

Site Compliance Report

Site No: REG612219
Site Owner: Waikato District Council
Site Name: Te Kauwhata WWTP : Waikato District Council
Date: 8 November 2021

1 INTRODUCTION

The following resource consents are held for the site:

Resource Consent	Status	Description	Commenced	Expiry
AUTH117991.01.01	Current	Discharge treated municipal wastewater from the Te Kauwhata Wastewater Treatment Plant into Lake Waikare	4/07/2013	4/07/2028
AUTH117992.01.01	Current	Discharge contaminants, namely odour, into the air from the Te Kauwhata WWTP	4/07/2013	4/07/2028

This report examines the level of compliance of Waikato District Council with the selected conditions of the resource consents.

2 BACKGROUND

The Te Kauwhata wastewater treatment plant (WWTP) receives, treats and discharges wastewater from the Te Kauwhata township and surrounds as well as Springhill Prison. The local area has seen a significant amount of subdivision development over the past 6 years and this increased load has caused the treatment efficiency to drop to a non-compliant level. There is a large-scale development at the Lakes development, and this is likely to increase the pressure on the existing performance at the plant.

The WWTP is subject to an Abatement Notice to comply with conditions of resource consents and new improved technology is the only viable way to do this. The consent holder has commenced works for the installation of Membrane Aeration Bio Reactor (MABR) technology to enable the plant to meet the limits of the consent. The consent holder has included the following executive summary in their annual report:

Executive Summary

A 'desktop' investigation into feasible disposal options for the Te Kauwhata wastewater treatment plant (WWTP) has been undertaken and includes a review of the previous disposal options report completed by PDP in 2007. Five feasible options in this new report were identified, a continued discharge to Lake Waikare with significantly higher quality treated effluent, discharge via constructed wetlands to either Lake Waikare or Whangamarino wetland, disposal to a possible rapid infiltration site south of Rangiriri and disposal via a rock seep on the banks of the Waikato River. All disposal options require a level of effluent quality improvement at the WWTP. The option to continue disposal directly to the Lake includes the installation of a membrane bioreactor (MBR) and a denitrification bed, while the other four options include some minor upgrades to improve nitrogen and phosphorus removal with the inclusion of a UV disinfection system.

The very rough order costs (VROC) CAPEX estimates for the options ranged from \$3.4M to \$5.6M and OPEX estimates for the additional treatment upgrades and disposal methods for each option ranged from \$120k to \$200k.

Several other disposal options were considered that required effluent to be pumped all the way to Meremere and disposed of via the existing Meremere WWTP outlet, and a separate disposal option of slow rate irrigation. These options were not deemed feasible due to cost and distance and were not considered further.

2.1 PREVIOUS COMPLIANCE HISTORY

Date Period	Site Compliance
1 July 2020 to 30 June 2021	Significant Non-Compliance
1 July 2019 to 30 June 2020	Significant non-compliance
1 July 2018 to 30 June 2019	Significant non-compliance
1 July 2017 to 30 June 2018	Partial compliance
1 July 2016 to 30 June 2017	Partial compliance

Please note: For the 2021-22 compliance year WRC has commenced using the new MfE compliance monitoring scoring regime that has been implemented nationwide for all regional councils. This new scoring system is designed to bring all the regions into line and make the measuring of national compliance much easier to compare.

3 COMPLIANCE ASSESSMENT

Unless otherwise specified in this document this assessment covers the period from **1 July 2020 to 30 June 2021**.

This compliance assessment has been undertaken based on the submitted annual report by the consent holder, monitoring data supplied throughout the compliance period and any site inspections undertaken. Some administration, duplicate or irrelevant conditions have been omitted for brevity.

Please note that a description of the classification system used to describe compliance status is given in Appendix 1 of this report.

