

# Site Compliance Report

**Site No:** REG606683  
**Site Owner:** Waikato District Council  
**Site Name:** Raglan WWTP: Wainui Rd, Raglan  
**Date:** 12 December 2017

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## 1 INTRODUCTION

The following resource consents are held for the site:

Resource Consent	Status	Description	Commenced	Expiry
AUTH971389.01.01	Current	Undertake soil disturbance activities within a high risk erosion area in association with the construction and modifications of the Raglan wastewater treatment site	14/02/2005	14/02/2020
AUTH971390.01.01	Current	Discharge up to 2600 cubic metres of treated wastewater per day into the Raglan Harbour	14/02/2005	14/02/2020
AUTH971391.01.01	Current	Retain existing treated wastewater pipeline, to enable discharge of treated wastewater to Harbour	14/02/2005	14/02/2020
AUTH971392.01.01	Current	Discharge odour to the air associated with all aspects of the existing & proposed treatment system	14/02/2005	14/02/2020

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

## 2 BACKGROUND

The consent holder Waikato District Council has submitted an annual report on the operation of the Raglan WWTP as required by its resource consents. The consent holder has summarised the performance of the WWTP in this extract:

*“The Waikato District Council (WDC) holds the above resource consent associated with the treatment and discharge of wastewater from the Raglan wastewater treatment plant (WWTP) to the Raglan Harbour. The consent was issued on February 2005 and has an expiry date of February 2020.*

*The conditions issued by Waikato Regional Council include the following:*

*971390 To discharge up to 2,600m<sup>3</sup> per day of treated wastewater from the plant after treatment subject to a number of conditions.*

*The average daily discharge of treated effluent was 1,218 m<sup>3</sup> over the reporting period.*

*During the 2016-2017 monitoring period, median consent conditions were achieved for bacteriological treatment and cBOD5.*

*There was one extremely high enterococci result, however, this was most likely a labelling error and the test result was for the RAW wastewater entering the Raglan WWTP, not the final treated effluent.*

*Compliance with the total suspended solids (TSS) limits was not achieved; exceeding both median and 90<sup>th</sup> percentile. A new final holding pond was commissioned on the 10<sup>th</sup> April 2015 to improve TSS*

compliance. This was achieved by constructing a lined storage pond that empties completely during each tidal discharge, therefore preventing algal growth. The performance of this new pond has been very good, despite the fact that it has not achieved TSS compliance. The problematic months for the previous storage pond were from December to June (incl). The average TSS in the old storage pond for that period was 106mg/L. The average TSS for the same months with the new lined pond, was 30mg/L, which is a 71% TSS reduction.

The Aquamat treatment system installed at the Raglan WWTP is not capable of complying with the TSS consent limits.

Various tertiary solids removal systems to further improve TSS compliance, have been trialled in the 15/17 periods. A tertiary membrane system has been identified as being the most effective tertiary solids removal system for Raglan.

A concept design and cost estimate for a membrane system is nearing completion, however, the Service Delivery General Manager has recommended that construction of a membrane system is not confirmed until the consent renewal phase has been completed to ensure that any upgrades align with the outcomes of the consent process”.



Aerial view of site

## 2.1 PREVIOUS COMPLIANCE HISTORY

Date Period	Compliance status
1 July 2016 to 30 June 2017	Partial Compliance
1 July 2015 to 30 June 2016	High Level of Compliance
1 July 2014 to 30 June 2015	Partial Compliance
1 July 2013 to 30 June 2014	High level of Compliance
1 July 2012 to 30 June 2013	Partial Compliance
1 July 2011 to 30 June 2012	High level of Compliance

## 2.2 PREVIOUS COMPLIANCE ISSUES

In last year's annual audit (doc ref 9811166), covering the period 1 July 2015 to 30 June 2016, the consent holder achieved a **high level of compliance**. The issues raised for action to be undertaken in that audit were:

Resource consent	Condition Number	Action Required
AUTH971390.01.01	14	Provide confirmation of method implemented to reduce TSS to compliant levels – <b>remains non-compliant. Although trials have been undertaken no system or process has been implemented in order to reduce TSS levels to within compliant limits</b>
AUTH971392.01.01	2	Please provide full details of any complaints and resolutions to any complaints received as relating to the operation of the WWTP – <b>remains non-compliant. I note that this year there was a complaint relating to odour however no information pertaining to that complaint has been included in this audit.</b>

