of wastewater generated at Meremere, the applicant determined the most financially viable option for land disposal was to combine the wastewater stream with that from the Te Kauwhata; taking account of projected population to 2035, a disposal area of 113 ha was determined necessary.

Five area were investigated for land disposal, however the most suitable site (which met the necessary size requirement) had a number of constraining factors:

- It is adjacent to the Whangamarino wetland
- It has a rolling to steep contour, reducing suitability for land disposal
- Its proximity to lifestyle block developments and the possibility for reverse sensitivity issues.

Overall, the applicant concluded that there is limited land suitable for land disposal of treated wastewater in the Meremere and Te Kauwhata area.

Pipeline options

The applicant has undertaken a feasibility assessment of pipeline installation and pumpstation upgrades to various alternate treatment and disposal facilities, these are:

- Option A – from Meremere WWTP lagoon to Te Kauwhata WWTP for treatment and disposal.
- Option B – from Meremere WWTP lagoons to Tuakau via existing Pokeno wastewater pumpstation, generally following SH1 to Pukekohe WWTP for treatment and disposal.
- Option C – as option B, but with additional flows from Mercer.

2.3 Proposed Upgrades

Pre-Upgrade Consent Limits

The consent holder has proposed a suite of effluent quality limits to cover the period up until "the successful commissioning of the side-stream Membrane Bioreactor (MBR) treatment process…or by 1 December 2021, whichever occurs first".

From the existing resource consent, these limits:

- Reduce median instantaneous discharges of $cBOD_5$, NH_4-N, TKN and *E. coli*
- Reduce 90th percentile instantaneous discharges of $cBOD_5$ and *E. coli*
- Increase median instantaneous discharges of TSS
- Increase 90th percentile instantaneous discharges of TSS and NH_4-N
- Removes the 90th percentile instantaneous limit for *E. coli*
- Are unchanged with regard to median instantaneous discharge of TP and 90th percentile instantaneous discharges of TKN and TP

The authorised discharge volume is proposed to be changed from an absolute maximum and a "dry weather" average, to a 90th percentile maximum, which more accurate reflects the inflows to the plant from a catchment that suffers from significant inflow and infiltration.

This change is proposed to capture the current wastewater inflows from Meremere village and is not designed to provide for growth within the catchment.

Post-Upgrade Limits

The consent holder has proposed a suite of effluent quality limits to become effective after "the successful commissioning of the side-stream MBR treatment process…or by 1 December 2021, whichever occurs first".

From the existing resource consent, these limits:

- Reduce median instantaneous discharges of BOD, TSS, NH_4N and *E. coli*
- Increase 90th percentile instantaneous discharges of $cBOD_5$, TSS and NH_4N
- Removes the 90th percentile instantaneous limit for *E. coli*
- Introduce daily mass load discharges of TN and TP

From the Pre-Upgrade limits proposed, these limits:

- Reduce median instantaneous discharges of TSS, NH_4N and *E. coli*
- Increase 90th percentile instantaneous discharges of $cBOD_5$
- Introduce daily mass load discharges of TN and TP

Post-upgrade discharge limits, whilst allowing for increased 90th percentile discharges, will require a reduction in the total annual contaminant discharges from the plant to the Waikato River.

3 Status of Activities under the Plans

Consideration as directed by section 104(1) of the Resource Management Act 1991 ("RMA") has to be given to the Waikato Regional Plan ("WRP") being the operative plan that has effect in the Waikato Region.

The discharge of treated wastewater to land is classified as a discretionary activity under '3.5.4.5 Discretionary Activity Rule – Discharges – General Rule'.

> ***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).*
>
> ***Advisory Note:***
>
> - *Information requirements to enable the assessment of any application under this Rule are set out in Section 8.1.2.2 of this Plan. In addition, assessment shall also take into account the matters identified in the policies in Section 3.5.3 of this Plan.*

The discharge of odours to air is classified as a discretionary activity under '6.1.9.2 Discretionary Activity Rule – General Rule'

> ***6.1.9.2 Discretionary Activity Rule – General Rule***
>
> *Except as provided for in any other rule in this Plan, the discharge of contaminants into air from:*
>
> 1. *Any process or activity that is on an industrial or trade premises and is not permitted by or does not comply with Rules 6.1.9.1, 6.1.10.1 to 6.1.19.1; or*
> 2. *A mobile source or premises that are not industrial or trade premises, and does not comply with Rules 6.1.9.1, 6.1.10.1 to 6.1.19.1*

