# Site Compliance Report

Site No:	REG602801
Site Owner:	Waikato District Council
Site Name:	Huntly WWTP: McVie Rd, Huntly
Date:	26 February 2020

### 1 INTRODUCTION

The following resource consents are held for the site:

Resource Consent	Status	Description	Commenced	Expiry
AUTH119647.01.02	Current	Discharge up to 11,500 cubic metres per day of treated wastewater from the Huntly WWTP into the Waikato River		31/03/2029
AUTH119648.01.01	Current	Discharge contaminants to air from activities associated with the Huntly WWTP	13/04/2011	31/03/2029
AUTH119649.01.01	Current	Use, upgrade and maintenance of an outflow pipeline structure including an outflow diffuser on the bed of the Waikato River for the discharge of treated wastewater from the Huntly WWTP		31/03/2029
AUTH119650.01.01	Current	Discharge treated wastewater (via seepage) to land and groundwater from activities associated with the Huntly WWTP	13/04/2011	31/03/2029
AUTH119651.01.01	Current	Discharge treated wastewater (via flooding of wetlands during storm events) to a tributary of the Kimihia Stream from activities associated with the Huntly WWTP		31/03/2029
AUTH130140.01.01	Current	To place a pipe bridge over an unnamed tributary of Lake Hakanoa in Huntly	19/09/2013	10/09/2048

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

### 2 BACKGROUND

The Huntly wastewater treatment plant (WWTP) is operated on behalf of the community of the Huntly township and its surrounds. Waikato District Council in conjunction with Watercare Services Limited operates the facility under the resource consents issued by Waikato Regional Council and listed in the table above.

The consent holder submitted their annual report for the 2018-2019 compliance period and this report contained the following summary:

Discharge volumes from the Huntly WWTP were compliant with resource consent limits.

*For the complete reporting period (Jul-Jun), Huntly WWTP achieved the consented discharge quality limits for pH, Total Phosphorous (TP), Total Nitrogen (TN), cBOD5 and E-coli.* 

As agreed in the 2012 resource consent review, WDC are collecting data and also investigating treatment options to meet the suspended solids consent conditions at the post-UV sampling point. CH2MBeca, along with sub-consultant The Wastewater Specialists, have undertaken a review of the



operation and maintenance of Waikato District Council's Wastewater Treatment Plants (WWTPs). This report discusses the current operational roles, how data is collected and monitored, and summarises the works completed over this reporting period (if any).

Waikato District Council (WDC) have entered into a commercial agreement where Watercare Services Ltd (WSL) this will see WSL providing all Councils waters management services to WDC under the guidance of a Waters Governance Board (WGB). This contract will be effective from 1 October 2019.

WSL will begin the process to review and get an understanding of the wastewater plants but will continue planned or reactive works as identified in the current Council Long Term Plan 2018-2028 any new initiatives or changes will be limited to budgets and works already identified for the next 21 months.

### **OPERATIONAL COMMENTS**

Staff Maintenance Visits: An operations staff member visits the site at least twice a week. Please see Appendix Three – Upgrades and wetlands renewal per CH2MBeca compliance investigations

#### FUTURE WORKS

Under WSL levels of service will be maintained as agreed but it may offer an opportunity to raise levels of service in the future.

### **Upgrade Proposals – Huntly**

- 2009/10 Carry out maintenance on the surface-flow wetlands and decommission the gravel-bed cells.
   Construct rock-lined stream after wetlands.
   Modify pipeline from secondary oxidation pond to divert wastewater to pumping station in the event of severe flooding.
- 2011/12 Install curtains in secondary (maturation) pond to prevent short-circuiting.

• 2016/17 Install bottom-deployed aeration and biological growth media in the inlet zone Install bottom-deployed aeration and biological growth media near the end of the facultative zone (primary pond).

• 2027/28 Install additional bottom-deployed aeration and biological growth media in the inlet zone.

Install additional bottom-deployed aeration and biological growth media near the end of the facultative zone.

Provide for chemical dosing for P removal.

Install filtration and UV disinfection.

• 2032/33 Install additional bottom-deployed aeration and biological growth media in the inlet zone.

Install additional bottom-deployed aeration and biological growth media near the end of the facultative zone.

Provide for additional chemical dosing for P removal.

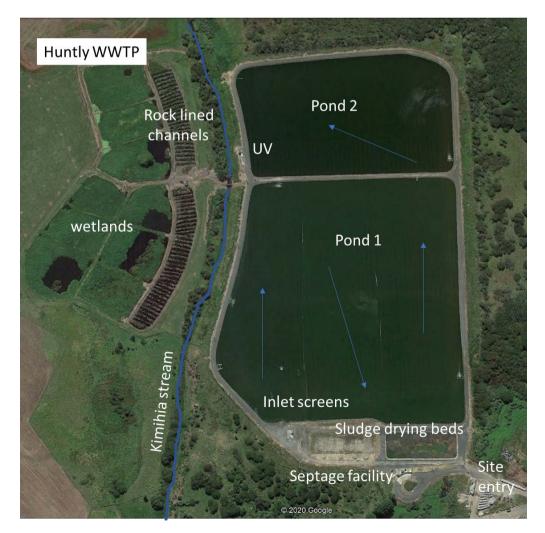
Install additional filtration and additional UV disinfection.

"The latest revision of the "Future Proof" population predictions shows slightly higher population growth at Ngaruawahia but **significantly faster growth at Huntly**. The trigger levels and trigger points as discussed under question 4 below will take care of any change of timing resulting from the actual population (and therefore loading to the ponds) growth that occurs.

While the upgrades have proposed specific treatment processes, the actual process that is adopted and installed will be selected at the time, taking account of the most appropriate technology at that time. As an example the Bio Filtro process is one option that will probably be considered, either as a form of tertiary treatment or as a parallel treatment pathway"



Aerial photos of the Huntly WWTP and surrounds



#### 2.1 PREVIOUS COMPLIANCE HISTORY

Date Period	Compliance status
1 July 2018 to 30 June 2019	Partial compliance
1 July 2017 to 30 June 2018	Partial compliance - LOD
1 July 2016 to 30 June 2017	Partial compliance
1 July 2015 to 30 June 2016	Partial compliance
1 July 2014 to 30 June 2015	High level of compliance
1 July 2013 to 30 June 2014	Partial compliance
1 July 2012 to 30 June 2013	Partial compliance
1 July 2011 to 30 June 2012	Partial compliance

In last years audit for the 2017-2018 compliance period the consent holder was issued with a **Letter of Direction** (doc ref 11418337).

### 2.2 TRIGGER LEVELS EXCEEDED

In the audit for the period **1 July 2016 to 30 June 2017**, the consent holder was advised that the trigger levels for ammoniacal nitrogen had been reached and condition (10) had been enacted. This excerpt from that audit report clarifies the position:

The main issue of non-compliance highlighted in this audit is the continued failure to meet the ammoniacal nitrogen consent limits for the last 3 years. There is a condition (10) in RC119647 that requires the consent holder to undertake an upgrade to the system if a trigger value has been exceeded in three consecutive years. This has now occurred for ammoniacal nitrogen and therefore condition 10 becomes relevant. Waikato District Council must design, build and commission the appropriate upgrade to the treatment process to reduce the 90%ile concentration of ammoniacal nitrogen being discharged to 80% of the current concentration limit of 20.0g/m<sup>3</sup>. This will require Waikato District Council to comply with new limit of 16g/m3 of ammoniacal nitrogen by 31 January 2019.

The following table submitted by Waikato District Council on 5 March 2020 shows that the ammoniacal nitrogen ( $NH_4N$ ) levels have not achieved the required new limits of  $16g/m^3$  on numerous occasions:

	1	1								
									H	untly
	pН	TSS	cBOD5	NH4N	TN	TPhos	OutflowMax	OutflowTotal	InflowMax	InflowTotal
Jul-19	7.6	61.0	22.3	0.6	13.0	2.1	2223.8	53269.9	6520.2	74877.5
Aug-19	7.6	41.3	9.3	13.5	18.3	2.3	4289.4	71839.3	6861.9	104540.1
Sep-19	7.6	14.0	4.0	22.9	23.2	4.0	2036.4	52176.8	3689.1	77271.5
Oct-19	8.1	38.0	9.0	21.2	26.6	3.0	2715.4	50190.0	6536.7	76781.8
Nov-19	8.1	35.0	8.0	17.4	22.5	1.7	1146.1	1757.8	3803.8	55802.5
Dec-19	7.6	15.0	9.0	13.2	15.9	2.3	684.0	1844.5	2710.5	53504.7
Jan-20	7.5	110.0	79.0	2.3	14.9	9.0	2191.2	21715.9	1586.4	43836.9
Feb-20	8.2	100.0	16.0	0.2	8.5		682.5	14819.5	1512.5	37447.0
Mar-20							607.3	1717.2	1346.6	3922.0
	Median limit	exceeded								
Key	Key 90 <sup>th</sup> percentile limit exceeded									

#### 3 COMPLIANCE ASSESSMENT

Unless otherwise specified in this document this assessment covers the period from **1 July 2018 to 30** June **2019**.