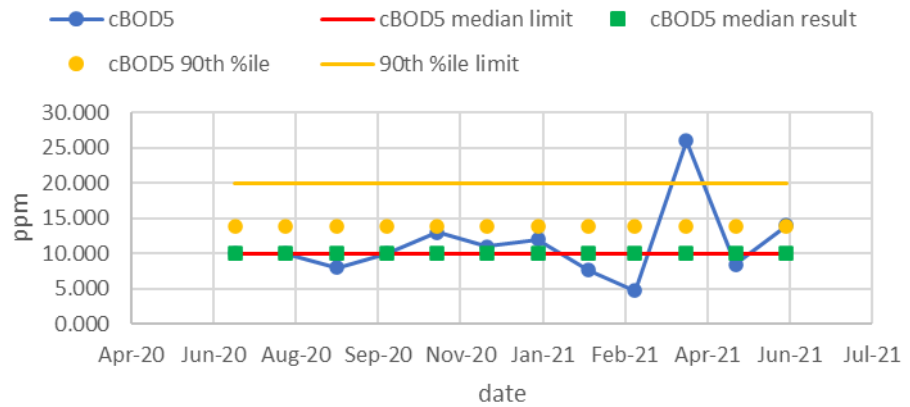
AUTH117991.01.01 - Discharge to water

Activity Authorised: Discharge treated municipal wastewater from the Te Kauwhata Wastewater Treatment Plant into Lake Waikare	
Condition No.	Description
1	The wastewater treatment and disposal system shall be designed, operated and maintained in general accordance with: (i) "Te Kauwhata Wastewater Treatment Plant Discharge Application – Assessment of Environmental Effects" Pattle Delamore Partners Ltd., January 2008 (Doc Ref 1278369), (ii) "Te Kauwhata Wastewater Treatment Plant Discharge Applications 117991 and 117992" Pattle Delamore Partners Ltd., September 2010 (Doc Ref 1770596), and (iii) "Te Kauwhata Wastewater Treatment Plant Discharge Applications 117991 and 117992: Update to Assessment of Environmental Effects" Pattle Delamore Partners Ltd., January 2011 (Doc Ref 1902521) subject to the resource consent conditions below, which shall prevail should any inconsistency occur between the conditions and the application documents.
Evidence	This WWTP is not being operated in line with the documents listed. Significant and ongoing non-compliance has been occurring and the discharge to the lake continues for non-compliant quality treated wastewater. The plant is visited at least twice per week.
Status Reasoning	
Action Required	Continue with the planned upgrade and keep WRC updated with progress reports on a monthly basis
3	The maximum volume of treated wastewater discharged to Lake Waikare shall not exceed 3,600 cubic metres per day.

Evidence	Compliant- max volume discharged 2098m3 per day in July 2020	
Status Reasoning		
Action Required		Full Compliance
4	The annual average volume of treated wastewater discharged to Lake Waikare shall not exceed 1,100 cubic metres per day.	
Evidence	Compliant - annual average was 856.1m3/day	
Status Reasoning		
Action Required		Full Compliance
5	<p>The consent holder shall investigate alternative disposal locations for the disposal of treated wastewater from the Te Kauwhata Wastewater Scheme and, within two years of the commencement of this consent, shall provide a report to the Waikato Regional Council with a preliminary assessment of the alternative options. As a minimum, the report shall: (a) Provide details of the alternative options that have been identified; (b) Identify those options which are not considered practicable and the rationale for this; (c) Identify those options which are considered potentially feasible and the rationale for this. For the purposes of this condition, and as a minimum, the options of: irrigation to pasture/crops, rapid infiltration to land and further wetland treatment, are to be included, inclusive of any associated wastewater treatment plant upgrade works. (d) Identify the further investigations needed to better understand the practicability of each of the options identified in clause (c) above, and the timeframe for their assessment, including any staging of investigations; (e) Provide technical worksopes for those investigations identified in clause (d) that are to be undertaken over the next two years for inclusion in the report required by Condition 6; and (f) Describe the consultation undertaken during the preparation of the report, in particular the consultation undertaken pursuant to condition 18 of this consent, (g) Assess progress against the timetable contained in Appendix 2. Note: The Consent Holder has entered into an agreement with various third parties in respect of the evaluation of alternatives and records its commitment to following the process outlined in that agreement.</p>	
Evidence	<p>The report titled "Te Kauwhata Wastewater Treatment Disposal Options" was prepared by Pattle Delamore Partners in 2007 prior to the Resource Consent being granted. Options have been investigated and most land-based options have been ruled out as being:</p> <ul style="list-style-type: none"> • too expensive • unsuitable land quantity • unsuitable land geology • site owners not willing to lease land <p>Mid Waikato Servicing Strategic plan which includes alternative options were submitted to WRC as Appendix Eight to the 2019-20 Annual report.</p> <p>The current short to medium term option being pursued is for an installation of a MBR and ultra-violet disinfection prior to discharge to Lake Waikare. Longer term options involve the discharge of highly treated effluent to the Waikato River.</p>	
Status Reasoning		
Action Required		Full Compliance
6	<p>Within two years of completion of the report required by condition 5 and every two years thereafter, the consent holder shall provide a further report on alternative options to the Waikato Regional Council and as a minimum the report shall provide: (a) Details of the further investigations undertaken in relation to the alternative options identified in the report required by clauses (d) and (e) of condition 5 of this consent; (b) An updated assessment of the practicability of implementing each of the options identified in clause (c) of condition 5 of this consent; (c) Any proposed amendments to the assessments being undertaken pursuant to clause (d) of condition 5 of this consent and the rationale for this; and (d) Describe the consultation undertaken during the preparation of the report, in particular the consultation undertaken pursuant to condition 18 of this consent. (e) Assess progress against the timetable contained in Appendix 2.</p>	
Evidence	Mid Waikato Servicing Strategic plan which includes alternative options were submitted to WRC as	