*is a **discretionary activity** (requiring resource consent).*

Exclusions to Rule 6.1.9.2:

a. *Non-industrial or trade premises and mobile sources not explicitly controlled by Rules 6.1.9.1 or 6.1.10.1 to 6.1.19.1 are permitted as provided for in s15(2) of the RMA.*
b. *Agrichemical application as it is specifically addressed in Chapter 6.2.*

Advisory Notes:

- *Information requirements to enable the assessment of any application under this Rule are as set out in Section 8.1.5.1. In addition assessment shall also take into account the matters identified in the policies in Section 6.1.3 of this Chapter.*
- *For other discretionary activities in this Module, refer to Section 6.1.13.2 and 6.1.19.1.*

The continued occupancy of the Waikato River by the outfall structure is classified as a discretionary activity under '4.2.4.4 Discretionary Activity Rule – Structures In, On, Under or Over the Beds of Rivers and Lakes'.

4.2.4.4 Discretionary Activity Rule – Structures In, On, Under or Over the Beds of Rivers and Lakes

The use, erection, reconstruction, placement, extension, alteration or demolition or removal of any structure in, on, under or over the bed of any lake or river that is not specifically provided for by any rule, or does not comply with the conditions of a permitted or controlled activity rule in this Plan, is a **discretionary activity** (requiring resource consent).

Advisory Note:

- Information requirements to enable the assessment of any application under this rule are set out in Section 8.1.31. In addition, assessment shall also take into account the matters identified in Policy 1 of Section 4.2.3.

4 Consultation/Affected Party Approvals

4.1 Iwi

This application falls into Waikato River co-management 'Area A', and therefore automatic notice of consent lodgement was made to relevant iwi; no correspondence has subsequently been entered into with WRC by any Iwi representative regarding this application.

As detailed within the AEE, the applicant has consulted with Ngāti Naho regarding the proposal, who provided a letter of support (dated 22 September 2020).

Subsequently, Ngāti Naho supplied a Cultural Values Assessment (CVA) (dated November 2020) regarding the application, identifying that while Ngāti Naho oppose discharges to Waikato River on principle, they support the WWTP upgrade as an immediate solution to the increased wastewater flows generated by population growth and development in the immediate area.

4.2 Other Parties

The applicant additionally consulted with three downstream rowing clues, who subsequently provided the following correspondence:

- Mercer Rowing Club (dated 29 September 2020) "fully support the consent"
- West End Rowing Club (dated 28 September 2020) "no issues regarding the project"
- Counties Manukau Rowing Club (dated 28 September 2020) "positive feedback supporting the proposal"

5 Process Matters

Date	Process Detail
18/09/2020	Active
18/09/2020	Lodged
22/09/2020	Extension of timeframe (S.37), 20 days
17/11/2020	Extension of timeframe (S.37), 5 days
24/11/2020	Extension of timeframe (S.37), 5 days
26/11/2020	Non-notification decision
10/12/2020	Extension of timeframe (S.37), 8 days

6 Statutory Considerations

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:

- National Environmental Standards for:
  - Sources of Human Drinking Water 2008
  - Freshwater 2020
- National Policy Statement:
  - For Freshwater Management 2020
- Waikato Regional Policy Statement (Operative May 2016), including Te Ture Waimana o Te Awa o Waikato – the Vision and Strategy for the Waikato River.

- Waikato Regional Plan
- Proposed Waikato Regional Plan Change 1 – Waikato and Waipa River Catchments – Decisions Version (April 2020)

Consideration has been given to Section 104 of the RMA as detailed in this report. 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; with the site surrounded by primarily farmland and urban development in the Meremere village.

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.

There is no Permitted Activity rule within the Waikato Regional Plan authorising the discharge of treated domestic wastewater to water, therefore I have not discounted any baseline effect in making my assessment of effects on the environment.

6.1 Assessment of Environmental Effect (s104(1)(a))

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

- Effects on surface water quality,
- Effects on groundwater quality,
- Effects on aquatic ecosystems,
- Cultural matters, and
- Amenity

6.1.1 Surface Water Quality

Wastewater discharges can cause water quality problems in aquatic environments when:

- plant and weed growth accelerates in response to wastewater sourced nutrients,
- aquatic organisms are adversely affected by oxygen levels being reduced by the BOD load from the wastewater,
- aquatic organisms are adversely affected by the toxic effects of ammonia from wastewater,
- the presence of microbiological contaminants in wastewater can cause a risk to human and animal health.