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.

Activity Authorised: Waikato River	Discharge up to 11,500 cubic metres per day of treated wastewater from the Hu	ntly WWTP into the
Condition No.	Description	
1	The wastewater treatment and disposal system shall be designed, operated general accordance with: i) The application for this resource consent; ii) T "Waikato District Council Ngaruawahia and Huntly Wastewater Resource Consent Consents Application: Assessment of Effects on the Environment" dated March on Waikato Regional Council's document system numbered 1458402; and iii) T "Waikato District Council Ngaruawahia and Huntly Wastewater Resource Consent Consents Application: Response to RMA Section 92(1) Requests for Further August 2009 and recorded on Waikato Regional Council's document system r subject to the resource consent conditions below, which shall prevail should any between the conditions and the application documents.	he document titled its Project, Resource 2009 and recorded The document titled its Project, Resource Information" dated numbered 1531323;
Evidence		
Action Required		Full compliance
3	Notwithstanding the stated limits in conditions of this consent, the consent h reasonable and practical efforts to ensure that the final effluent quality is manapabilities of the treatment system at all times.	
Evidence		
Action Required		Full compliance
4	The maximum volume of treated wastewater discharged shall not exceed 11,5 day.	00 cubic metres per
Evidence	Maximum daily outflow reported as 3684m <sup>3</sup> /day	
Action Required		Full compliance
6.	The consent holder shall ensure that, no later than 1 December 2012, the qua immediately after all controlled treatment processes and before any wetlands so following limits: i) The pH of the discharge shall not be less than 6 or greater that median five day carbonaceous biochemical oxygen demand concentration shall re per cubic metre and the 90th percentile shall not exceed 60 grams per cubic metre suspended solids concentration shall not exceed 40 grams per cubic metre and shall not exceed 100 grams per cubic metre; The monitoring point for suspend the outlet from the gravel beds until 30 November 2016. From 1 December suspended solids concentration shall not exceed 30 grams per cubic metr ammoniacal-nitrogen concentration shall not exceed 10 grams per cubic met shall not exceed 20 grams per cubic metre; v) The median total nitrogen shall not exceed 25 grams per cubic metre; vi) The median summer (December to nitrogen (TNsummer) concentration shall not exceed 20 grams per cubic met summer (December to May inclusive) total nitrogen load (TNload) for Ngaru Treatment Plant and Huntly Wastewater Treatment Plant combined shall not exceed per day; viii) The median total phosphorus (TP) concentration shall not exceed	hall comply with the an 9 pH units; ii) The not exceed 30 grams etre; iii) The median the 90th percentile ed solids shall be at er 2016 the median re. iv) The median netre and the 90th n (TN) concentration D May inclusive) total tre; vii) The median awahia Wastewater exceed 57 kilograms

#### AUTH119647.01.02 - Water - sewage

	metre; ix) The median summer (December to May inclusive) total phosphorus (TPsummer) concentration shall not exceed 8 grams per cubic metre; x) The median summer (December to May inclusive) total phosphorus load (TPload) for Ngaruawahia Wastewater Treatment Plant and Huntly Wastewater Treatment Plant combined shall not exceed 17.3 kilograms per day; xi) The median Escherichia coli (E-coli) concentration in any 12 month period shall not exceed 126 cfu 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 summer median limits, no more than 3 of the 6 monthly samples in any given summer (December to May) shall exceed the specified limit. To determine compliance with the more than 26 samples in any 52 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: The discharge of treated wastewater to the Waikato River from the Ngaruawahia Wastewater Treatment Plant is authorised by consent 119642.
Evidence	<ul> <li>i) The pH of the discharge shall not be less than 6 or greater than 9 pH units; - NON compliant, some data missing.</li> <li>ii) The median five-day carbonaceous biochemical oxygen demand concentration shall not exceed 30</li> </ul>
	grams per cubic metre and the 90th percentile shall not exceed 60 grams per cubic metre; - compliant
	iii) The median suspended solids concentration shall not exceed 40 grams per cubic metre and the 90th percentile shall not exceed 100 grams per cubic metre; The monitoring point for suspended solids shall be at the outlet from the gravel beds until 30 November 2016. From 1 December 2016 the median suspended solids concentration shall not exceed 30 grams per cubic metre Non-compliant with new median of 30g/m3 - result 39.4g/m3. Compliant with the 90%ile limit - result 70.8g/mg
	iv) The median ammoniacal-nitrogen concentration shall not exceed 10 grams per cubic metre and the 90th percentile shall not exceed 20 grams per cubic metre; - Non-compliant with median and 90%ile limits.
	v) The median total nitrogen (TN) concentration shall not exceed 25 grams per cubic metre; - compliant - result 23g/m3
	vi) The median summer (December to May inclusive) total nitrogen (TNsummer) concentration shall not exceed 20 grams per cubic metre; - Compliant with result of 13.95g/m3
	vii) The median summer (December to May inclusive) total nitrogen load (TNload) for Ngaruawahia Wastewater Treatment Plant and Huntly Wastewater Treatment Plant combined shall not exceed 57 kilograms per day; - compliant combined amount is 31.75g/m3
	viii) The median total phosphorus (TP) concentration shall not exceed 8 grams per cubic metre; - compliant result 2.7g/m3
	ix) The median summer (December to May inclusive) total phosphorus (TPsummer) concentration shall not exceed 8 grams per cubic metre; - compliant - result of 2.2g/m <sup>3</sup>
	x) The median summer (December to May inclusive) total phosphorus load (TPload) for Ngaruawahia Wastewater Treatment Plant and Huntly Wastewater Treatment Plant combined shall not exceed 17.3 kilograms per day; - compliant result 2.3kg/day
	xi) The median Escherichia coli (E-coli) concentration in any 12 month period shall not exceed 126 cfu 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 summer median limits, no more than 3 of the 6 monthly samples in any given summer (December to May) shall exceed the specified limit.
	To determine compliance with the median E.coli limit, no more than 26 samples in any 52 consecutive weekly samples shall exceed the specified limit compliant 14 samples of 52 have exceeded limit.

Status Reasoning Action Required Pl di su 9 9 4 M de pl W	o determine compliance with the 90th percentile limits, no more than one onsecutive monthly sampling events shall exceed the specified limit. ailure to comply with pH (90%ile), suspended solids (median now set at 20g/mi itrogen (median & 90%ile) limits release investigate and report what actions WDC intends to take to improve the ischarge quality of selected determinants to within compliant limits. (pH, uspended solids, ammoniacal nitrogen) at least one month prior to decommissioning the gravel filters, the consent hol Management Plan to the Waikato Regional Council which details as a m ecommissioning works and construction of the rock-lined channel will be under lan for the rock-lined channel, and how compliance will be achieved with con- Vaikato Regional Council reserves the right to make comment on the Management of any cuberoguent changes to the Management Plan	3) and ammoniacal Medium priority non-compliance Ider shall provide a ninimum how the ertaken, the design dition 8. Note: The
Action Required Pl di su 9 At M de pl W	itrogen (median & 90%ile) limits lease investigate and report what actions WDC intends to take to improve the ischarge quality of selected determinants to within compliant limits. (pH, uspended solids, ammoniacal nitrogen) It least one month prior to decommissioning the gravel filters, the consent hol Management Plan to the Waikato Regional Council which details as a m ecommissioning works and construction of the rock-lined channel will be under lan for the rock-lined channel, and how compliance will be achieved with const Vaikato Regional Council reserves the right to make comment on the Management	Medium priority non-compliance der shall provide a ninimum how the ertaken, the design dition 8. Note: The
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	nd any subsequent changes to the Management Plan.	
	he Huntly WWTP Gravel Beds Modifications Plan and associated documents wer n 30 May 2014.	re provided to WRC
Status Reasoning		
Action Required		Full compliance
ca of a uµ u fo	hould the measured median concentration or 90th percentile concentration arbonaceous biochemical oxygen demand, suspended solids, or ammoniacal-nit f the consented limits, as specified in condition 6 of this consent, for 2 of 3 cons "trigger" level will be met. The consent holder shall design, build and commissi pgrade to the treatment process within two years after the "trigger" level is rea ndertaken shall be designed to reduce the median or 90th percentile concentra or the parameter for which the trigger was reached to less than 80% of the cons arameter.	trogen exceed 90% secutive years then on the appropriate ached. The upgrade ation, as applicable,
iii 90 50 1 20 20 W th of 20 20 1 1 1 1 1 1 1 1 30	018/2019 i) The median suspended solids concentration shall not exceed 40 grams per cu Oth percentile shall not exceed 100 grams per cubic metre; The monitoring per olids shall be at the outlet from the gravel beds until 30 November 2016. From the median suspended solids concentration shall not exceed 30 grams per cu OMPLIANT median reported was 35.2g/m 017/2018 VDC must design, build and commission the appropriate upgrade to the treatmen the 90%ile concentration being discharged of ammoniacal nitrogen to 80% of the f 20.0g/m <sup>3</sup> (16g/m <sup>3</sup> ) by 31 January 2019. • Still pending see section 2.2 above 016/2017 i) The median for total suspended solids limit has been reduced as of 1 December 0g/m <sup>3</sup> therefore the reported median is outside of the consented limits. 90%il onsent limits with a reported value of 109.7g/m3.	oint for suspended a 1 December 2016 ubic metre NON- at process to reduce concentration limit r 2016 to a value of
ลเ	out of 4 of the last 4 audits have included failures in the suspended solids limits. i udits show non-compliance against suspended solids then the trigger for this ctivated.	
	he trigger levels were exceeded for ammoniacal nitrogen in the 2017/2018 apprade and subsequent improvement in compliance with this determinant has n	