Furthermore the consent holder was advised in the previous audit that:

*“The main issue arising from this audit is the continued non-compliance with the total suspended solids limits. The non-compliances have been ongoing for the last two years and were also highlighted as an issue in the previous audit. The consent holder has been trialling different methods of reducing the TSS in the final discharge and this has still not been successful. Previously the algal growth in the final holding pond was a major source of TSS. This algal issue has now been resolved with the installation of a smaller daily holding pond which is pumped out on every outgoing tidal cycle. The remaining TSS in the final effluent is most likely entrained in the effluent from the upper ponds.*

*Waikato District Council must improve performance with the TSS standards by the end of June 2017 to avoid a decrease in compliance status and potential for further actions to be taken in relation to the continued non-compliance”.*

Therefore the issue of non-compliant TSS in the final discharge has been ongoing and made clear to the consent holder as a primary issue of concern relating to this site.

## 3 COMPLIANCE ASSESSMENT

Unless otherwise specified in this document this assessment covers the period from **1 July 2016 to 30 June 2017** state relevant assessment period or inspection date.

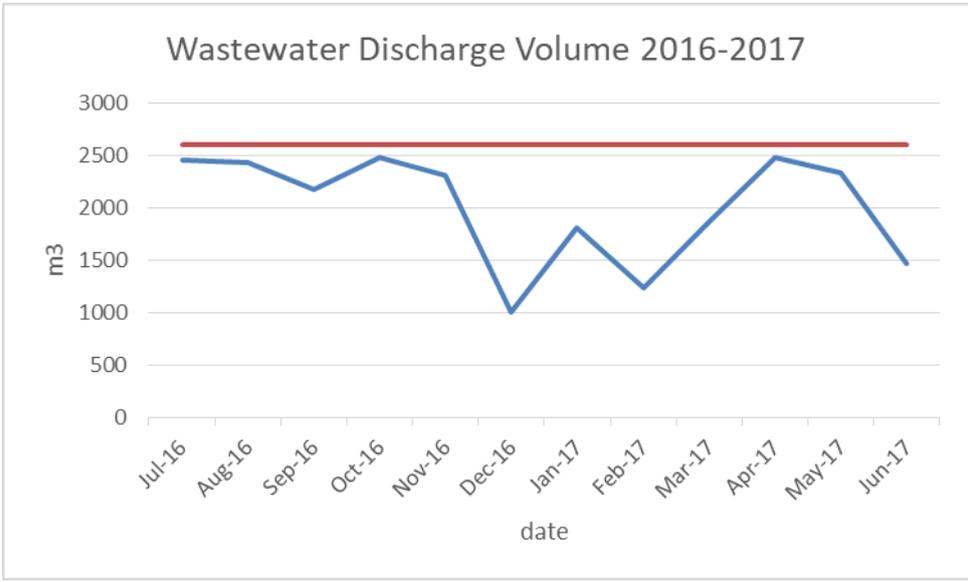
This compliance assessment has been undertaken based on the submitted annual report by the consent holder, monitoring data supplied throughout the compliance period and site inspections. Some administration, duplicate or irrelevant conditions have been omitted for brevity.