<u>Pre-upgrade discharges</u>

The applicant has proposed a suite of limits for the plant discharge to the Waikato River for the period to 1 December 2021 or until the successful commissioning of the new side-stream MBR (whichever is first), these limits are summarised in section 2.3, key matters being:

- The authorised discharge volume is proposed to be changed from an absolute maximum of 480m^3/day and a "dry weather" average of 160m^3/day, to a 90th percentile maximum of 1,500m^3/day
- Median instantaneous discharge limits of $cBOD_5$, NH_4-N, TKN and *E. coli* are reduced
- 90th percentile instantaneous discharges limits of $cBOD_5$ and *E. coli*
- Median instantaneous discharges of TSS are increased
- 90th percentile instantaneous discharges of TSS and NH_4-N are increased
- Removes the 90th percentile instantaneous limit for *E. coli*
- Are unchanged with regard to median instantaneous discharge of TP and 90th percentile instantaneous discharges of TKN and TP

This change to discharge volume limit is proposed to capture the current wastewater inflows from Meremere village and is not designed to provide for growth within the catchment, which suffers from significant stormwater inflow and infiltration. While these new limits present a potential for increased contaminant discharges to the Waikato River, I do not consider that actual increases will occur. I further note that historical compliance issues relating to discharge volumes are for wet weather exceedances and not dry weather (where volumes accurately reflect wastewater generation).

As such, I consider that in terms of cumulative discharges to the Waikato River, contaminant loads for all measured parameters will either be maintained or reduced, with the exception of a minor increase to total suspended solids. I consider that this represents an overall reduction to cumulative contaminant loads.

In terms of instantaneous effects, a hypothetical worst case dilution scenario of Waikato River flow at its lowest recorded 133m^3/second (determined at the Mercer Bridge monitoring site) and a daily discharge of 1,500m^3 provides for a greater than 7,000-fold dilution after mixing. At this level of dilution, the instantaneous degradation to water quality would be almost impossible to directly measure with any certainty. I further note that this worst-case scenario would be highly unlikely to ever occur, with typical dilution even greater due to higher river flows and small discharge volumes.

In terms of mixing zone, the AEE presents a mixing zone assessment that state under the future continuous discharge methodology, within 40 metres of discharge a minimum dilution of approximately 700-fold can be anticipated. Whilst I consider it unlikely that there are any localised effects (due largely to the rapid rate of mixing), I consider that a zone of reasonable mixing of 40 metres can be provided for, which would capture any unanticipated localised effects.

<u>Post-upgrade discharges</u>
Post upgrade, proposed limits for discharge parameters are further revised, as summarised in section 2.3, with key matters being:

- Further reductions in median instantaneous discharge limits for TSS, NH_4N and *E. coli*
- An increase to the 90th percentile instantaneous discharge limit for $cBOD_5$
- The replacement of instantaneous TP limits with a daily mass load limit
- Introduction of a daily mass load limit for TN

An assessment by WRC Senior Scientist Mr Bill Vant (doc#17379992 and #17589143) states that based on historical data "*The proposed limit to the load of nitrogen is lower than the load actually discharged…but the proposed limit to the load of phosphorus is higher than the observed load in 2010-12",* however *"the wastewater load from Meremere was a small component of the cumulative loads of N and P carried by the river (0.01-0.02%*".

In term of cumulative discharges to the Waikato River, contaminant loads for all measured parameters will either be maintained or further reduced, with the exception of a minor potential increase to TP discharges. Overall, I am satisfied that these limits represent a further reduction in cumulative contaminant loads discharged.

In terms of instantaneous effects, I consider that these will be further reduced from the pre-upgrade limits proposed.

6.1.2 Groundwater Quality

The ponds are constructed from compacted clay liners, these are typically slightly more permeable that a high-density polyethylene liner that would be used in the construction of a new pond. As such, seepage from the base of the ponds has the potential to effect groundwater.

An assessment of the AEE by WRC Senior Scientist Mr John Hadfield who notes that "*there are no known users of groundwater locally and the Waikato River is the only surface water body down-gradient of the Meremere plant*" and that following construction of the fully contained side-stream MBR "*Seepage to groundwater will therefore be reduced from the current situation."*

In considering the size of the ponds, the absence of groundwater users between the ponds and the Waikato River, and Mr Hadfield's assessment, I consider that the effects of seepage on groundwater will be less than minor.

6.1.3 Aquatic Ecology

Wastewater discharges can impact on aquatic ecology through a range of mechanisms, the AEE details a water quality approach to assessing ecological effects through water quality effects, an approach supported by WRC Scientist Dr Michael Pingram (doc# 17613432).