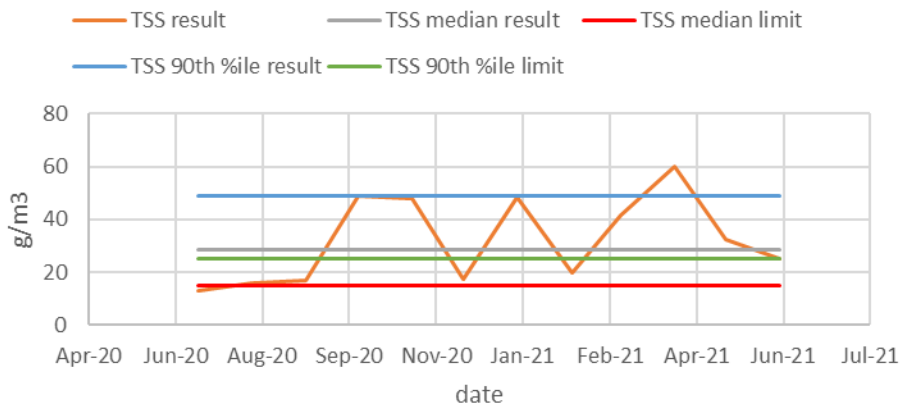
	Appendix Eight to the 2019-20 Annual report.	
Status Reasoning		
Action Required		Full Compliance
7	Notwithstanding the stated limits in conditions of this consent, the consent holder shall operate the treatment system with the objective of achieving the highest final effluent quality that can reasonably and practicably be achieved having regard to the capabilities of the treatment system, financial implications, the current state of technical knowledge and best wastewater management practice. For the avoidance of doubt, nothing in this condition requires the consent holder to achieve lower limits than those specified in condition 8 of this consent.	
Evidence	The system is operated to the best of its ability however the influent load has increased to a point where the current treatment system cannot comply with many of the determinant limits. a planned upgrade is about to commence which the consent holder states will significantly improve the performance and hence the compliance of the treatment plant.	
Status Reasoning		
Action Required	Review and take all available actions and improvements to processes to improve the performance of the WWTP	Moderate Non-Compliance
8	The consent holder shall ensure that the quality of the discharge to Lake Waikare shall comply with the following limits: i) The median five day carbonaceous biochemical oxygen demand (cBOD5) concentration shall not exceed 10 grams per cubic metre and the 90th percentile shall not exceed 20 grams per cubic metre; ii) The median suspended solids (SS) concentration shall not exceed 15 grams per cubic metre and the 90th percentile shall not exceed 25 grams per cubic metre; iii) The median Total Kjeldahl Nitrogen (TKN) concentration shall not exceed 6 grams per cubic metre and the 90th percentile shall not exceed 12 grams per cubic metre; iv) The median total nitrogen (TN) concentration shall not exceed 8 grams per cubic metre; v) The median total nitrogen load (TNload) shall not exceed 8.8 kilograms per day; vi) The median total phosphorus (TP) concentration shall not exceed 5.6 grams per cubic metre; vii) The median total phosphorus load (TPload) shall not exceed 3.1 kilograms per day; viii) The median Escherichia coli (E-coli) concentration in any 12 month period shall not exceed 1500 MPN per100 millilitres. For the purposes of this condition, to determine compliance with the median limits (excluding E.coli), no more than six samples in any 12 consecutive monthly samples over the period 1 July to 30 June each year shall exceed the specified limit. To determine compliance with the median E.coli limit, no more than 13 samples in any 26 consecutive weekly samples shall exceed the specified limit. To determine compliance with the 90th percentile limits, no more than one sample in any ten consecutive monthly sampling events shall exceed the specified limit. Note: For the avoidance of doubt, E. coli sampling is included on a fortnightly basis due to the contact recreation status of Lake Waikare. Note: Compliance with Condition 8 shall be determined at a sampling location immediately prior to the rock seep outfall.	
Evidence	i) The median five day carbonaceous biochemical oxygen demand (cBOD5) concentration shall not exceed 10 grams per cubic metre and the 90th percentile shall not exceed 20 grams per cubic metre; - Compliant	

cBOD5 Te Kauwhata WWTP 2020-21

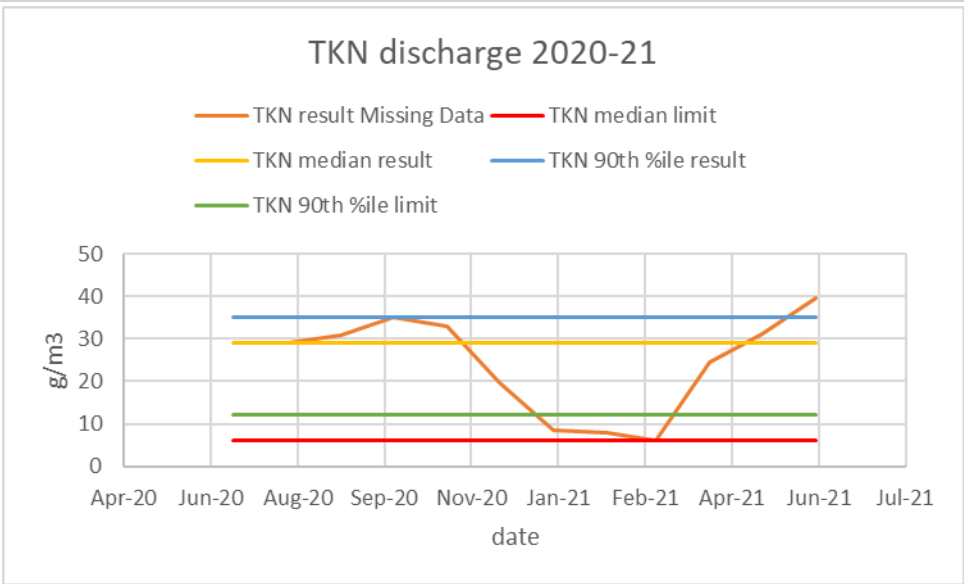


ii) The median suspended solids (SS) concentration shall not exceed 15 grams per cubic metre and the 90th percentile shall not exceed 25 grams per cubic metre; - Non-compliant- Median result 28.8g/m³, Non-compliant 90%ile result 48.96g/m³