12       Should the measured median summer (December to May inclusive) mass load for entrogen (TNload) or total phosphorus (TPload) for Huntly and Ngaruawahia combined re the consented limit, as specified in condition 6 of this consent, for 2 of 3 consecutive summer then a "trigger" level will be met. The consent holder shall design, build and commappropriate upgrade to the treatment process within two years after the "trigger" level The upgrade undertaken shall be designed to reduce the combined summer mass load of the for which the trigger was reached to less than 80% of the consented limit for that parameter for which the trigger dual to the treated to less than 80% of the consented limit for that parameters.         Evidence       The consent holder states:         The treated wastewater did not exceed the trigger consent limits.         TN 31.8 which is 56% of total limit of 57kg/day         TP 2.3 which is 13% of total limit of 17.3kg/day         Status Reasoning         Action Required         13         Upgrade Proposals – Huntly         2009/10         • Carry out maintenance on the surface-flow wetlands and decommission the cells COMPLIANT	riority non- compliance	Required Please ensure you take action to prevent the suspended solids limits being breached for 3 consecutive years. Please provide evidence of any upgrades to the WWTP to reduce the level of ammoniacal nitrogen to compliant limits as per previous audits.	Action Required
Ammoniacal nitrogen trigger limit has been exceeded for median and 90%ile. Total Suspei trigger limit for median has been exceeded. Status Reasoning Consecutive years component has not yet been met for suspended solids however the tr for ammoniacal nitrogen have been in place since 2017. The consent holder was r undertake an upgrade in order to meet a new lower limit of 16g/m <sup>3</sup> of ammoniacal nitro Action Required Undertake actions to meet the new condition limit of 16g/m <sup>3</sup> of ammoniacal nitro nitrogen a per condition 10 Should the measured median summer (December to May inclusive) mass load for to the consented limit, as specified in condition 6 of this consent, for 2 of 3 consecutive summ then a "trigger" level will be met. The consent holder shall design, build and combined re the consented limit, as specified in condition 6 of this consent, for 2 of 3 consecutive summ then a "trigger" level will be met. The consent holder shall design, build and com- naporpriate upgrade to the treatment process within two years after the "trigger" level The upgrade undertaken shall be designed to reduce the combined summer mass load of to for which the trigger was reached to less than 80% of the consented limit for that parame Evidence The consent holder states: The treated wastewater did not exceed the trigger consent limits. TN 31.8 which is 56% of total limit of 57kg/day TP 2.3 which is 13% of total limit of 17.3kg/day Status Reasoning Unless otherwise agreed with the Waikato Regional Council in writing, the consent he ensure that the treatment system is upgraded in accordance with the application docum the satisfaction of Waikato Regional Council. Evidence Upgrade Proposals – Huntly 2009/10 Carry out maintenance on the surface-flow wetlands and decommission the cells COMPLIANT Construct rock-lined stream after wetlandsCOMPLIANT	consecutive mission the is reached.	exceed 90% of the consented limits, as specified in condition 6 of this consent, for years then a "trigger" level will be met. The consent holder shall design, build an appropriate upgrade to the treatment process within two years after the "trigger The upgrade undertaken shall be designed to reduce the median for the parameters.	11
Action Required       for ammoniacal nitrogen have been in place since 2017. The consent holder was r undertake an upgrade in order to meet a new lower limit of 16g/m <sup>3</sup> for ammoniacal nitro         Action Required       Undertake actions to meet the new condition limit of 16g/m <sup>3</sup> of ammoniacal nitro         12       Should the measured median summer (December to May inclusive) mass load for en nitrogen (TNload) or total phosphorus (TPload) for Huntly and Ngaruwahia combined re the consented limit, as specified in condition 6 of this consent, for 2 of 3 consecutive summ then a "trigger" level will be met. The consent holder shall designed be reduce the combined summer mass load of t for which the trigger was reached to less than 80% of the consented limit for that parameter         Evidence       The consent holder states: The treated wastewater did not exceed the trigger consent limits. TN 31.8 which is 56% of total limit of 57kg/day TP 2.3 which is 13% of total limit of 17.3kg/day         13       Unless otherwise agreed with the Waikato Regional Council in writing, the consent h ensure that the treatment system is upgraded in accordance with the application docum the satisfaction of Waikato Regional Council.         Evidence       Upgrade Proposals – Huntly 2009/10         0       Carry out maintenance on the surface-flow wetlands and decommission the cells - COMPLIANT e. Construct rock-lined stream after wetlandsCOMPLIANT	nded solids	Ammoniacal nitrogen trigger limit has been exceeded for median and 90%ile. Tota	Evidence
nitrogen a per condition 10       Image: Condition 10         12       Should the measured median summer (December to May inclusive) mass load for entrogen (TNIoad) or total phosphorus (TPIoad) for Hunty and Ngarawahia combined te the consented limit, as specified in condition 6 of this consent, for 2 of 3 consecutive summ then a "trigger" level will be met. The consent holder shall design, build and comma appropriate upgrade to the treatment process within two years after the "trigger" level The upgrade undertaken shall be designed to reduce the combined summer mass load of the for which the trigger was reached to less than 80% of the consented limit for that parameters for which the trigger was reached to less than 80% of the consent elimit for that parameters. The treated wastewater did not exceed the trigger consent limits. TN 31.8 which is 56% of total limit of 57kg/day         Status Reasoning       Full con         Action Required       Full con         13       Unless otherwise agreed with the Waikato Regional Council in writing, the consent he ensure that the treatment system is upgraded in accordance with the application document the satisfaction of Waikato Regional Council.         Evidence       Upgrade Proposals – Huntly         2009/10       . Carry out maintenance on the surface-flow wetlands and decommission the cells COMPLIANT	required to	for ammoniacal nitrogen have been in place since 2017. The consent holder	Status Reasoning
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The consent holder states:         The treated wastewater did not exceed the trigger consent limits.         TN 31.8 which is 56% of total limit of 57kg/day         TP 2.3 which is 13% of total limit of 17.3kg/day         Action Required         13         Unless otherwise agreed with the Waikato Regional Council in writing, the consent hersure that the treatment system is upgraded in accordance with the application docum the satisfaction of Waikato Regional Council.         Evidence         Upgrade Proposals – Huntly         2009/10         • Carry out maintenance on the surface-flow wetlands and decommission the cells COMPLIANT         • Construct rock-lined stream after wetlandsCOMPLIANT	each 90% of mer periods mission the is reached. the nutrient	nitrogen (TNload) or total phosphorus (TPload) for Huntly and Ngaruawahia comb the consented limit, as specified in condition 6 of this consent, for 2 of 3 consecutiv then a "trigger" level will be met. The consent holder shall design, build and appropriate upgrade to the treatment process within two years after the "trigger The upgrade undertaken shall be designed to reduce the combined summer mass lo	12
The treated wastewater did not exceed the trigger consent limits.   TN 31.8 which is 56% of total limit of 57kg/day   TP 2.3 which is 13% of total limit of 17.3kg/day   Status Reasoning   Action Required   13   Unless otherwise agreed with the Waikato Regional Council in writing, the consent he ensure that the treatment system is upgraded in accordance with the application of Waikato Regional Council.   Evidence   Upgrade Proposals – Huntly   2009/10   • Carry out maintenance on the surface-flow wetlands and decommission the cells COMPLIANT   • Construct rock-lined stream after wetlandsCOMPLIANT			Evidence
TN 31.8 which is 56% of total limit of 57kg/day         TP 2.3 which is 13% of total limit of 17.3kg/day         Status Reasoning         Action Required         I3         Unless otherwise agreed with the Waikato Regional Council in writing, the consent hensure that the treatment system is upgraded in accordance with the application document the satisfaction of Waikato Regional Council.         Evidence         Upgrade Proposals – Huntly         • Carry out maintenance on the surface-flow wetlands and decommission the cells COMPLIANT         • Construct rock-lined stream after wetlandsCOMPLIANT		The treated wastewater did not exceed the trigger consent limits.	
Status Reasoning       Full com         Action Required       Image: Comparison of the state of the		TN 31.8 which is 56% of total limit of 57kg/day	
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Upgrade Proposals – Huntly         2009/10         • Carry out maintenance on the surface-flow wetlands and decommission the cells COMPLIANT         • Construct rock-lined stream after wetlandsCOMPLIANT		ensure that the treatment system is upgraded in accordance with the application	13
<ul> <li>Carry out maintenance on the surface-flow wetlands and decommission the cells COMPLIANT</li> <li>Construct rock-lined stream after wetlandsCOMPLIANT</li> </ul>			Evidence
cells COMPLIANT     Construct rock-lined stream after wetlandsCOMPLIANT		2009/10	
	gravel-bed		
		Construct rock-lined stream after wetlandsCOMPLIANT	
<ul> <li>Modify pipeline from secondary oxidation pond to divert wastewater to station in the event of severe flooding ASSUMED NON-COMPLIANT</li> </ul>	to pumping		
2011/12		2011/12	