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

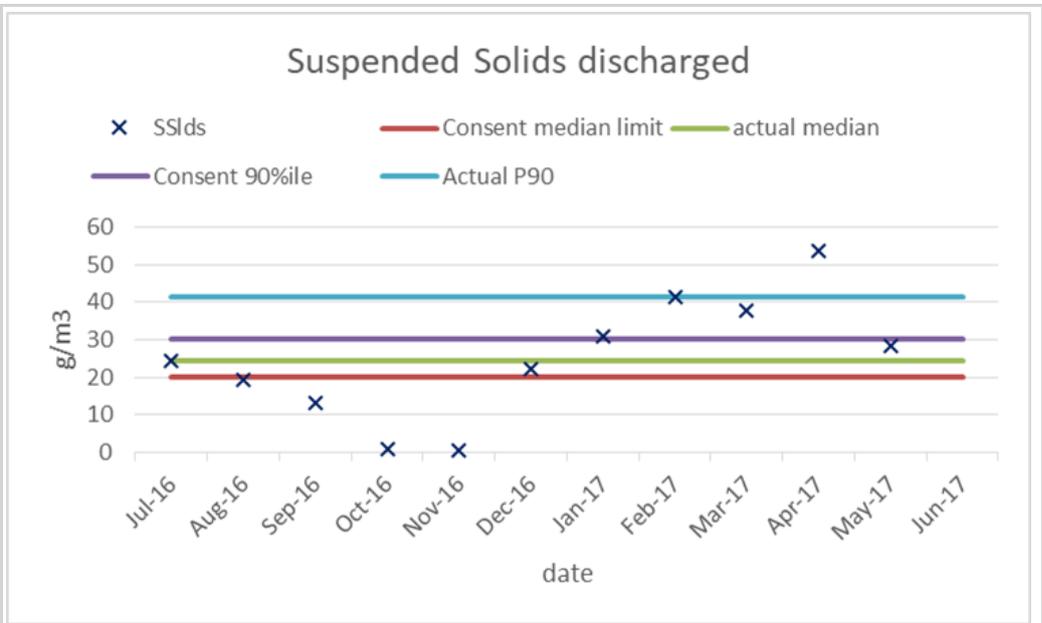
### AUTH971390.01.01 - Water - sewage

Activity Authorised: Discharge up to 2600 cubic metres of treated wastewater per day into the Raglan Harbour	
Condition No.	Description
1	The Raglan wastewater treatment and disposal system shall be constructed, operated and maintained in general accordance with the documents titled "Resource Consent Application and Assessment of Environmental Effects, Volume 1 –Report", "Resource Consent Application and Assessment of Environmental Effects, Volume 2 – Report", and "Raglan Wastewater Treatment and Disposal System, Request for Further Information" dated 15 September 1998, unless superseded by the following document "Raglan Wastewater Treatment Upgrade Assessment of Environmental Effects" dated October 2002, or inconsistent with the resource consent conditions below, which shall prevail. This condition shall preclude the Council from modifying the design or layout of elements of the Raglan Wastewater Treatment and Disposal System to incorporate other treatment technologies which may prove beneficial for the treatment process or environmental outcomes, provided that it meets the conditions of this consent.
<b>Evidence</b>	The wastewater treatment and disposal system, and subsequent discharge to air, is operated and maintained in accordance with the documents listed above and as assessed in the conditions below.
<b>Status Reasoning</b>	
<b>Action Required</b>	<b>Full compliance</b>
2	Suitable fencing shall be installed and maintained to ensure that livestock are at all times unable to access the wastewater treatment site.
<b>Evidence</b>	The site is suitably fenced to exclude livestock from accessing the wastewater treatment site.
<b>Status Reasoning</b>	
<b>Action Required</b>	<b>Full compliance</b>
4	The consent holder shall provide the Waikato Regional Council with a management plan which details the procedures that will be implemented to operate in accordance with the conditions of this resource consent and the procedures that will be put into place to avoid the potential for adverse effects on the Raglan Harbour. This plan shall be lodged with the Waikato Regional Council for its approval within 12 months of date of commencement of the consent as defined in section 116 of the Resource Management Act 1991. The plan shall as a minimum include the following: (i) a description of the entire treatment system facility including: - the filter treatment system, facultative, maturation and holding ponds, and ultra-violet (UV) disinfection unit; - discharge pumps, - discharge pump activation/deactivation and monitoring systems, including a backup system to ensure failsafe operation of the discharge pumps on the outgoing tide, and - discharge and outfall pipeline. (ii) a description of routine maintenance procedures to be undertaken; (iii) an outline of the methods to be utilised to monitor the treatment plant in an operational sense including: - monitoring of influent waste water - monitoring of treatment performance (iv) specific management procedures for operation of the wastewater treatment system, discharge and outfall pipeline; (v) procedures for recording routine maintenance and all repairs that are undertaken; (vi) contingency measures in place to deal with unusual events; (vii) other actions necessary to comply with the requirements of this resource consent; (viii) procedures for improving and/or reviewing the management plan. The consent holder shall provide an opportunity to the Tainui Hapu to have the draft management plan presented and explained to it and shall take into consideration any comments made by the Tainui Hapu prior to lodgement of the management plan with the Waikato Regional Council for approval. The consent holder shall on submitting the management plan for approval, provide the Waikato Regional Council with a commentary on the above discussions with Tainui Hapu for the Council's consideration. The management plan shall be reviewed and updated by the consent holder as a minimum at 1-year intervals. The consent holder shall provide opportunities to the Tainui Hapu to comment on any proposed changes to the plan. Any proposed changes to the plan shall be submitted in writing for approval by the Waikato Regional Council. The consent holder shall undertake the treatment and disposal of wastewater in accordance with the approved management plan.