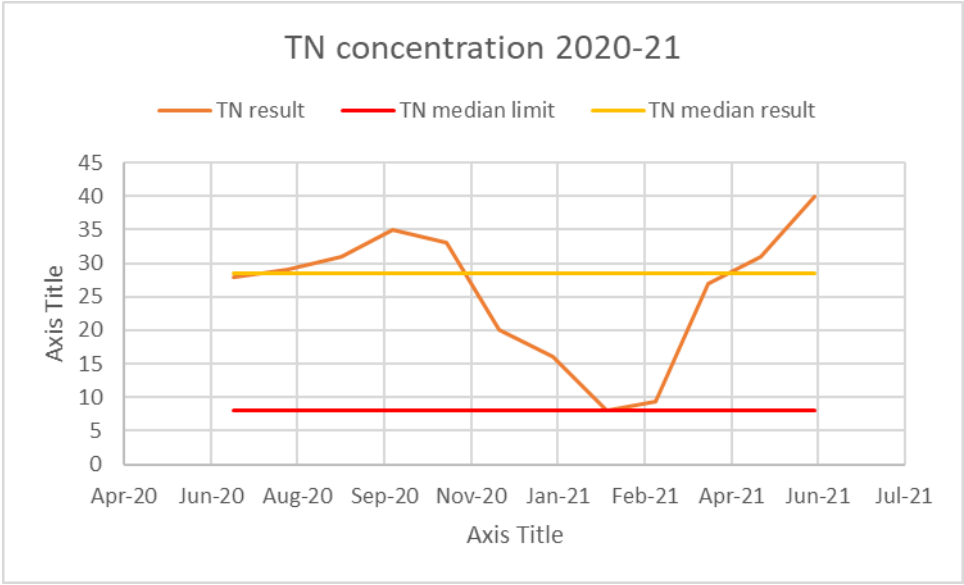
TSS discharge 2020-21



iii) The median Total Kjeldahl Nitrogen (TKN) concentration shall not exceed 6 grams per cubic metre and the 90th percentile shall not exceed 12 grams per cubic metre; Non-compliant- Median result 29g/m³

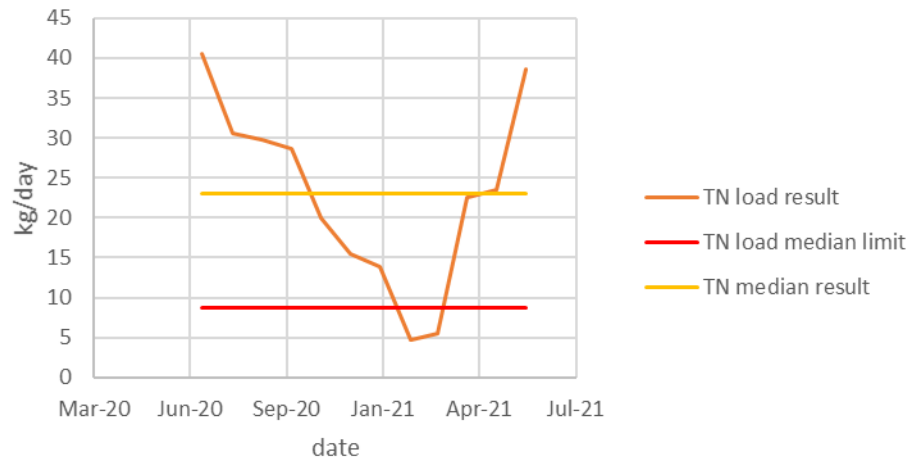


iv) The median total nitrogen (TN) concentration shall not exceed 8 grams per cubic metre; Non-compliant- Median result 28.5g/m³



v) The median total nitrogen load (TNload) shall not exceed 8.8 kilograms per day; compliant- Median result 3.9 kg/day