	<ul> <li>Install curtains in secondary (maturation) pond to prevent short COMPLIANT</li> </ul>	t-circuiting NON-
	2016/17	
	<ul> <li>Install bottom-deployed aeration and biological growth media in the COMPLIANT</li> </ul>	e inlet zone - NON-
	<ul> <li>Install bottom-deployed aeration and biological growth media n facultative zone (primary pond) NON COMPLIANT</li> </ul>	ear the end of the
Status Reasoning	The items listed above were proffered by the consent holder as part of their a Some items have been undertaken however it is unknown whether all items of u have been installed as required within the set timeframes.	
Action Required	Please confirm whether the upgrade items listed have been installed as required within their timeframes.	Low priority non- compliance
14	The consent holder shall continuously monitor the flow rate of wastewater enter treatment plant and shall record the total daily influent and discharge volumes.	ring and leaving the
Evidence		
Action Required		Full compliance
15	The consent holder shall continuously monitor and record rainfall at the site on a	daily basis.
	No data on rainfall at this site has been submitted to WRC. WDC states: <i>An on-line weather station has been installed at the Huntly WWTP.</i>	
Status Reasoning		
Action Required	Please ensure that rainfall data is included in all monthly reports from now on	Minor technical non-compliance
16	The consent holder shall, prior to January each year, calculate the ratio of daily Flow (PWWF) to Average Dry Weather Flow (ADWF). Where the ratio of PWWF to the consent holder shall prepare an Infiltration Management Plan and provin Regional Council for review prior to implementation. For the purposes of this co	ADWF exceeds 4.5, de this to Waikato
	of ADWF will be taken as the median daily wastewater flow measured at the in pond during the month of March for the preceding year.	
Evidence	of ADWF will be taken as the median daily wastewater flow measured at the in	let to the oxidation
Evidence Action Required	of ADWF will be taken as the median daily wastewater flow measured at the in pond during the month of March for the preceding year. WDC has provided a ratio figure of 4.1 which is compliant. this figure has no	let to the oxidation
	of ADWF will be taken as the median daily wastewater flow measured at the in pond during the month of March for the preceding year. WDC has provided a ratio figure of 4.1 which is compliant. this figure has no	t been assessed or Full compliance ude of ammoniacal- w flow conditions. in at six sites below low). The frequency een collected, upon
Action Required	of ADWF will be taken as the median daily wastewater flow measured at the in pond during the month of March for the preceding year. WDC has provided a ratio figure of 4.1 which is compliant. this figure has no confirmed by WRC. The consent holder shall undertake an investigation into the extent and magnitu nitrogen in the wastewater discharge plume in the Waikato River during lo Sampling of ammoniacal-nitrogen shall, as a minimum, be conducted mid-colum the discharge outfall on three occasions over the summer period (when flows are of monitoring may be reviewed after a minimum of three years of data has be request to and approval by a Programme Manager in the Resource Use Group of the summer period (waster the taken taken the taken ta	t been assessed or Full compliance ude of ammoniacal- w flow conditions. in at six sites below low). The frequency een collected, upon
Action Required	of ADWF will be taken as the median daily wastewater flow measured at the in pond during the month of March for the preceding year. WDC has provided a ratio figure of 4.1 which is compliant. this figure has no confirmed by WRC. The consent holder shall undertake an investigation into the extent and magnitu nitrogen in the wastewater discharge plume in the Waikato River during lo Sampling of ammoniacal-nitrogen shall, as a minimum, be conducted mid-colum the discharge outfall on three occasions over the summer period (when flows are of monitoring may be reviewed after a minimum of three years of data has be request to and approval by a Programme Manager in the Resource Use Group of Council.	let to the oxidation t been assessed or <b>Full compliance</b> ude of ammoniacal- w flow conditions. In at six sites below low). The frequency teen collected, upon of Waikato Regional

	The 2014 and 2015 reports concluded that: o The Huntly WWTP discharge was not causing any marked increase in the an	nmoniacal nitrogen
		nmoniacal nitrogon
	concentrations at the time of sampling, during low river flow.	ninoniacai-inti ogen
	o The discharge plume ammoniacal-nitrogen concentrations were well below the Plan standards.	e Waikato Regional
	o WDC requests that this testing ceases based on the findings of the reports.	
Status Reasoning	The consent holder has previously requested that this sampling requirement cer of previous data by WRC principal scientist Bill Vant to ensure cessation will not adverse effects. It was agreed to suspend the sampling of ammoniacal nitrogen in cease the sampling. The sampling will be suspended until further notice.	lead to any further
Action Required	WRC has given permission to suspend the sampling for ammoniacal nitrogen in the river until further notice.	Full compliance
18	The consent holder shall define a sampling location or locations and the sampling method or metho to be used for monitoring the parameters in conditions 5, 6 and 17. The location(s) and method used for the sampling shall be to the satisfaction of Waikato Regional Council.	
Evidence		
Action Required		Full compliance
19	The consent holder shall take grab samples of the treated wastewater on a mon sampling location specified in condition 18 of this consent, for the purpose of deter with conditions 5 and 6. E.coli grab samples shall be taken on a weekly basis.	
Evidence		
Status Reasoning		
Action Required		Full compliance
20	All wastewater quality analyses shall be undertaken by an IANZ accredited or equal the All methods used shall be appropriate for the wastewater analyses undertaken.	uivalent laboratory.
Evidence		
Status Reasoning		
Action Required		Full compliance
21	The consent holder shall prepare an Operations and Management Plan. This Pla by a suitably qualified and experienced person and shall detail how the treatment a is to be operated and maintained to ensure compliance with the conditions of consents 119648, 119649, 119650 and 119651. As a minimum the Plan shall in matters: i) A description of the wastewater treatment plant including as-te wastewater treatment facilities; ii) A description of the sequence, timing and meth of upgrades to the treatment plant; iii) A description and schedule of the monitoring and maintenance procedures to be undertaken to ensure effective pl schedule of monitoring to be carried out to ensure effective plant operation ar consent conditions; v) A sampling location plan; vi) A schedule of the treatment p and the detailed response and contingency plans to address anticipated variations operation; vii) Procedures for recording routine maintenance and all repairs that a Chain of command, responsibility and notification protocols; ix) The current infiltr plan; x) Procedures for improving and/or reviewing the plant management plant lodged with Waikato Regional Council within six months of commencement of thi be reviewed and updated annually and as required as a result of any changes in management. An electronic copy of the management plan shall be provided to Council within 10 working days of a request to do so. Advice note: The Waikat reserves the right to make comment on the Operations and Management Plan subsequent changes to the Plan.	and disposal system of this consent and clude the following puilt plans for the nods of construction routine inspection, ant operation; iv) A nd compliance with plant critical aspects is from normal plant are undertaken; viii) ration management n. This Plan shall be is consent, and shall plant operation or p Waikato Regional to Regional Council
Evidence	O&M plan (doc number 3516604) was submitted to WRC on 5 December 2014. No version has been submitted to WRC since 2014.	o review or updated