As detailed in section 6.1.1, the discharged wastewater at this site is rapidly and significantly diluted to an extent that once fully mixed, direct detection of additional contaminants would be unlikely. While cumulative effects cannot be discounted, Mr Vant notes in his assessment that the TN contribution to the river post-upgrade is in the order of 0.01 to 0.02% of the cumulative load.

In terms of localised effects, I am satisfied that rapid mixing at the outfall, and the full width of the river compared to the width of the outfall structure means that no fish passage barrier is created by either the discharge or structure.

6.1.4 Cultural Matters

The discharge of human wastewater to water is considered unacceptable to Māori cultural values (te ao Māori), with such discharges degrading the mana and mauri of receiving waters. In this instance, however the applicant has undertaken consultation with Ngāti Naho, who hold mana whenua for the rohe, and a letter of support (dated 22 September 2020) for the application. This letter details a series of recommendations for matters to be addressed through a new consent, which I have incorporated into recommended Iwi liaison conditions of consent.

6.1.5 Amenity

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. Contact with effluent could occur if it were to run across the ground surface, or when partially treated effluent enters surface or groundwater. The potential for these types of effects typically arises when a system provides only limited treatment, when the system is not properly designed, installed or maintained, or a combination of these factors.

I am satisfied that potential risk of public health effects will be minimised by the appropriately designed wastewater treatment and disposal system, and appropriate fencing and signage at the site.

Contact Recreation
The applicant has proposed a significant reduction in the authorised *E. coli* discharge limits (from a current median of 10,000 MPN/100ml to 3,500 MPN/100ml, then a median of 650 MPN/100ml upon completion of upgrades), in combination with the scale of dilution detailed in section 6.1.1, I am satisfied that upon completion of upgrades, the increase to *E. coli* in the river will not be directly measurable once fully mixed.

In terms of recreational users of the river, three downstream rowing clubs have provided correspondence in support of the application, as detailed in section 4.2.

Odour
Offensive odours can emanate from processes within both the treatment and disposal of wastewater. In this instance, the wastewater treatment plant has been operating for many years without significant odour concerns. Given the proposed plant upgrades, I consider it unlikely that odour will be an issue at this site.

I have recommended a standard condition regarding the avoidance of objectionable odour beyond the property boundary.

Erosion
The discharge to the Waikato River is via a subsurface diffuser; historical issues with diffuser operation have been the result on instream movement of upstream silt/sand.

I have nonetheless recommended conditions assigning responsibility for remediation of any erosion associated with the discharge and structure to the applicant.

6.1.6 Summary
Overall, I consider that the actual and potential effects of the discharges to surface water, to groundwater and to air, and the occupation of the Waikato River by a discharge structure, are less than minor.

6.2 Assessment against Policy Statements, Plans and Regulations (s104(1)(b))

6.2.1 National environmental standards
There are seven NES's that have come into effect - the National Environmental Standards for Air Quality; Sources of Human Drinking Water; Electricity Transmission Activities; Telecommunication Facilities; Assessing and Managing Contaminants in Soils to Protect Human Health, Plantation Forestry and Freshwater.

Of these, only the National Environmental Standard for Human Drinking Water is relevant to this application.

<u>National Environmental Standard for Sources of Human Drinking Water (NESSHDW)</u>
The NESSHDW commenced on 20 June 2008. This standard is a regulation enacted by an Order in Council, under s43 of the Resource Management Act. 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 nearest take for human drinking water is four kilometres downstream at Mercer. Based on the effects assessment in section 6.1, I am satisfied that this application is not contrary to the purpose of the NESSHDW.

6.2.2 National policy statements

National Policy Statement for Freshwater Management 2020 (NPSFM)
The NPS came into force on the 3 September 2020, with a requirement for it to be given effect "as soon as reasonably practicable".

I have reviewed this application against the NPSFM provide the following commentary regarding the objectives and policies I consider to be relevant:

Objective 1: The Objective of this National Policy Statement is to ensure that natural and physical resources are managed in a way that prioritises:

(a) first, the health and wellbeing of water bodies and freshwater ecosystems
    - I consider that the proposed reductions in contaminant parameters provide for improvements in the health and wellbeing of the Waikato River and the downstream catchment.
(b) second, the health needs of people (such as drinking water)
    - The nearest take for human drinking water is approximately four kilometres downstream from the discharge. I consider that the wastewater treatment upgrades (and corresponding reduction in contaminant parameters, particularly *E. coli*) provide for such needs.
(c) third, the ability of people and communities to provide for their social, economic, and cultural well-being, now and in the future.
    - I consider that this application provides for the well being of communities by balancing the need for a municipal wastewater system and improved wastewater treatment with economic realities. Community stakeholders have been engaged with the application process and provided correspondence in support of the proposal.