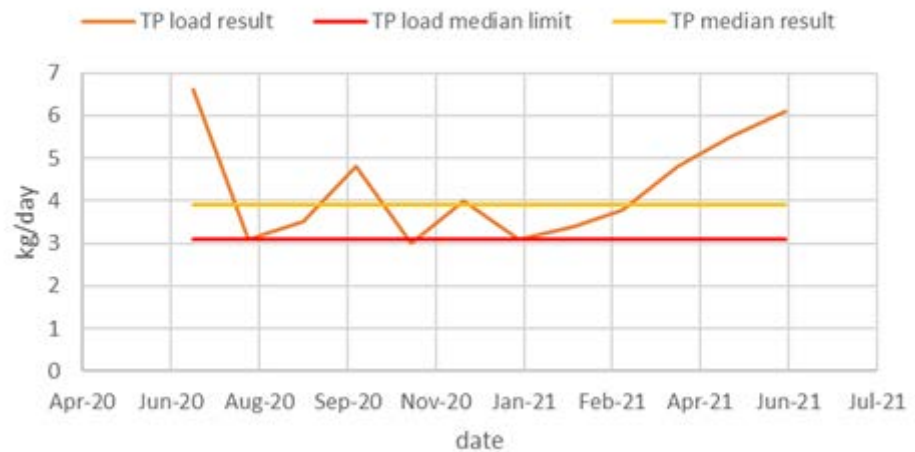
Tn Load discharged 2020-21



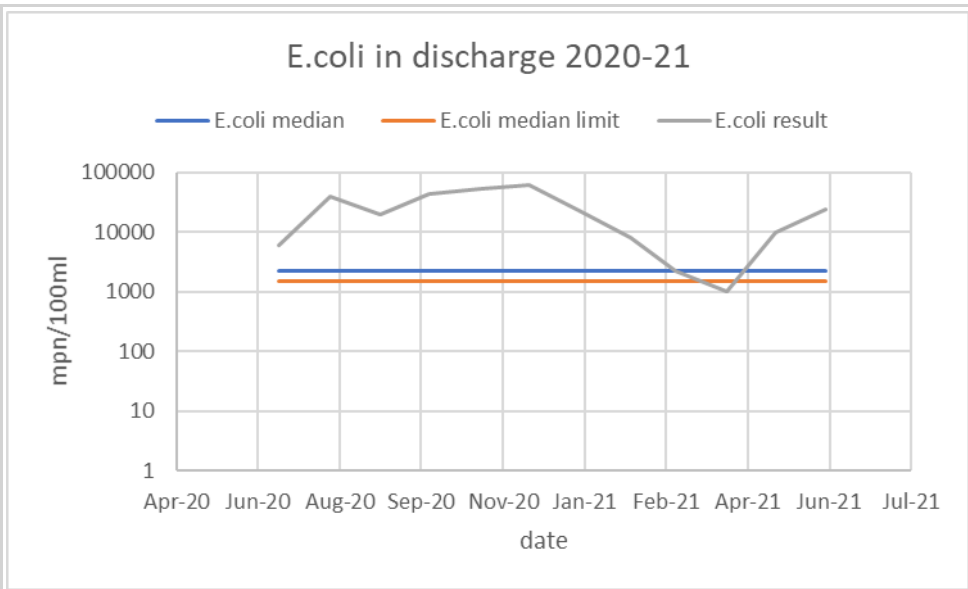
vi) The median total phosphorus (TP) concentration shall not exceed 5.6 grams per cubic metre; Compliant- Median result 5.5 g/m³

vii) The median total phosphorus load (TPload) shall not exceed 3.1 kilograms per day; Non-compliant- Median result 4.2 kg/day

TP Load discharged 2020-21



viii) The median Escherichia coli (E-coli) concentration in any 12 month period shall not exceed 1500 MPN per100 millilitres. For the purposes of this condition, to determine compliance with the median limits (excluding E.coli), no more than six samples in any 12 consecutive monthly samples over the period 1 July to 30 June each year shall exceed the specified limit. To determine compliance with the median E.coli limit, no more than 13 samples in any 26 consecutive weekly samples shall exceed the specified limit. Non-compliant- Median result 2250 cfu/100mL



To determine compliance with the 90th percentile limits, no more than one sample in any ten consecutive monthly sampling events shall exceed the specified limit.

Note: For the avoidance of doubt, E. coli sampling is included on a fortnightly basis due to the contact recreation status of Lake Waikare.

Note: Compliance with Condition 8 shall be determined at a sampling location immediately prior to the rock seep outfall.

Status Reasoning

Continued non-compliances as the current WWTP is unable to achieve treated wastewater to the required standard.

Action Required

The consent holder must take all reasonable steps to improve the treatment performance of the WWTP using current and available equipment and processes. The planned upgrade must continue as agreed and to the agreed timeframes.

Significant Non-Compliance

9

The consent holder shall continuously monitor the flow rate of wastewater entering and leaving the treatment plant and shall record the total daily influent and discharge volumes.

Evidence

Status Reasoning

Action Required

Full Compliance

10

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 8. The location(s) and method(s) used for the sampling shall be to the satisfaction of a Programme Manager of the Resource Use Group acting in a technical certification capacity.

Evidence

Status Reasoning

Action Required

Full Compliance

11

The consent holder shall take grab samples of the treated wastewater: a) Subject to condition 11 b), on a monthly basis from the sampling location(s) referred to in condition 10 of this consent, b) Notwithstanding condition 11 a), fortnightly sampling from the sampling location(s) referred to in condition 10 of this consent for E. coli all for the purpose of determining compliance with condition 8.

Evidence

Status Reasoning

Action Required

Full Compliance

12

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.

Evidence		
Status Reasoning		
Action Required		Full Compliance
13	The consent holder shall prepare an Operations and Management Plan. 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 and consent 117992. As a minimum the Plan shall include the following matters: i) A description of the wastewater treatment plant including as-built plans for the wastewater treatment facilities; ii) A description of the sequence, timing and methods of construction of upgrades to the treatment plant; iii) A description and schedule of the routine inspection, monitoring and maintenance procedures to be undertaken to ensure effective plant operation; iv) A schedule of monitoring to be carried out to ensure effective plant operation and compliance with consent conditions; v) A sampling location plan; vi) A schedule of the treatment plant critical aspects and the detailed response and contingency plans to address anticipated variations from normal plant operation; vii) A Botulism Management Plan to be developed following consultation with Auckland – Waikato Fish and Game; viii) Procedures for recording routine maintenance and all repairs that are undertaken; ix) Chain of command, responsibility and notification protocols; x) Procedures for improving and/or reviewing the plant management plan. This Plan shall be lodged with Waikato Regional Council for approval by a Programme Manager of the Resource Use Group acting in a technical certification capacity within six months of commencement of this consent, and shall be reviewed and updated annually 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.	
Evidence	A copy of the updated O&M Plan was sent to WRC on 10 December 2014. Watercare Ops team is currently reviewing the Operation and Management plans across all Wastewater treatment plants. An updated O&M plan for the Te Kauwhata WWTP will be submitted to WRC upon completion of the upgrade works.	
Status Reasoning	This Plan shall be lodged with Waikato Regional Council for approval by a Programme Manager of the Resource Use Group acting in a technical certification capacity within six months of commencement of this consent, and shall be reviewed and updated annually 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.	
Action Required	Please submit an updated O&M Plan as soon as the upgrades to the plant are complete.	Low Risk Non-Compliance
14	The treatment system and discharge to Lake Waikare shall be operated, maintained and managed by appropriately experienced personnel in accordance with the Operations and Management Plan pursuant to condition 13 of this consent.	
Evidence		
Status Reasoning		
Action Required		Full Compliance
15	The consent holder shall 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 13.	
Evidence	All contractors employed at the treatment site are inducted in both health and safety procedures and relevant conditions of this consent.	
Status Reasoning		
Action Required		Full Compliance
16	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: i) The date, time and duration of the alleged event/incident that has resulted in the complaint; ii) The location of the complainant when the alleged event/incident was detected; iii) The possible cause of the alleged	