	the consent holder states that:	
	Section 4 of the O&M plan refers to the management structure.	
Status Reasoning	The O&M plan "shall be reviewed and updated annually and as required as a resuplant operation or management". It is highly likely that the operation and manage has changed significantly since 2014 and a review of the plan is overdue.	
Action Required	Please undertake a review and update the O&M plan	Minor technical non-compliance
22	The treatment system and discharge to the Waikato River shall be operate managed by appropriately experienced personnel in accordance with th Management Plan pursuant to condition 21 of this consent.	
Evidence		
Status Reasoning		
Action Required		Full compliance
23	The consent holder shall ensure contractors are made aware of the conditions of this resourc consent and ensure compliance with those conditions.	
Evidence	All contractors employed at the treatment site are inducted in both health and sat relevant conditions of this consent.	fety procedures and
Status Reasoning		
Action Required		Full compliance
24	In conjunction with consent 119648, the consent holder shall maintain and Register for all complaints made about the treatment and discharge operation consent holder. The Register shall record: i) The date, time and duration of the has resulted in the complaint; ii) The location of the complainant when the detected; iii) The possible cause of the incident; iv) The weather conditions and w site when the incident allegedly occurred, if significant to the complaint; v) Ar undertaken by the consent holder in response to the complaint. The Register sha to the Waikato Regional Council at all reasonable times. Complaints which compliance with the conditions of this resource consent shall be forwarded to the Council within 5 working days of the complaint being received.	ns received by the event/incident that event/incident was vind direction at the ny corrective action II be made available may indicate non-
Evidence	Council's CRM database records all complaints from the public please see App related queries or complaints for the 18-19 year.	endix Two for WW
Status Reasoning		
Action Required		Full compliance
25	The consent holder shall place and maintain a sign in the vicinity of the discha River, in such a way that it is conspicuous to river users, advertising of the presence discharge and warning against the use of the location for swimming.	
Evidence	A sign is located in the vicinity of the discharge that alerts and warns people of wastewater discharge.	the presence of the
Status Reasoning		
Action Required		Full compliance
26	The consent holder shall be responsible for any erosion that occurs as a result of consent and for any erosion works that become necessary to preserve the integ the banks of the Waikato River. Note: A separate resource consent may be requir need to undertake erosion control works. Any such consent shall be obtained by at their sole expense prior to any works being undertaken.	rity and stability of ed as a result of the

Fuidance		
Evidence	There are no current issues regarding erosion at the Huntly discharge site.	
Status Reasoning		
Action Required		Full compliance
27	The discharge to the Waikato River shall be via a multi-port diffuser located on the River.	bed of the Waikato
Evidence	The Huntly discharge is via a multi-port diffuser. Ports 2, 4, 6 and 8 are blocked o	ff.
Status Reasoning		
Action Required		Full compliance
28	Ports 2, 4, 6 and 8 of the diffuser, as numbered from the true right bank of the remain closed unless specifically permitted in writing by the Waikato Regional Co	
Evidence	The Huntly discharge is via a multi-port diffuser. Ports 2, 4, 6 and 8 are blocked o	ff.
Status Reasoning		
Action Required		Full compliance
29	The consent holder shall maintain the outfall diffuser in an operational state such from ports 1, 3, 5, 7 and 9 is uniform along the operational length of the diffuser flow.	
Evidence	The Huntly discharge is via a multi-port diffuser. Ports 2, 4, 6 and 8 are blocked o	ff.
Status Reasoning		
Action Required		Full compliance
30	The consent holder shall undertake a survey of the diffuser at six monthly interv compliance with conditions 28 and 29 of this consent. The frequency of the surve to no less than every two years following written request to and approval from th Council. The results of each survey and any recommendation as to the frequency shall be provided to the Waikato Regional Council within 30 days of the survey.	eys may be reduced Ie Waikato Regional
Evidence	No Dive survey report has been submitted to WRC since May 2017	
Status Reasoning	WDC must undertake a survey of the diffuser at six monthly intervals to demo with conditions 28 and 29 of this consent.	nstrate compliance
Action Required	Please undertake dive surveys as required	Minor technical non-compliance
31	The consent holder shall forward the results of the monitoring undertaken pursua 15, 17 and 19 to the Waikato Regional Council, via electronic means, within one the results by the consent holder.	
31 Evidence	15, 17 and 19 to the Waikato Regional Council, via electronic means, within one	
	15, 17 and 19 to the Waikato Regional Council, via electronic means, within one the results by the consent holder.	month of receipt of

Status Reasoning		
Action Required		Full compliance
32	The consent holder shall provide to the Waikato Regional Council, Waikato-Tai Incorporated (Claims and Environmental unit) and the Hopuhopu Manawhen report by 30 September each year, addressing the following: i) A summary of th required by conditions of this resource consent for the year ending 30 June; i) of monitoring data collected and comment on any emerging trends; ii) Comment the conditions of this resource consent; iii) Any reasons for non-compliance or dif compliance with the conditions of this resource consent and a description of ar efficacy of any remedial works undertaken; iv) Comment on infiltration rates and planned and the efficacy of these works in subsequent reports; v) Any other issue to the consent holder. A quarterly report shall be prepared and distributed at the and December of each year. These progress reports shall address the monitor preceding 12 months, including the rolling 12 month median value. The reports to Waikato Regional Council, Waikato-Tainui Te Kauhanganui Incorpor Environmental unit) and the Hopuhopu Manawhenua Roopu.	tua Roopu a written the monitoring results Critically analyse the on compliance with fficulties in achieving and a summary of the d any remedial works the considered relevant the end of March, June oring results for the s shall be distributed
Evidence	The consent holder states in their annual report: This report, the attached spreadsheet and the consent summary report are subr with this condition. WaterOutlook reporting at Council has allowed monthly discharge quality reporti	
Status Reasoning		
Action Required		Full compliance
Action Required	The consent holder shall notify the Waikato Regional Council within 24 hours (we the consent holder becoming aware of the limits specified in conditions 4, 5 ar consent being exceeded, or any accidental discharge, plant breakdown or other is likely to result in the limits of this consent being exceeded. The consent how working days of the incident occurring, provide a written report to the Waika identifying the breach, possible causes and steps to ensure future compliance.	where practicable) of nd 6 of this resource circumstance which Ider shall, within 10
-	the consent holder becoming aware of the limits specified in conditions 4, 5 ar consent being exceeded, or any accidental discharge, plant breakdown or other is likely to result in the limits of this consent being exceeded. The consent ho working days of the incident occurring, provide a written report to the Waika	where practicable) of nd 6 of this resource circumstance which Ider shall, within 10
33	the consent holder becoming aware of the limits specified in conditions 4, 5 ar consent being exceeded, or any accidental discharge, plant breakdown or other is likely to result in the limits of this consent being exceeded. The consent ho working days of the incident occurring, provide a written report to the Waika identifying the breach, possible causes and steps to ensure future compliance. The consent holder states in their annual report: <i>The WaterOutlook reports are forwarded to WRC.</i>	where practicable) of nd 6 of this resource circumstance which Ider shall, within 10
33 Evidence	the consent holder becoming aware of the limits specified in conditions 4, 5 ar consent being exceeded, or any accidental discharge, plant breakdown or other is likely to result in the limits of this consent being exceeded. The consent ho working days of the incident occurring, provide a written report to the Waika identifying the breach, possible causes and steps to ensure future compliance. The consent holder states in their annual report: <i>The WaterOutlook reports are forwarded to WRC.</i>	where practicable) of nd 6 of this resource circumstance which Ider shall, within 10
33 Evidence Status Reasoning	the consent holder becoming aware of the limits specified in conditions 4, 5 ar consent being exceeded, or any accidental discharge, plant breakdown or other is likely to result in the limits of this consent being exceeded. The consent ho working days of the incident occurring, provide a written report to the Waika identifying the breach, possible causes and steps to ensure future compliance. The consent holder states in their annual report: <i>The WaterOutlook reports are forwarded to WRC.</i>	vhere practicable) of nd 6 of this resource circumstance which older shall, within 10 to Regional Council, <b>Full compliance</b> kato District Council ato Regional Council int adverse effect on he Te Kauwhata and ns why the situation at measures can be st from the Waikato
33 Evidence Status Reasoning Action Required	the consent holder becoming aware of the limits specified in conditions 4, 5 ar consent being exceeded, or any accidental discharge, plant breakdown or other is likely to result in the limits of this consent being exceeded. The consent ho working days of the incident occurring, provide a written report to the Waika identifying the breach, possible causes and steps to ensure future compliance. The consent holder states in their annual report: <i>The WaterOutlook reports are forwarded to WRC.</i> <i>Incidents have been reported as required.</i> The consent holder shall as soon as reasonably practicable, notify the Waik (Community Assets – Operations Unit), Watercare Services Limited, and the Waik of an event that may in itself, or as a consequence of an event, have a significa the quality of the water within the Waikato River at the abstraction points of th Tuakau (Auckland) Water Supplies. The consent holder shall record the reasor occurred, the actions taken by the consent holder and an assessment of wh adopted in the future to minimise such occurrences and upon written reques Regional Council provide a report to the Waikato Regional Council and the Medi	vhere practicable) of nd 6 of this resource circumstance which older shall, within 10 to Regional Council, <b>Full compliance</b> kato District Council ato Regional Council int adverse effect on he Te Kauwhata and ns why the situation at measures can be st from the Waikato
33 Evidence Status Reasoning Action Required 34	the consent holder becoming aware of the limits specified in conditions 4, 5 ar consent being exceeded, or any accidental discharge, plant breakdown or other is likely to result in the limits of this consent being exceeded. The consent ho working days of the incident occurring, provide a written report to the Waika identifying the breach, possible causes and steps to ensure future compliance. The consent holder states in their annual report: <i>The WaterOutlook reports are forwarded to WRC.</i> <i>Incidents have been reported as required.</i> The consent holder shall as soon as reasonably practicable, notify the Waik (Community Assets – Operations Unit), Watercare Services Limited, and the Waik of an event that may in itself, or as a consequence of an event, have a significa the quality of the water within the Waikato River at the abstraction points of th Tuakau (Auckland) Water Supplies. The consent holder shall record the reasor occurred, the actions taken by the consent holder and an assessment of wh adopted in the future to minimise such occurrences and upon written reques Regional Council provide a report to the Waikato Regional Council and the Medi addressing this matter. The consent holder states in their annual report:	vhere practicable) of nd 6 of this resource circumstance which older shall, within 10 to Regional Council, <b>Full compliance</b> kato District Council ato Regional Council int adverse effect on he Te Kauwhata and ns why the situation at measures can be st from the Waikato