<b>Evidence</b>	<p>A Management and Contingency plan was submitted in June 2010 and accepted by Environment Waikato on 23 July 2010.</p> <p>An updated version was accepted by Waikato Regional Council in December 2013 with the requirement to update contact details.</p> <p>These details have been confirmed by Tainui hapu representatives and submitted to Waikato Regional Council in September 2014.</p>	
<b>Status Reasoning</b>		
<b>Action Required</b>		<b>Full compliance</b>
6	<p>The consent holder shall provide the Waikato Regional Council with a contingency plan that assesses the environmental hazards associated with potential discharge of wastewater from the wastewater treatment site and marine outfall. This plan shall be lodged with the Waikato Regional Council for its approval within 3 months of date of commencement of the consent as defined in section 116 of the Resource Management Act 1991. The hazard analysis shall include contingency plans to avoid discharges to the unnamed waterways on the treatment site and unauthorised discharges to the Raglan Harbour. The hazard analysis shall include consideration of the following events: (i) overtopping of one or more ponds; (ii) structural failure of one or more ponds; (iii) Datran system failure; The analysis shall include measures undertaken to effectively avoid the risk of a spill and measures available to reduce the impact of a spill, should one occur. The consent holder shall provide an opportunity to the Tainui Hapu to have the draft contingency plan presented and explained to it and shall take into consideration any comments made by the Tainui Hapu prior to lodgement of the contingency plan with the Waikato Regional Council for approval. The consent holder shall on submitting the contingency plan for approval, provide the Waikato Regional Council with a commentary on the above discussions with Tainui Hapu for the Council's consideration. The contingency plan shall be reviewed and updated by the consent holder as a minimum at 1-year intervals. The consent holder shall provide opportunities to the Tainui Hapu to comment on any proposed changes to the plan. Any proposed changes to the plan shall be submitted in writing for approval by the Waikato Regional Council. The consent holder shall undertake the treatment and disposal of wastewater in accordance with the approved contingency plan.</p>	
<b>Evidence</b>	<p>A Management and Contingency plan was submitted in June 2010 and accepted by Environment Waikato on 23 July 2010.</p>	
<b>Status Reasoning</b>		
<b>Action Required</b>		<b>Full compliance</b>
7	<p>The consent holder shall keep a complaints register for all complaints regarding all aspects of operations (with the exception of odour which is the subject of a separate resource consent) at the wastewater treatment facility received by the consent holder. The register shall record: (i) the date, time and duration of the event/incident that has resulted in a complaint; (ii) The nature of the event/incident complained of; (iii) the location of the complainant when the event/incident was detected; (iv) the possible cause of the event/incident; and (v) any corrective action undertaken by the consent holder in response to the complaint. The register shall be available to the Waikato Regional Council at all reasonable times upon request. Complaints received by the consent holder which indicate non-compliance with the conditions of this resource consent shall be forwarded to the Waikato Regional Council within 5 days of the complaint being received.</p>	
<b>Evidence</b>	<p>Council's CRM database records all complaints from the public.</p>	
<b>Status Reasoning</b>		
<b>Action Required</b>		<b>Full compliance</b>
8	<p>Until the fifth anniversary of the date of commencement of this consent as defined in section 116 of the Resource Management Act 1991, the maximum volume of treated wastewater discharged shall not exceed 2,600 cubic metres in any 24 hour period.</p>	