	<p>event/incident; iv) The weather conditions and wind direction at the site when the event/incident allegedly occurred, if significant to the complaint; v) Any corrective action undertaken by the consent holder in response to the complaint. This may be the same Register required under consent 117992. 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.</p>
Evidence	<p>Council's CRM database records all complaints from the public. There were 7 complaints logged to our data in relation to Te Kauwhata area. see appendix 2 for full list of complaints</p>
Status Reasoning	
Action Required	Full Compliance
17	<p>The consent holder shall erect a total of four signs around the shoreline of Lake Waikare advising the public of the presence and associated potential public health risks of the treated wastewater discharge authorised by this consent. The signs shall be located such that they are clearly visible to the public. The location of, and wording on, the signs shall be to the satisfaction of the Waikato Regional Council, following consultation with the consent holder, Auckland Waikato Fish and Game, the Department of Conservation and the Ngaa Muka Development Trust.</p>
Evidence	<p>The signs, as agreed by the stated groups, were installed at four locations around the shoreline of Lake Waikare in August 2014.</p>
Status Reasoning	
Action Required	Full Compliance
18	<p>Within three months of the commencement of this consent, the consent holder shall invite parties with an interest in Lake Waikare, including, but not limited to representatives of: Waikato-Tainui, Ngaa Muka Development Trust, Taniwha Marae, Waikare Marae, Horahora Marae, Maurea Marae, Okaerea Marae, Waahi Whaanui Trust, Auckland-Waikato Fish and Game, Department of Conservation, River and Catchment Services – Waikato Regional Council and the Lake Waikare Care Group to participate in the "Te Kauwhata Wastewater Treatment Consultation Group" ("TKWTTCG"). a) The purpose of the TKWTTCG, shall be as follows: i. Facilitate consultation between the TKWTTCG and the consent holder. ii. Share information about the physical, cultural and ecological health of Lake Waikare. iii. Engender co-operation between the parties in order to identify and implement an option that will negate the need to discharge wastewater from the Te Kauwhata Wastewater Treatment Plant to Lake Waikare, iv. Engender co-operation between the parties in order to identify land that may be suitable and/or available for land based wastewater disposal. v. Discuss matters relating to the preparation of the reports required by conditions 5 and 6. vi. Discuss ongoing initiatives in relation to the enhancement and /or restoration of Lake Waikare. . b) The consent holder shall, in complying with the reporting requirements of this consent to the consent authority, or when monitoring or research activities are being planned, or when results are to be submitted in accordance with this resource consent, invite the TKWTTCG to a meeting to discuss any matter and share this information prior to submitting the information to the consent authority. The information shall be provided to the TKWTTCG sufficiently in advance of the meeting so that the TKWTTCG has time to review and consider it. c) Notwithstanding clause b) of this condition the consent holder shall, at least once every six months, invite representatives of the consent authority and the TKWTTCG to a meeting to discuss any matter relating to the exercise and monitoring of this consent. At this time the consent holder shall provide information on matters relating to the exercise and monitoring of this consent and the proposed work programme for the following 12 months. d) The consent holder shall keep minutes of the meetings held in accordance with clause b) and c) of this condition and shall forward them to all attendees and the consent authority. e) The meetings required by clauses b) and c) of this condition need not occur if the TKWTTCG notifies the consent holder (in respect of clause b) and c)) and the consent authority (in respect of clause c)) that the meeting is not required. f) The consent holder shall provide final copies of the reports prepared in accordance with the conditions of this consent to the TKWTTCG concurrently with them being submitted to the consent authority.</p>
Evidence	<p>The TKWTTCG has been formed with the following members: Donna Flavell, Taroi Rawiri (Waikato Tainui); Hugh Keane, Amy King, Sarah Lealand, Edward prince (Waikato Regional Council); Andrew Styche (Department of Conservation), Jane Shaw (Auckland-Waikato Fish and Game); Ian Cathcart, Carole Nutt, Sam Toka (Waikato District Council). • Meetings are undertaken as required.</p>
Status Reasoning	