Policy 1: Freshwater is managed in a way that gives effect to Te Mana o te Wai.
- The applicant has undertaken consultation with both local Iwi and river users, and proposes to establish a liaison group with Ngāti Naho that will be maintained for the term of this consent.
- This application proposes staged reductions (upon granting and within 12 months of consent commencement) in contaminant discharges which provides for restoration of water quality and aquatic ecology.

Policy 2: Tangata whenua are actively involved in freshwater management (including decision making processes), and Māori freshwater values are identified and provided for.
- The applicant has undertaken consultation with both local Iwi and proposes to establish a liaison group with Ngāti Naho that will be maintained for the term of this consent. In response to

consultation, Ngāti Naho have made a series of recommendations which I have incorporated into the proposed consent conditions.

Policy 9: The habitats of indigenous freshwater species are protected.

- The Waikato River is identified as an indigenous fishery class stream in the WRP. I consider that the proposed reductions in contaminant parameters is consistent with this policy.

In summary, I have assessed the application against the NPSFM and am satisfied that it is consistent with the stated objectives and policies.

6.2.3 Regional Policy Statements

The RPS 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.

The Waikato Regional Council's 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), managing the built environment (Issue 1.4) the relationship of tangata whenua with the environment (Issue 1.5), and the health and wellbeing 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 3.2)
- Decision making (Objective 3.3);
- Health and wellbeing of the Waikato River (3.4)
- Ecosystem services (Objective 3.8);
- Relationship of tangata whenua with the environment (Objective 3.9);
- Sustainable and efficient use of resources (Objective 3.10);
- Air quality (Objective 3.11);
- Built environment (Objective 3.12)
- Mauri and values of freshwater bodies (Objective 3.14);
- Ecosystem integrity and indigenous biodiversity (Objective 3.19)
- Amenity (Objective 3.21);

Policies

- Integrated management (4)
- Air (5)
- Built environment (6)
- Fresh water bodies (8)
- Indigenous biodiversity (11)
- Landscape (including seascape), natural character and amenity (12)

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.

6.2.4 Regional Plan

The Waikato Regional Plan ("WRP") is operative. The purpose of regional plans is to help the Council carry out its functions under s30 of the RMA.

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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.

The Waikato River is classified as a "Surface Water Class", "Contact Recreation Water Class" and "Fishery Class" water body in the Waikato Regional Plan; in evaluating this application, I have had regard to standards 3.2.4.2, 3.2.4.4 and 3.2.4.5, and I am of the opinion that the while the proposed discharges will contribute to cumulative loads within the river, the scale of dilution means that effects associated specifically with this discharge will not be measurable beyond the mixing zone.

Discharges to Water

Objective 3.5.2 focuses on discharges into water that could have adverse effects on water quality and aquatic habitat. 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:

Policy 3 states that directs that alternatives to direct discharges to water should be promoted, in this instance, an options assessment determined that that the implementation of land discharge was not economically viable for this discharge, informed by the assessment that the direct discharge to the Waikato River will have effects that are less than minor.

Policy 6 requires that the relationship of tangata whenua as Kaitiaki is recognised and provided for with regard to the avoidance of significant effects, and the remedy or mitigation of cumulative adverse effects on the mauri of water, any waahi tapu sites, and any other identified taonga. I have recommend consent conditions that capture matters arising from consultation with local iwi.

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.

Proposed Waikato Regional Plan Change 1: Waikato and Waipā River Catchments

On 22 October 2016, WRC notified a proposed change to the WRP in relation to water quality within the Waikato and Waipā River catchments. Subsequent submission periods and hearings were held. On 22 April 2020 the Decisions Version was notified and this is the current version. I understand appeals to the Environment Court have been lodged against the plan in its entirety. However, despite this, given the maturity of the planning process, it is my view that the policies within PC1 can be given considerable (but not "full") weight.

The proposed plan change is referred to as "Proposed Waikato Regional Plan Change 1: Waikato and Waipā River Catchments ("PC1"). It introduces regulatory provisions into the WRP to assist with the achievement of the Vision and Strategy for the Waikato River and to implement the National Policy Statement for Freshwater Management. The proposed discharges to water and air are within the Lower Waikato River Freshwater Management Unit boundary as defined by PC1.