<b>Evidence</b>		
<b>Status Reasoning</b>		
<b>Action Required</b>		<b>Full compliance</b>
9	A water flow meter shall be installed to record the quantity of treated wastewater discharged on a cumulative basis per tidal period. The meter shall be calibrated to ensure measurement of treated wastewater flow is maintained to an accuracy of +/- 2%. Access to the meter shall be provided to Waikato Regional Council staff at all reasonable times. The flow meter display panel shall be visible to the public.	
<b>Evidence</b>	<p>A meter is installed to record quantities of effluent discharged. The meter was calibrated May 2014.</p> <p>A flow display panel visible to the public is installed on the roadside wall of the UV building.</p>	
<b>Status Reasoning</b>		
<b>Action Required</b>		<b>Full compliance</b>
10	The consent holder shall maintain a record of the daily volume of treated wastewater discharged from the treatment system which shall be made available to the Waikato Regional Council at all reasonable times and these records shall be forwarded to the Waikato Regional Council on a three monthly basis.	
<b>Evidence</b>	<p>Records are kept and supplied to WRC on request. The consent holder states that:</p> <p><i>WaterOutlook reporting at Council has allowed this process to be automated.</i></p> <p>I have not yet started to receive automatically sent monthly records from WaterOutlook</p>	
<b>Status Reasoning</b>		
<b>Action Required</b>	<b>Please arrange for Water Outlook to send monthly emails of data to WRC</b>	<b>Full compliance</b>
11	The discharge of treated wastewater shall occur for a maximum of 5.5 hours per outgoing tide. The discharge may commence no earlier to 0.5 hours before high tide and shall cease no later than 1 hour before low tide. Provided that for not more than 20 days per year immediately after extreme weather, pumping hours may exceed that maximum discharge duration of 5.5 hours per tide.	
<b>Evidence</b>	<p><i>The treatment team have automated the system so that the pumps logic is set using an algorithm dictated by the NIWA tide charts.</i></p> <p><i>The accuracy of the automated pump settings are checked periodically.</i></p> <p><i>All 2016-2017 discharges have been time compliant.</i></p>	

<b>Status Reasoning</b>	
<b>Action Required</b>	<b>Full compliance</b>
12	The consent holder shall maintain a record of the date and time each discharge cycle commences and finishes which shall be made available to the Waikato Regional Council upon request and these records shall be forwarded to the Waikato Regional Council on a three monthly basis.
<b>Evidence</b>	This data is recorded in the SCADA system.
<b>Status Reasoning</b>	
<b>Action Required</b>	<b>Full compliance</b>
13	There shall be no discharge of oil or grease or persistent surface foam as a result of the exercise of this consent.
<b>Evidence</b>	No oils, greases or foams have been observed during the reporting period.
<b>Status Reasoning</b>	
<b>Action Required</b>	<b>Full compliance</b>
14	The consent holder shall ensure that, no later than 2 years after the date of commencement of this consent, the suspended solids level does not exceed a median level of 20 grams per cubic metres for 12 consecutive monthly samples (one sample per month) and a maximum of 30 grams per cubic metre for 9 of 10 consecutive monthly samples (one sample per month). The point of compliance with the specified limit shall be at or about the point that the treated effluent enters the discharge pipeline. Notwithstanding the time given for compliance, the consent holder shall make all reasonable and practical efforts to ensure that final effluent quality is maximised within the capabilities of the current treatment system. All sample analyses shall be undertaken in accordance with the methods detailed in the "Standard Methods For The Examination Of Water And Wastewater, 1999" 20th edition by A.P.H.A. and A.W.W.A. and W.P.C.F.
<b>Evidence</b>	<p>Compliance with the total suspended solids (TSS) limits was not achieved; exceeding both median and 90th percentile. A new final holding pond was commissioned on the 10th April 2015 to improve TSS compliance. This was achieved by constructing a lined storage pond that empties completely during each tidal discharge, therefore preventing algal growth. The performance of this new pond has been very good, despite the fact that it has not achieved TSS compliance. The problematic months for the previous storage pond were from December to June (incl). The average TSS in the old storage pond for that period was 106mg/L. The average TSS for the same months with the new lined pond, was 30mg/L that is a 71% TSS reduction.</p> <p>The Aquamat treatment system installed at the Raglan WWTP is not capable of complying with the TSS consent limits.</p> <p>Various tertiary solids removal systems to further improve TSS compliance, have been trailed in the 15/17 periods. A tertiary membrane system has been identified as being the most effective tertiary solids removal system for Raglan.</p> <p>A concept design and cost estimate for a membrane system is nearing completion, however, the Service Delivery General Manager has recommended that construction of a membrane system is not confirmed until the consent renewal phase has been completed to ensure that any upgrades align with the outcomes of the consent process.</p>