Action Required		Full Compliance
19	The consent holder shall forward the results of the monitoring undertaken pursuant to conditions 8 and 11 to the Waikato Regional Council, via electronic means, within one month of receipt of the results by the consent holder.	
Evidence	Water Outlook reports sent to Regional Council monthly. Water Outlook reporting has allowed this process to be automated.	
Status Reasoning		
Action Required		Full Compliance
20	The consent holder shall provide to the Waikato Regional Council and the TKWTCG a written report by 30 September each year, addressing the following: i) A summary of the 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) 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; v) Any ecological enhancement works undertaken by the consent holder in the Lake Waikare catchment; and vi) Any other issue considered relevant to the consent holder.	
Evidence	An Annual report is submitted to WRC as required by 30 September each year	
Status Reasoning		
Action Required		Full Compliance
21	The consent holder shall notify the Waikato Regional Council and members of the TKWTCG as soon as practicable after the consent holder has become aware of any occasion when the limits specified in condition 8 of this resource consent have been 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 breach, possible causes and steps to ensure future compliance.	
Evidence	WDC/WSL has maintained communication with WRC for all exceedances through monthly reporting • WSL-WRC liaison meetings were also held during the 2020-21 period to address any non compliances and update on actions to improve compliance	
Status Reasoning		
Action Required		Full Compliance
	Authorisation Compliance:	Significant Non-Compliance

AUTH117992.01.01 - Discharge to air

Activity Authorised: Discharge contaminants, namely odour, into the air from the Te Kauwhata WWTP

Condition No.	Description	
1	The discharge to air shall be undertaken in general accordance with: (i) "Te Kauwhata Wastewater Treatment Plant Discharge Application – Assessment of Environmental Effects" Pattle Delamore Partners Ltd., January 2008 (Doc Ref 1278369), (ii) "Te Kauwhata Wastewater Treatment Plant Discharge Applications 117991 and 117992" Pattle Delamore Partners Ltd., September 2010 (Doc Ref 1770596), and (iii) "Te Kauwhata Wastewater Treatment Plant Discharge Applications 117991 and 117992: Update to Assessment of Environmental Effects" Pattle Delamore Partners Ltd., January 2011 (Doc Ref 1902521) subject to the conditions below which shall prevail should any inconsistency occur between the conditions and the above documents.	
Evidence		
Status Reasoning		
Action Required		Full Compliance

2	The consent holder shall 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 Odour Management Plan required by Condition 6.
Evidence	All contractors employed at the treatment site are inducted in both health and safety procedures and relevant conditions of this consent.
Status Reasoning	
Action Required	Full Compliance
4	The operation, management and maintenance of the Te Kauwhata Wastewater Treatment Plant shall not result in any objectionable odours which have an adverse effect at or beyond the boundary of the properties on which the treatment plant is located.
Evidence	WRC has not received any complaints or reports of odour emanating from the WWTP beyond the boundary of the site
Status Reasoning	
Action Required	Full Compliance
5	There shall 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 subject property on which the treatment plant is located. Note: For the purpose of this consent, the Waikato Regional Council will use the guidelines for assessment in chapter 6.4 of the Waikato Regional Plan to determine whether adverse effects are occurring from the discharge of odour or particulate matter.
Evidence	WRC has not received any complaints or reports of the 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 subject property on which the treatment plant is located.
Status Reasoning	
Action Required	Full Compliance
6	The consent holder shall prepare an Odour Management Plan. This Plan shall be prepared by a suitably qualified and experienced person and shall detail the methods and operational procedures adopted by the consent holder to ensure compliance with the conditions of this consent. The Plan may form part of the Operations and Management Plan specified in consent 117991. As a minimum the Odour Management Plan shall address the following matters: i) A description of the entire wastewater treatment facility; ii) A description of routine inspection, monitoring and maintenance procedures to be undertaken to ensure effective plant operation and compliance with consent conditions; iii) Details of operational and maintenance procedures to minimise odour release from the inlet screen; iv) Details of operational and maintenance procedures to minimise odour release from the aerated ponds; v) Details of operational and maintenance procedures to minimise odour release during pond desludging and pond sludge drying and handling; vi) Details of contingency plans and procedures to address power or equipment failure at the treatment plant; vii) Details of the odour complaints procedure, record keeping and response procedure. This Plan shall be lodged with the Waikato Regional Council for approval by a Programme Manager of the Resource Use Group acting in a technical certification capacity, within six months of commencement of this consent, and shall be reviewed and updated annually 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.
Evidence	An odour management plan is included in the O&M plan
Status Reasoning	
Action Required	Full Compliance
7	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: i) The date, time and duration of the alleged event/incident that has resulted in the complaint; ii) The location of the complainant when the alleged event/incident was detected; iii) The possible cause of the alleged

	event/incident; iv) The weather conditions and wind direction at the site when the event/incident allegedly occurred; v) Any corrective action undertaken by the consent holder in response to the complaint. This may be the same Register required under consent 117991. 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.	
Evidence	WDC operates a CRM complaints database however no complaints received by WDC or WRC pertaining to odour emanating from the WWTP	
Status Reasoning		
Action Required		Full Compliance
8	The consent holder shall notify the Waikato Regional Council of any incident, including power, mechanical or process failure, leading to a significant emission of odour from the plant, within 24 hours of the incident being brought to the attention of the consent holder, or the next working day if the end of the 24 hour period occurs on a weekend or outside of normal office hours (9am to 5pm Monday to Friday). A written report shall be forwarded to the Waikato Regional Council within seven working days of the event occurring describing the incident, the reasons for it occurring, its consequences (including the nature of any complaints), the measures taken to remedy or mitigate its effects, and any measures taken to prevent a recurrence of the event, including any changes proposed to the Odour Management Plan.	
Evidence	WDC/WSL notify WRC of any relevant event	
Status Reasoning		
Action Required		Full Compliance
	Authorisation Compliance:	Full Compliance