35	The consent holder shall monitor the actual performance of the Huntly WWT median summertime mass-load of nutrients and of the Huntly WWTP in re- parameters for the period from 1 December 2012 to 31 May 2015 (three s Immediately following 31 May 2015 the consent holder shall review the performa- options for upgrading the treatment processes, all in consultation with Waahi Waikato-Tainui Kauhanganui Incorporated. The preferred upgrade option shall reported to Waikato Regional Council not later than 31 October 2015. ii) The option shall be constructed and commissioned not later than 30 November 2016. shall include consideration of the future of both the surface-flow and the substi- cells, based on the monitored performance and the decision in relation to the option, all in consultation with Waahi Whaanui Trust and Waikato-Tainui Kauhan iv) The 2015 review shall also give consideration to the ongoing appropriate combined summertime mass-load limits for Total Nitrogen and Total Phosph WWTP, taking account of the actual performance of the two plants from 1 Decem 2015 and any changes in the environmental objectives for the Waikato River after Recommendation whether the wetlands should remain in the treatment decommissioned and the reasons for this decision; vi) A plan for the decommiss of the wetland, should the conclusion be that the wetlands should be decommiss some way.	espect of all other ummer seasons). i) ance and review the Whaanui Trust and be determined and preferred upgrade iii) The 2015 review urface-flow wetland e preferred upgrade ganui Incorporated. ness of the median norous from Huntly ober 2012 to 31 May er 31 March 2011. v) nt process or be sioning or alteration
Evidence	The combined mass loadings are compliant with the consented limits.	
Status Reasoning		
Action Required		Full compliance
36	Waikato District Council shall retain suitably qualified persons to review the a Appendix 5 "Alternatives Study" of the AEE, recorded on Waikato Regional of system numbered 1458402, at intervals as below. The investigations shall ince technology and economics of alternative collection, treatment and disposal syster including land-based disposal options. The reviews shall be carried out in consult Tainui Te Kauhanganui Incorporated (Claims and Environmental unit) an Manawhenua Roopu and the findings of the reviews shall be adopted by Waikato the proposed upgrade of the treatment system. The first review shall focus on al options for removal of algae from the effluent after the pond systems and UV the proposed rock-lined channel. The review shall include (but not be limited to sand filter, Bio-Filtro and an algae treatment system that has been identi Manawhenua Roopu. This review shall be completed and reported to the Waikato Waikato-Tainui Te Kauhanganui Incorporated (Claims and Environmental unit) Manawhenua Roopu not later than 30 September 2011. The second review shall the matters listed in condition 35 above. The third review shall cover the same r as the second review and shall be completed and reported to Waikato Regiona Tainui Te Kauhanganui Incorporated (Claims and Environmental unit) a Manawhenua Roopu not later than 31 March 2022. Note: Commissioning of any is subject to condition 13.	Council's document lude the feasibility, ems for wastewater ation with Waikato- nd the Hopuhopu o District Council for ternative treatment disinfection prior to to) consideration of ified by Hopuhopu to Regional Council, and the Hopuhopu consider all aspects matters and options al Council, Waikato- nd the Hopuhopu
Evidence	The consent holder states in their annual report: The second treatment review report was completed on the 29 September 2015. The third review is due before 31 March 2022.	
Status Reasoning		Eullin P
Action Required		Full compliance
37	The consent holder shall, by 30 September 2015 and every five years thereafter. Regional Council a wastewater treatment system review report, the scope of w An analysis of the performance of the treatment system with respect to the ini- Identification of any deficiencies in the plant design or operation and the measu- been undertaken to address these deficiencies and the anticipated (or actua treated wastewater quality; iii) Timetable for the treatment plant capital upgrad population growth; iv) A review of the trend in the combined contribution made and Huntly wastewater discharges to the Total Nitrogen and Total Phosphorus River at Mercer Bridge since the granting of this consent.	hich shall include: i) itial plant design; ii) res that are or have I) improvements in e to cater for actual by the Ngaruawahia

Evidence	The first treatment review report was completed on the 29 September 2015.	
	The third review is due before 31 March 2022.	
Status Reasoning	technical error in submission dates which should be for a third review of the treatr is due by 29 September 2020 (i.e. five years after the previous review)	ment review report
Action Required	Please ensure the third treatment review is undertaken by 29 September 2020	Minor technical non-compliance
38	The Waikato Regional Council may, in the six month period following 30 Septemble five years thereafter, serve notice on the consent holder under section 128(1) Management Amendment Act (1991), of its intention to review the condition consent for the following purposes: i) To review the effectiveness of the condition consent in avoiding or mitigating any adverse effects on the environment from the resource consent and if necessary to avoid, remedy or mitigate such effects by amended conditions; or ii) To review the adequacy of and the necessity for mon- by the consent holder and specifically to review the frequency of record keeping a record collection for the purposes of determining the most appropriate method ar If necessary and appropriate, to require the holder of this resource consent practicable option to remove or reduce adverse effects on the surrounding envi- review the conditions of this resource consent to ensure the exercise of this resour- inconsistent with the Vision and Strategy of the Waikato-Tainui Raupatu Clai Settlement Act 2010 (Schedule 2 – Vision and strategy for Waikato River) and if ne- any such inconsistencies by way of further or amended conditions. Note: Costs a review of the conditions of this resource consent will be recovered from the accordance with the provisions of section 36 of the Resource Management Act 19	c) of the Resource is of this resource ins of this resource the exercise of this way of further or itoring undertaken and the method of ind frequency; or iii) to adopt the best ronment; or iv) To urce consent is not ims Waikato River ecessary to address ssociated with any consent holder in
Evidence		
Status Reasoning		
Action Required	A review of the conditions of this consent is available to WRC between 1 October 2020 and 31 March 2021.	Not assessed
	Authorisation Compliance: Par	tial compliance