**Status Reasoning**

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.

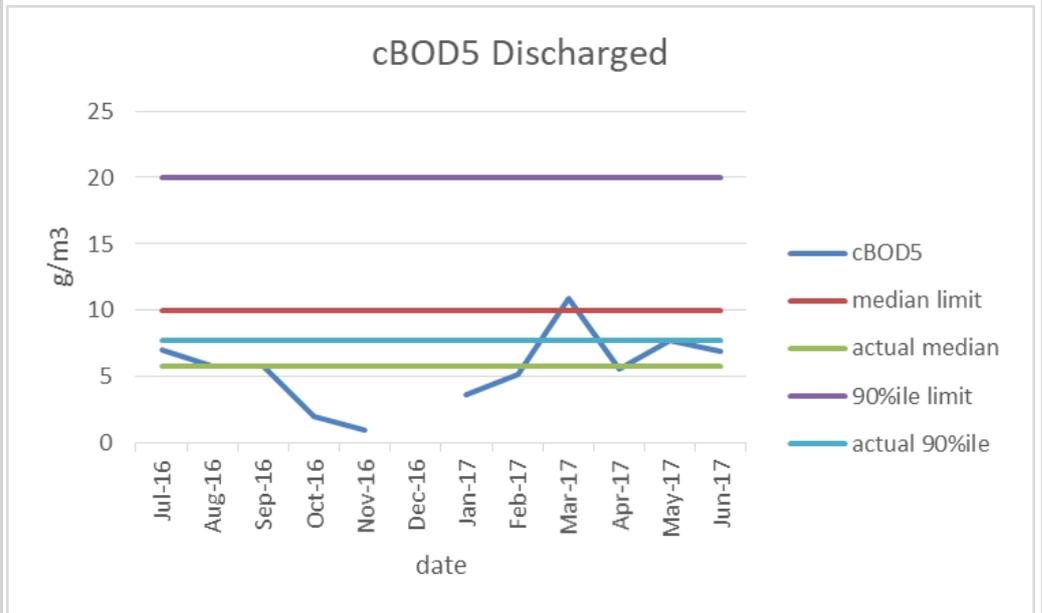
**Action Required**

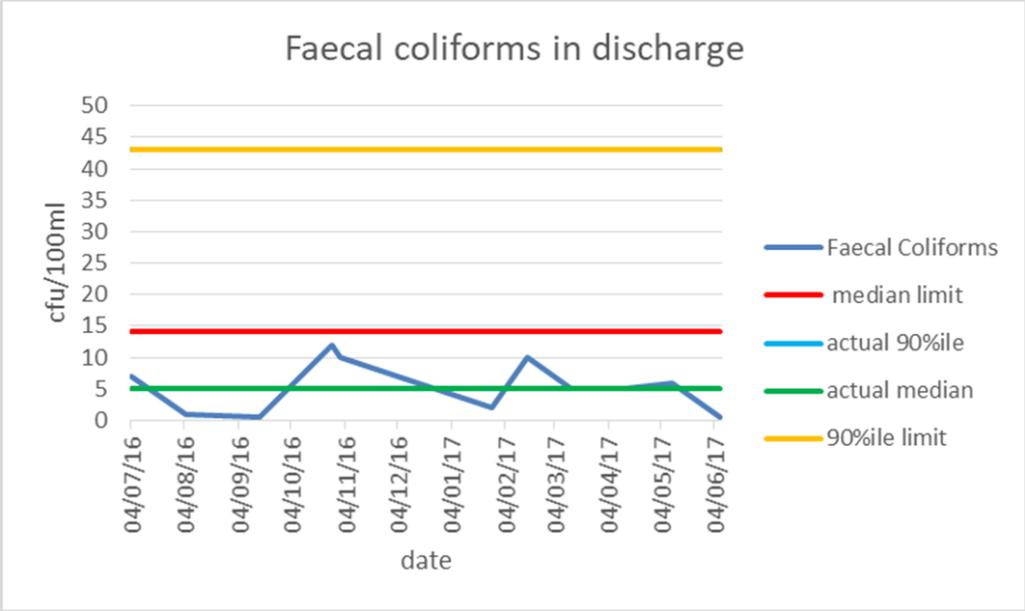
**Take immediate action to resolve the issue of suspended solids in the discharge to within compliance limits.** Medium priority non-compliance