4 SUMMARY OF COMPLIANCE

Based on the conditions selected for monitoring, compliance has been assessed as:

Authorisation	Authorisation Description	Compliance Status
AUTH117991.01.01	Discharge treated municipal wastewater from the Te Kauwhata Wastewater Treatment Plant into Lake Waikare	Significant Non-Compliance
AUTH117992.01.01	Discharge contaminants, namely odour, into the air from the Te Kauwhata WWTP	Full Compliance

Overall Site Compliance: Significant Non-Compliance

5 DISCUSSION AND CONCLUSIONS

The site has achieved a significant non-compliance rating for the third year running. The only viable solution to improve compliance is to upgrade WWTP technology to produce wastewater compliant with the current discharge consent, and to this end a programme of works has been submitted to WRC with project timeframes. The consent holder has started construction of a Membrane Aeration Bio Reactor (MABR) and an ultraviolet disinfection system to improve the treated wastewater quality to compliant standards.

WRC has assessed their plan and agreed the proposed timeframes for commissioning of MABR technology by May 2023. The consent holder is also required to provide regular updates to WRC on progress to install the MABR technology.

The current performance of the site is poor and well below standard for several measured determinants as shown in the table below:

Discharge Monthly Tests Parameters	Unit	Consent Limits		Trigger Limit		Measured		Compliance		
		Median	90%ile	Median	90%ile	Median	90%ile	Median	90%ile	
CBOD5	g/m ³	10.0	20.0			10.0	13.9	5 / 12	1 / 12	Compliant
TKN	g/m ³	6.0	12.0			29.0	35.0	11 / 11	8 / 11	X
Total Nitrogen	g/m ³	8.0				28.5	34.8	11 / 12		X
TN Load	kg/day	8.8				26.0	37.8	10 / 12		X
Total Phosphorus	g/m ³	5.6				5.5	6.4	6 / 12		Compliant
TP Load	kg/day	3.1				4.2	6.1	11 / 12		X
Total Suspended Solids	g/m ³	15.0	25.0			28.8	49.0	11 / 12	6 / 12	X
E.Coli	cfu/100mL	1,500.0				2,250.0		32 / 50		X

The site was recommended for prosecution after last year's significant non-compliance audit for the 2019-20 compliance period. A report was sent to the WRC Enforcement Decision Group (EDG) with a recommendation for prosecution however the EDG declined to send the case for prosecution preferring to award a formal warning for the non-compliant period whilst keeping the abatement notice for the site in place and requiring regular reporting on adherence to the timeframes for upgrading the site.

The Te Kauwhata WWTP-MABR plant upgrade is expected to be completed and operational by May 2023

I am recommending that this year for enforcement action a further formal warning is again served for the non-compliances, and that the abatement notice remains in place to ensure the consent holder regularly appraises WRC on progress with the upgrade on a monthly basis.

6 SUMMARY OF ACTIONS REQUIRED

The following actions are required to be undertaken:

Resource consent	Condition	Action Required
AUTH117991.01.01	13	Please submit an updated O&M Plan as soon as the upgrades to the plant are complete
AUTH117991.01.01	1	Site requires an upgrade and WRC must be kept advised of progress towards the implementation of the upgrade on a monthly basis.

7 RECOMMENDATIONS FOR WAIKATO REGIONAL COUNCIL

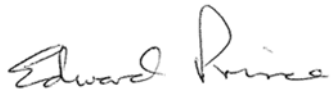
I recommend that this site:

- Receives a Formal Warning (Punitive) for the non-compliances attained during the compliance period 1 July 2020 to 30 June 2021.
- Remains as a Focus 1 site for the 2021-2022 compliance year due to continued non-compliance and high public interest.
- Has the abatement notice left in place until such time that the site can comply with the relevant conditions of the resource consent for the WWTP.
- Provides WRC with regular monthly updates on how the upgrade project is progressing against the agreed timeframes

The EDG was convened on 30 November 2021 to consider the recommended actions resulting from this audit report. The EDG has endorsed the recommendations as the consent holder is:

- Continuing with the planned upgrade as proposed;
- Continuing to liaise with the stakeholder group; and
- Assessing future options for the discharge of treated wastewater

The minutes from the meeting can be seen in doc ref 22960364.



Edward Prince
**Senior Resource Officer - Infrastructure
Resource Use**

Date: 6 December 2021

7.1 Decision

I have reviewed this audit report and agree with the recommendations.



Hugh Keane
**Team Leader - Infrastructure
Resource Use**

Date: 6 December 2021

APPENDIX 1
Compliance Rating System

Compliance Status	Compliance Grade
	Not Assessed
	Full Compliance Full compliance with all relevant consent conditions, plan rules, regulations and national environmental standards.
	Low Risk Non-Compliance Non-compliance with some of the relevant consent conditions, plan rules, regulations and national environmental standards. Non-compliance carries a low risk of adverse environmental effects or is technical in nature (e.g. failure to submit a monitoring report).
	Moderate Non-Compliance Non-compliance with most of the relevant consent conditions, plan rules, regulations and national environmental standards, where there are some environmental consequences and/or there is a moderate risk of adverse environmental effects.
	Significant Non-Compliance Non-compliance with many of the relevant consent conditions, plan rules, regulations and national environmental standards, where there are significant environmental consequences and/or a high risk of adverse environmental effects.