Policy 11/Te Kaupapa Here 11:
When considering resource consent applications for point source discharges of nitrogen, phosphorus, sediment and microbial pathogens to water or onto or into land in the Waikato or Waipā River catchments, subject to policies 12 and 13 and having regard to the need to achieve Objective 1, provide for the continued operation and development of regionally significant infrastructure and regionally significant industry.

Comment
I note that the Meremere WWTP meets the criteria of 'regionally significant infrastructure', as defined by the Operative Waikato Regional Policy Statement 2016, which identifies that such infrastructure includes "lifeline utilities as defined in the Civil Defence and Emergency Management Act 2002", which in Schedule 1 Part B defines a lifeline utility as "An entity that provides a waste water or sewerage network or that disposes of sewage or storm water."[1]

Therefore Policy 11 applies to this activity and we are directed to provide for the continued operation of this wastewater treatment plant, subject to Policies 12 and 13 which I will consider now.

Policy 12/Te Kaupapa Here 12:

(a) *When considering resource consent applications for point source discharges of nitrogen, phosphorus, sediment or microbial pathogens to water or onto or into land in the Waikato or Waipā River catchments, require demonstration that the proposed discharge represents the Best Practicable Option at the time resource consent is being considered, to prevent or minimise the adverse effects of the discharge.*

(b) *Where, despite the adoption of the Best Practicable Option, there remain residual adverse effects, measures should be proposed at an alternative location(s) to the point source discharge, for the purpose of ensuring positive effects on the environment sufficient to offset or compensate for any residual adverse effects of the discharge(s) that will or may result from allowing the activity, provided that:*
    i. *the primary discharge does not result in the discharge having either significant adverse effects on aquatic life or toxic adverse effects; and*
    ii. *the measure relates to the contaminant(s) giving rise to the residual adverse effects; and*
    iii. *the measure occurs upstream within the same sub-catchment in which the primary discharge occurs and if this is not practicable, then upstream within the same Freshwater Management Unit or a Freshwater Management Unit located upstream; and*
    iv. *it remains in place for the duration of the adverse residual effect and is secured by consent condition or another legally binding mechanism; and*

(c) *For the purpose of establishing if a discharge will have a residual adverse effect, relevant considerations include:*
    i. *the extent to which any replacement discharge(s) fails to reduce the contaminant load of an existing discharge proportionate to the decrease required to achieve the short-term numeric water quality values in Table 3.11-1 or the steady progression towards the 80-year water quality attribute states in Table 3.11-1, including at downstream monitoring sites; and*

[1] http://www.legislation.govt.nz/act/public/2002/0033/latest/DLM151443.html

ii. *in respect of a new discharge, whether any new discharge will increase the load of nitrogen, phosphorus, sediment and/or microbial pathogens contaminants to either the Waikato River or Waipā River catchments; and in either case*

iii. *where the discharge is associated with the damming or diversion of water, whether it will exacerbate the rate or location of those contaminants that would otherwise have occurred without the damming or diversion, and if so, the extent of such increase or exacerbation.*

Comment

(a) I consider the Best Practicable Option is being applied for the discharge from the Meremere WWTP. In coming to this conclusion, I refer to the definition from the RMA and have had regard to each of the matters:
- *Nature of the discharge and the sensitivity of the receiving environment to adverse effects*. I refer to the effects assessment in section 6.1 of this report
- *The financial implications, and the effects on the environment, of that option when compared with other options*. And *the current state of technical knowledge and the likelihood that the option can be successfully applied.* The applicant is proposing a significant upgrade after consideration of both the need to improve the quality of effluent discharge and implement treatment strategy that is affordable by the community.

(b) I note the wording within this policy is deliberately[2] "*should be proposed*" and that the effects of this discharge are less than minor. In terms of cumulative effects, the reductions in discharge parameters sought will reduce contaminant loads discharged to the Waikato River.

(c) I consider that this "replacement discharge" with proposed, staged reductions in discharge parameters over the first year of consent will result in contaminant load reductions proportionate to the sought short-term numeric water quality values in Table 3.11-1.