### AUTH119648.01.01 - Air - odour

Activity Authorised: Discharge contaminants to air from activities associated with the Huntly WWTP			
Condition No.	Description		
1	The discharge to air shall be undertaken in general accordance with: i) The application for this resource consent; ii) The document titled "Waikato District Council Ngaruawahia and Huntly Wastewater Resource Consents Project, Resource Consents Application: Assessment of Effects on the Environment" dated March 2009 and recorded on Waikato Regional Council's document system numbered 1458402; and iii) The document titled "Waikato District Council Ngaruawahia and Huntly Wastewater Resource Consents Project, Resource Consents Application: Response to RMA Section 92(1) Requests for Further Information" dated August 2009 and recorded on Waikato Regional Council's document system numbered 1531323; 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 ensure compliance with those conditions.		
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 Huntly Wastewater Treatment Plant shall not result in any objectionable odours at or beyond the boundary of the properties on which the treatment plant is located.	
Evidence	No odour complaints have been notified by the consent holder or received be compliance period	by WRC during this
Status Reasoning		
Action Required		Full compliance
5	There shall be no discharge of airborne contaminants as a result of the activities resource consent to the extent that it causes an adverse effect at or beyond to subject property on which the treatment plant is located. Note: For the purpose Waikato Regional Council will use the guidelines for assessment in chapter of Regional Plan to determine whether adverse effects are occurring from the dis particulate matter.	he boundary of the of this consent, the 5.4 of the Waikato
Evidence		
Status Reasoning		
Action Required		Full compliance
	suitably qualified and experienced person and shall detail the methods and ope adopted by the consent holder to ensure compliance with the conditions of thi may form part of the Operations and Management Plan specified in consent 119 the Odour Management Plan shall address the following matters: i) A descri wastewater treatment facility; ii) A description of routine inspection, monitorin procedures to be undertaken to ensure effective plant operation and compl conditions; iii) Details of operational and maintenance procedures to minimise the inlet screen; iv) Details of operational and maintenance procedures to mini from the oxidation pond; v) Details of operational and maintenance procedures release during pond desludging and pond sludge drying and handling; vi) Details of and procedures to address power or equipment failure at the treatment plant odour complaints procedure, record keeping and response procedure. This Plan s Waikato Regional Council within six months of commencement of this consent, ar and updated annually and as required as a result of any changes in plant operation An electronic copy of the management plan shall be provided to Waikato Region working days of a request to do so. Note: The Waikato Regional Council reserver comment on the Operations and Management Plan submitted and any subseque Plan.	s consent. The Plan 647. As a minimum ption of the entire g and maintenance iance with consent odour release from mise odour release to minimise odour of contingency plans c; vii) Details of the shall be lodged with nd shall be reviewed on or management. al Council within 10 ss the right to make
Evidence	see doc ref 2400081. the Odour management of the site is contained in the O&M 11.4 to 11.6 <b>11.4 Monitoring for Odour</b> All management and operations staff of Council should be tasked with carefully "detect any bad odours whenever they visit the plant. They should be required odour detected, the exact location where the odour was detected and the likely s and to report the event to the Treatment and Services Team Leader as soon as p the same day. During the hot summer period a staff member should be tasked to visit the site morning at least once each month to "sniff" around to see if there is any bad o atmospheric inversion and pervading across the neighbourhood. These visits s noting date and time of the visit, whether any odour was detected or not. If any bat the staff member should endeavour to discover the likely source and cause of the that information in their report.	sniffing" in order to to record any bad ource of the odour, ossible – at least on on a still clear early dour trapped by an hould be recorded, id odour is detected

Status Reasoning	the O7M plan does not contain all of the relevant items listed in the condition, na	amely:
	i) A description of the entire wastewater treatment facility; - compliant	
	ii) A description of routine inspection, monitoring and maintenance procedures t ensure effective plant operation and compliance with consent conditions; - comp	
	iii) Details of operational and maintenance procedures to minimise odour rele screen; - compliant	ease from the inlet
	iv) Details of operational and maintenance procedures to minimise odour release pond; - compliant	from the oxidation
	v) Details of operational and maintenance procedures to minimise odour reddesludging and pond sludge drying and handling; - non-compliant, no details of could be found in the O&M plan on file.	
	vi) Details of contingency plans and procedures to address power or equipr treatment plant; - compliant	nent failure at the
	vii) Details of the odour complaints procedure, record keeping and response proc	cedure compliant
Action Required	Please include details of operational and maintenance procedures to minimise odour release during pond desludging and pond sludge drying and handling in the next O&M plan review	
7	In conjunction with consent 119647, the consent holder shall maintain and Register for all complaints made about the treatment and discharge operatio consent holder. The Register shall record: i) The date, time and duration of the has resulted in the complaint; ii) The location of the complainant when the detected; iii) The possible cause of the incident; iv) The weather conditions and w site when the incident allegedly occurred; v) Any corrective action undertaken by in response to the complaint. The Register shall be made available to the Waika at all reasonable times. Complaints which may indicate non-compliance with th resource consent shall be forwarded to the Waikato Regional Council within 5 w complaint being received.	ns received by the event/incident that event/incident was vind direction at the the consent holder to Regional Council e conditions of this
Evidence	Council's CRM database records all complaints from the public please see App related queries or complaints for the 18-19 year.	endix Two for WW
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. 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	The consent holder states in their annual report "that Incidents have been report	ted as required".
Status Reasoning		
Action Required		Full compliance
9	The Waikato Regional Council may, in the six month period following 30 Septem five years thereafter, serve notice on the consent holder under section 12 Management Act 1991, of its intention to review the conditions of this resour following purposes: i) To review the effectiveness of the conditions of this re avoiding or mitigating any adverse effects on the environment from the exerci- consent and if necessary to avoid, remedy or mitigate such effects by way of f	8 of the Resource rce consent for the esource consent in ise of this resource

	conditions; or ii) To review the adequacy of and the necessity for monitoring consent holder and specifically to review the frequency of record keeping and the collection for the purposes of determining the most appropriate method and necessary and appropriate, to require the consent holder to adopt the best pr remove or reduce adverse effects on the surrounding environment; or iv) To reviet this resource consent to ensure the exercise of this resource consent is not in Vision and Strategy of the Waikato-Tainui Raupatu Claims Waikato River Se (Schedule 2 – Vision and strategy for Waikato River) and if necessary to inconsistencies by way of further or amended conditions. Note: Costs associated the conditions of this resource consent will be recovered from the consent holder the provisions of section 36 of the Resource Management Act 1991.	e method of record frequency; or iii) If acticable option to ew the conditions of consistent with the ttlement Act 2010 address any such with any review of
Evidence		
Status Reasoning		
Action Required	A review period is available at this time.	Not assessed
	Authorisation Compliance: F	ull compliance

#### AUTH119649.01.01 - Bed - structure

Activity Authorised: Use, upgrade and maintenance of an outflow pipeline structure including an outflow diffuser on the bed of the Waikato River for the discharge of treated wastewater from the Huntly WWTP

Condition No.	Description	
1	The outfall structure shall be maintained and operated in general accordance wir for this resource consent; ii) The document titled "Waikato District Council Ngar Wastewater Resource Consents Project, Resource Consents Application: Assessm Environment" dated March 2009 and recorded on Waikato Regional Council' numbered 1458402; and iii) The document titled "Waikato District Council Ngar Wastewater Resource Consents Project, Resource Consents Application: Respo 92(1) Requests for Further Information" dated August 2009 and recorded o Council's document system numbered 1531323; subject to the conditions below should any inconsistency occur between the conditions and the above documen	uawahia and Huntly ient of Effects on the s document system uawahia and Huntly inse to RMA Section n Waikato Regional w which shall prevail
Evidence		
Status Reasoning		
Action Required		Full compliance
2	The consent holder shall ensure contractors are made aware of the condition consent and ensure compliance with those conditions.	ons of this resource
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 discharge of treated wastewater to the Waikato River shall be via a multi-port diffuser located on the bed of the Waikato River.	
Evidence	The Huntly discharge is via a multi-port diffuser. Ports 2, 4, 6 and 8 are blocked off.	
Status Reasoning		
Action Required		Full compliance
5	Ports 2, 4, 6 and 8 of the diffuser, as numbered from the true right bank of the remain closed unless specifically permitted in writing by the Waikato Regional C	

Evidence	dive report undertaken on 18/19 May 2017 was unable to confirm the condition of	f the ports however
	the consent holder states in their annual report that: The Huntly discharge is via a multi-port diffuser. Ports 2, 4, 6 and 8 are blocked o	ff.
Status Reasoning		
Action Required		Full compliance
6	The consent holder shall maintain the outfall diffuser in an operational state suc from ports 1, 3, 5, 7 and 9 is uniform along the operational length of the dif effective dispersion of the wastewater in the river flow.	-
Evidence	it is assumed this is occurring as required. Discharges are being undertaken as re	quired.
Status Reasoning		
Action Required		Full compliance
7	The consent holder shall undertake a survey of the diffuser at six monthly inter- compliance with conditions 5 and 6 of this consent. The frequency of the surveys no less than every two years following written request to and approval from th Council. The results of each survey and any recommendation as to the frequen shall be provided to the Waikato Regional Council within 30 days of the survey.	s may be reduced to e Waikato Regional
Evidence	The last submitted dive report was dated 18/19 May 2017 (doc ref 13168003)	
Status Reasoning	inspections are required every 6 months. WRC has no record of any dive repo since May 2018.	rts being submitted
Action Required	Dive reports for this site's diffuser is required to be undertaken every 6 months.	Low priority non- compliance
8	The consent holder shall notify the Waikato Regional Council in writing at least fiv to commencement of survey works.	e working days prior
Evidence	WDC does not always notify WRC in advance of the dive surveys being commend	ed.
Status Reasoning		
Action Required	The consent holder must notify the Waikato Regional Council in writing at least five working days prior to commencement of survey works, unless a suitable alternative arrangement is agreed by both parties.	
9	The consent holder shall be responsible for the structural integrity and maintenance of the multi-port diffuser and for the provision and maintenance of any erosion control works that become necessary to preserve the structural integrity of the multi-port diffuser, and/or to control erosion as a result of exercise of this consent. Any such works shall be to the satisfaction of the Waikato Regional Council. Note: A separate resource consent may be required as a result of the need to undertake erosion control works. Any such consent shall be obtained by the consent holder at their sole expense prior to any works being undertaken.	
Evidence	The diffuser is maintained	
Status Reasoning		
Action Required		Full compliance
11	The consent holder shall maintain the structure so that no part of the structure loose due to water) or results in a navigational hazard. Any material that is lost shall be immediately retrieved by the consent holder. Should the material I navigation the Waikato Regional Council shall be informed immediately.	from the structure