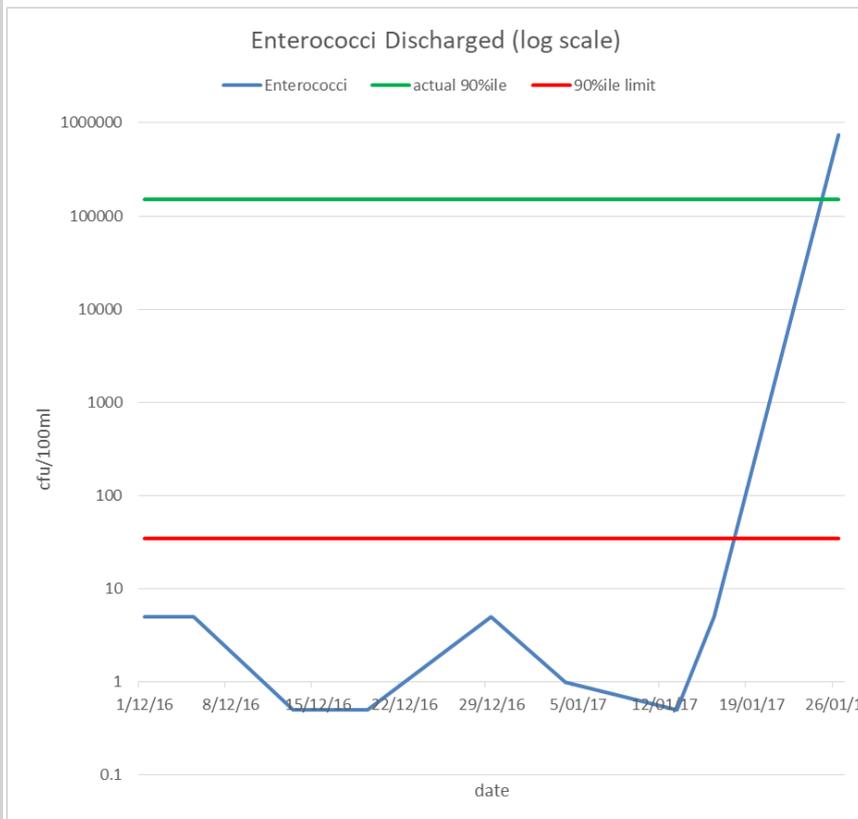
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The consent holder shall ensure that, no later than 2 years after the date of commencement of this consent, the 5-day biochemical oxygen demand (BOD5) concentration of the discharge does not exceed a median level of 10 grams per cubic metre of 12 consecutive monthly samples (one sample per month) and a maximum of 20 grams per cubic metre for 9 of 10 consecutive monthly samples (one sample per months). The point of compliance with the specified limit shall be at or about the point that the treated effluent enters the discharge pipeline. Notwithstanding the time given for compliance, the consent holder shall make all reasonable and practical efforts to ensure that final effluent quality is maximised within the capabilities of the current treatment system. All sample analyses shall be undertaken in accordance with the methods detailed in the "Standard Methods For The Examination Of Water And Wastewater, 1999" 20th edition by A.P.H.A. and A.W.W.A. and W.P.C.F.