Policy 13/Te Kaupapa Here 13:

When considering a resource consent application for point source discharges of nitrogen, phosphorus, sediment or microbial pathogens to water or onto or into land in the Waikato or Waipā River catchments, and subject to Policy 12, consider the contribution made to the nitrogen, phosphorus, sediment and microbial pathogen catchment loads in the Waikato River or Waipā River catchments and the impact of that contribution on the achievement of the short-term numeric water quality values in Table 3.11-1 and, where applicable, the steady progression towards the 80-year water quality attribute states in Table 3.11-1, taking into account the following:

(a) The contribution of nitrogen, phosphorus, sediment or microbial pathogens as a proportion to the catchment load and the net change proposed in that contribution;

(b) The water quality of the receiving environment and how the proposed discharge will contribute to:

i. *The protection of water quality where the receiving environment is of high water quality; or*

ii. *The improvement in water quality in a manner proportional to the impact of the discharge where the receiving environment is less than high quality.*

(c) Where relevant, reduction in the discharge of nitrogen, phosphorus, sediment or microbial pathogens within the previous consent term resulting from past plant upgrades; and

(d) Whether it is appropriate to stage future mitigation actions to allow investment costs to be spread over time to contribute to the achievement of the water quality attribute values and states specified above;

(e) The potentially diminishing return on investment in treatment plant upgrades in respect of any resultant reduction in nitrogen, phosphorus, sediment or microbial pathogens when

[2] Proposed Waikato Regional Plan Change 1: Waikato and Waipā River Catchments – The Hearing Panel's Recommendation Report, volume 1 of 2, Para 1331

treatment plant processes are already achieving a high level of contaminant reduction through the application of the Best Practicable Option and the nature of any offsetting/compensation of effects that has been proposed by the applicant in accordance with Policy 12;

(f) Where existing point source discharge locations are being amalgamated, the combined effects on water quality when comparing the effects of the proposed discharge/s to the existing discharges;

(g) The influence of seasonal climatic conditions and other natural processes that affect the assimilative capacity of waterbodies and resultant ability to achieve Objectives 1 and 2;

(h) Any beneficial social, cultural and economic effects of the point source discharge;

(i) The application of reasonable mixing (in accordance with Policy 3.2.3.8) may be acceptable as a transitional measure during the life of this Chapter;

(j) Whether the activity solely transports flows from upstream across or through a dam or control structure without adding to nitrogen, phosphorus, sediment or microbial pathogens loads in the flow or exacerbating effects of those contaminants, and the practical ability to reduce contaminants in the flow.

Comment

I have considered the consent application in light of this policy. As is discussed above, I consider the planned upgrade and discharge quality is the Best Practicable Option for servicing the Meremere village's wastewater needs. As also discussed, I consider that the decreases in nutrients, suspended solids and *E. coli* proposed will result in contaminant load reductions proportionate to the sought short-term numeric water quality values in Table 3.11-1.

Policy 14/Te Kaupapa Here 14:

In addition to having regard to the matters set out in Policy 1.2.4.6, when determining an appropriate duration for any consent granted for a point source discharge have regard to the following matters:

(a) The matters set out in Policies 12 and 13;

(b) The magnitude and significance of the investment made or proposed to be made in contaminant reduction measures and any resultant or predicted improvement in the water quality of the receiving environment;

(c) The desirability of providing certainty of investment where contaminant reduction measures are proposed (including investment in treatment plant upgrades or land-based application technology); and

(d) The need not to compromise a steady improvement in water quality consistent with achievement of Objective 1.

The application documents request a term of 35 years. Give the significant upgrades committed to, I am satisfied that this term is consistent with this policy.

Policy 19/Te Kaupapa Here 19:

When managing resource consent applications related to the discharge of nitrogen, phosphorus, sediment and microbial pathogens, seek opportunities to advance achievement of the objectives in Te Ture Whaimana o Te Awa o Waikato for the Waikato and Waipā Rivers, including, but not limited to:

(a) Opportunities to enhance biodiversity and the functioning of ecosystems; and

(b) Opportunities to enhance access and recreational values associated with the rivers.

Comment:

As outlined in section 6.1 of this report, the proposed improvements to all of the parameters listed in this policy will contribute positively to water quality in the Waikato River and hence the other factors as listed above.

6.2.5 Vision and Strategy

Under s11 of the Waikato-Tainui Raupatu Claims (Waikato River) Settlement Act 2010 and other river "settlement" legislation, the Vision and Strategy is deemed to be part of the Waikato Regional Policy Statement. Under s104(1)(b), the Council must "have regard to" the RPS when considering any application for resource consent. However, additionally, the river settlement legislation also requires that the Council must have "particular regard" to the Vision and Strategy for the Waikato River when carrying out any of its functions under RMA 1991. Through case law, the Vision and Strategy is acknowledged as the primary, direction-setting policy for the River. Case law indicates that activities which are subject to the V&S are required to provide for the protection and restoration of the River, and that this will require "betterment" to an extent proportionate with the scale of the activity and its effects.