Evidence	No breakages or damage to the diffuser has been reported to WRC	
Status Reasoning		
Action Required		Full compliance
	Authorisation Compliance: High lev	vel of compliance

#### AUTH119650.01.01 - Water - sewage

Activity Authorised: Discharge treated wastewater (via seepage) to land and groundwater from activities associated with the Huntly WWTP

Condition No.	Description	
4	The consent holder shall manage and maintain the integrity of all ponds, wetlan other structures that form any part of the wastewater treatment process so volume of seepage from such structures so far as practicable.	
Evidence		
Status Reasoning		
Action Required		Full compliance
	Authorisation Compliance:	Full compliance

#### AUTH119651.01.01 - Water - sewage

Activity Authorised: Discharge treated wastewater (via flooding of wetlands during storm events) to a tributary of the Kimihia Stream from activities associated with the Huntly WWTP

Condition No.	Description	
4	The discharge of treated wastewater from the wetlands to the tributary of the lonly occur when the wetlands are inundated during storm events.	Kimihia Stream shall
Evidence		
Status Reasoning		
Action Required		Full compliance
7	When the wetland is about to be inundated and until flood waters recede, the bypassed and treated wastewater from the oxidation pond shall be discharged direction River via the bypass pipeline.	
Evidence		
Status Reasoning		
Action Required		Not assessed
	Authorisation Compliance:	Not assessed

#### AUTH130140.01.01 - Bed - structure

Activity Authorised: To place a pipe bridge over an unnamed tributary of Lake Hakanoa in Huntly	
Condition No.	Description
1	The aerial pipeline authorised by this consent shall be undertaken in general accordance with the application (Recorded as document #2830872 on the Waikato Regional Councils document recording

	system), and as identified in the resource consent conditions below which shall of any inconsistency between the aforementioned documentation and the condi	· .
Evidence	This consent relates primarily to the construction phase of this asset and that we therefore no further routine monitoring of this authorisation is required.	ork is now complete
Status Reasoning		
Action Required		Full compliance
	Authorisation Compliance:	Not assessed

#### 4 SUMMARY OF COMPLIANCE

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

Authorisation	Authorisation Description	Compliance Status
AUTH119647.01.02	Discharge up to 11,500 cubic metres per day of treated wastewater from the Huntly WWTP into the Waikato River	Partial compliance
AUTH119648.01.01	Discharge contaminants to air from activities associated with the Huntly WWTP	Full compliance
AUTH119649.01.01	Use, upgrade and maintenance of an outflow pipeline structure including an outflow diffuser on the bed of the Waikato River for the discharge of treated wastewater from the Huntly WWTP	-
AUTH119650.01.01	Discharge treated wastewater (via seepage) to land and groundwater from activities associated with the Huntly WWTP	Full compliance
AUTH119651.01.01	Discharge treated wastewater (via flooding of wetlands during storm events) to a tributary of the Kimihia Stream from activities associated with the Huntly WWTP	
AUTH130140.01.01	To place a pipe bridge over an unnamed tributary of Lake Hakanoa in Huntly	Not assessed

#### Overall Site Compliance:

**Partial compliance** 

#### 5 DISCUSSION AND CONCLUSIONS

The performance of the Huntly WWTP has only been achieving a partial level of compliance for the last four years including this audit. The non-compliance of most concern is the quality of treated wastewater with the pH, suspended solids and ammoniacal nitrogen levels all being discharged above the consented limits. The continuance of discharges above the limits can also trigger the need for upgrades to be undertaken at the site and this occurred in 2017 following three successive years of non-compliance with the limits for ammoniacal nitrogen. Because the trigger had been reached the consent holder was required to undertake upgrade works within 2 years (up to 31 January 2019), in order to meet a new lower limit based on 80% of the original 20g/m<sup>3</sup> (16g/m<sup>3</sup>).

The remaining items of non-compliance primarily relate to a lack of reporting and surveys such as the dive surveys which are required six monthly. The O&M plan is also due for a review and I understand that Watercare Services Limited is aware of this requirement and has it scheduled.

#### 6 SUMMARY OF ACTIONS REQUIRED

Resource consent	Condition	Action Required
AUTH119647.01.02	6.	Please investigate and report what actions WDC intends to take to improve the discharge quality of selected determinants to within compliant limits. (pH, suspended solids, ammoniacal nitrogen)
AUTH119647.01.02	10	Please ensure you take action to prevent the suspended solids limits being breached for 3 consecutive years. Please provide evidence of any upgrades to the WWTP to reduce the level of ammoniacal nitrogen to compliant limits as per previous audits.
AUTH119647.01.02	13	Please confirm whether the upgrade items listed in this condition have been installed as required within their timeframes.
AUTH119647.01.02	15	Please ensure that rainfall data is included in all monthly reports from now on
AUTH119647.01.02	17	WRC has given permission to suspend the sampling for ammoniacal nitrogen in the river until further notice.
AUTH119647.01.02	21	Please undertake a review and update the O&M plan
AUTH119647.01.02	30	Please undertake dive surveys as required
AUTH119647.01.02	37	Please ensure the third treatment review is undertaken by 29 September 2020
AUTH119647.01.02	38	A review of the conditions of this consent is available to WRC between 1 October 2020 and 31 March 2021.
AUTH119648.01.01	6	Please include details of operational and maintenance procedures to minimise odour release during pond desludging and pond sludge drying and handling in the next O&M plan review
AUTH119648.01.01	9	A review period is available at this time.
AUTH119649.01.01	7	Dive reports for this sites diffuser is required to be undertaken every 6 months.
AUTH119649.01.01	8	The consent holder must notify the Waikato Regional Council in writing at least five working days prior to commencement of survey works, unless a suitable alternative arrangement is agreed by both parties.

The following actions are required to be undertaken:

#### 7 RECOMMENDATIONS FOR WAIKATO REGIONAL COUNCIL

I recommend that Waikato District Council is issued with a **formal warning** for continued partial noncompliance. This is an escalation from last years partial compliance where Waikato District Council was issued with a Letter of Direction. This site is in serious need of an upgrade and significant maintenance in order to improve performance and achieve full compliance.

Recommendation - Formal warning

Edward Prince

Edward Prince Senior Resource Officer - Infrastructure Resource Use

#### 7.1 Decision

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

Luch

Hugh Keane Team Leader - Infrastructure Resource Use Date: 6 March 2020

Date: 2 March 2020

Overall Compliance Status for site	Your compliance status
Full compliance	
High level of compliance	
Partial compliance	
Significant non-compliance	

#### **APPENDIX 1**

# **Compliance Status for Individual Conditions**

Compliance Status	Description
Not assessed	Monitoring of this condition was not undertaken during this monitoring event
High priority non-compliance	The non-compliance has the potential for, or has resulted in, significant adverse effects on the environment.
Medium priority non-compliance	There is non-compliance with limits or other direct controls on adverse effects; and The non-compliance has the potential for, or has resulted in, a greater than minor increase in the level of effects authorised.
Low priority non-compliance	There is non-compliance with limits or other direct controls on adverse effects; and The non-compliance has the potential for, or has resulted in, a less than minor increase in the level of effects authorised; and/or There has been a significant technical non-compliance such as a failure to collect or supply self-monitoring data.
Minor technical non-compliance	There is non-compliance with a condition, or part of a condition, that does not directly control adverse effects; and The non-compliance was not significant in the management of effects. For example a short delay in supplying data or meeting a deadline for a report
Full Compliance	The condition has been complied with

# Compliance status for individual consents and the entire site

Compliance Status	Description	
Not assessed	Monitoring has not been undertaken at this site during the current financial year	
Significant non-compliance	There has been a high priority non-compliance; and/or There have been several medium priority non-compliances.	
Partial compliance	There has been a medium priority non-compliance; and/or There have been several low priority non-compliances.	
High level of compliance	There has been a low priority non-compliance; and/or There have been several minor technical non-compliances.	
Full compliance	All conditions that include limits or other direct controls on adverse effects have been complied with. A small number of minor technical non-compliances may have occurred.	