I have had particular regard to the Vision and Strategy in making my assessment and note the key objectives and strategies regarding the proposal:

Objectives

a. The restoration and protection of the health and wellbeing of the Waikato River

g. The recognition and avoidance of adverse cumulative effects, and potential cumulative effects, of activities undertaken both on the Waikato River and within its catchments on the health and wellbeing of the Waikato River

h. The recognition that the Waikato River is degraded and should not be required to absorb further degradation as a result of human activities.

Strategies

9. Encourage and foster a 'whole of river' approach to the restoration and protection of the Waikato River, including the development, recognition and promotion of best practice methods for restoring and protecting the health and wellbeing of the Waikato River.

10. Establish new, and enhance existing, relationships between Waikato-Tainui, other Waikato River iwi (where they so decide), and stakeholders with an interest in advancing, restoring and protecting the health and wellbeing of the Waikato River.

I consider that the proposed conditions that require staged reductions in nutrients, suspended solids, biochemical oxygen demand *E. coli* directly address these matters, by way of reduction in the cumulative loads discharged to the Waikato River. Further, I consider that the requirement for "betterment" is met by the proffered reductions in effluent parameters.

6.3 Other Matters

Waikato-Tainui Environmental Plan

The Waikato-Tainui Environmental Plan identifies key resource based issues for Waikato-Tainui. The plan sets out Waikato-Tainui's vision statement for environmental and heritage issues and key strategic objectives such as tribal identity and integrity, including "to grow our tribal estate and manage our natural resources." The plan is designed to enhance Waikato-Tainui participation in resource and environmental management.

I have assessed this proposal against the objectives and outcomes set out in this plan and overall I consider that the proposal is consistent with those objectives and outcomes.

6.4 Section 105 matters

Section 105 of the RMA requires a consent authority to have regard to the following matters when considering a discharge permit:

(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.

I am satisfied that the applicant has undertaken an appropriate options assessment and selection process in preparing this application. Section 6 of this report details the effects assessment of the discharge.

6.5 Section 107 matters

Section 107(1) of the RMA restricts a consent authority from granting a discharge permit that contravenes section 15 or 15A if, after reasonable mixing, the contaminant or water discharged is 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.

I have considered the likelihood for the above effects to occur in the receiving environment, and the discharges from the WWTP are not expected to result in any of these.

6.6 Customary activities

I am satisfied that this application will not impact on any notified customary activities.

7 Relevant Part 2 Considerations

As per current case law (Davidson, Court of Appeal, 2018), I consider that an assessment of Part 2 matters is necessary. Part 2 sets out the purpose and principles of the RMA, and relevant considerations (section 5 – 8) are outlined below.

- Purpose (5)
- Matters of National Importance (6)
- Other Matters (7)
- Treaty of Waitangi (8)

Each section has been considered in relation to this application, and I conclude that the proposed discharge of treated wastewater to the Waikato River is not contrary to Part 2 matters.

8 Discussion/Conclusions

Watercare has applied for resource consents to authorise the discharge of treated municipal wastewater to the Waikato River (with associated discharges to air and groundwater) and to occupy the Waikato River with a discharge structure. The sought activities are discretionary activities and accordingly have 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 less than minor, and the application was non-notified. 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.

I have assessed the application against the objectives and policies within the Regional Policy Statement, Regional Plan, and the Waikato-Tainui Environmental Plan. I consider that the application does not compromise the objectives and policies within these documents.

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

I consider that the proposal provides the overall wellbeing of the local community.

In weighing these considerations, it is my opinion that it would achieve the purpose of the Act as defined in section 5 of the RMA, to **grant** consent to enable the continued operation of the Meremere municipal wastewater treatment plant.

The applicant has sought a 35-year consent term; I consider that this term can be supported.

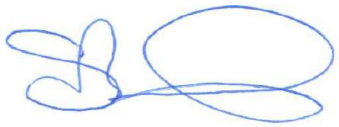
9 Monitoring

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 activities during enabling works and subsequent operation. It should be noted that if a condition(s) of consent is not complied with, the site may receive an elevated level of monitoring until Waikato Regional Council is satisfied that the consents are being exercised in accordance with consent conditions.

10 Recommended Decision

I recommend that in accordance with s104B resource consent application be granted in accordance with the duration and conditions prescribed in the attached Resource Consent Certificates 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
- The activities will not allow any of the effects described in s107(1) (c) to (g) of the Resource Management Act 1991



Stuart Beard **Date: 09 December 2020**

Resource Officer

Resource Use

11 Decision

That the resource consent applications are granted in accordance with the above recommendations.

Hugh Keane **Date: 10 December 2020**

Team Leader

Resource Use