**Evidence**



<b>Status Reasoning</b>																												
<b>Action Required</b>		<b>Full compliance</b>																										
16	<p>The consent holder shall ensure that, no later than 2 years after the date of commencement of this consent, the concentration of faecal coliforms in the discharge does not exceed a median level of 14 (number per 100 millilitres) for 12 consecutive monthly samples (one sample per month) and a maximum of 43 (number per 100 millilitres) for 9 of 10 consecutive samples (one sample per month). Upon completion of the treatment system the point of compliance with the specified limit shall be at or about the point that the treated effluent enters the discharge pipeline. Notwithstanding the time given for compliance, the consent holder shall make all reasonable and practical efforts to ensure that final effluent quality is maximised within the capabilities of the current treatment system. All sample analyses shall be undertaken in accordance with the methods detailed in the "Standard Methods For The Examination Of Water And Wastewater, 1999" 20th edition by A.P.H.A. and A.W.W.A. and W.P.C.F.</p>																											
<b>Evidence</b>	 <table border="1"> <caption>Estimated data for Faecal coliforms in discharge</caption> <thead> <tr> <th>Date</th> <th>Faecal Coliforms (cfu/100ml)</th> </tr> </thead> <tbody> <tr><td>04/07/16</td><td>7</td></tr> <tr><td>04/08/16</td><td>2</td></tr> <tr><td>04/09/16</td><td>1</td></tr> <tr><td>04/10/16</td><td>5</td></tr> <tr><td>04/11/16</td><td>12</td></tr> <tr><td>04/12/16</td><td>8</td></tr> <tr><td>04/01/17</td><td>4</td></tr> <tr><td>04/02/17</td><td>10</td></tr> <tr><td>04/03/17</td><td>6</td></tr> <tr><td>04/04/17</td><td>5</td></tr> <tr><td>04/05/17</td><td>6</td></tr> <tr><td>04/06/17</td><td>2</td></tr> </tbody> </table>		Date	Faecal Coliforms (cfu/100ml)	04/07/16	7	04/08/16	2	04/09/16	1	04/10/16	5	04/11/16	12	04/12/16	8	04/01/17	4	04/02/17	10	04/03/17	6	04/04/17	5	04/05/17	6	04/06/17	2
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17	<p>The consent holder shall monitor the concentration of enterococci in the discharge at weekly intervals from 15 December to 30 January. The consent holder shall ensure that, no later than 2 years after the date of commencement of this consent, the concentration of enterococci in the discharge is less than 35 enterococci per 100 millilitres of 5 of 6 consecutive weekly samples (one sample per week). The point of compliance with the specified limit shall be at or about the point that the treated effluent enters the discharge pipeline. All sample analyses shall be undertaken in accordance with the methods detailed in the "Standard Methods for The Examination of Water and Wastewater, 1999" 20th edition by A.P.H.A. and A.W.W.A. and W.P.C.F.</p>																											
<b>Evidence</b>	<p>One sample had a significant level reported at the end of the sampling period. The consent holder states that:</p> <p><i>"this was a labelling error by the sample taker which resulted in a raw (influent) sample bottle being mis-labelled with the treated wastewater label".</i></p> <p>All other sample results were within the 0.5 to 10 cfu/100ml range.</p>																											



**Status Reasoning**

Error in sampling technique by consent holder.

**Action Required**

Please ensure that this issue is investigated and that sampling staff are advised and if necessary receive further training to prevent a re-occurrence of this type of incident.

**Minor technical non-compliance**

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The consent holder shall provide to the Waikato Regional Council a written monitoring report by 30 September each year for the previous year ending 30 June of each year that this consent is current. As a minimum this report shall include the following: (i) a comparison of data with previously collected data identifying any emerging trends in effluent quality in terms of suspend solids, five-day biochemical oxygen demand, faecal coliforms and enterococci (reference conditions 14,15, 16 and 17); (ii) comment on compliance with conditions 8,9,10,11,12,13,14,15,16 and 17 of this resource consent; (iii) any reasons for non-compliance or difficulties in achieving compliance with conditions 8,9,10,11,12,13,14,15,16, and 17 of this resource consent; (iv) any works that have been undertaken to improve the environmental performance of the wastewater treatment system or that are proposed to be undertaken in the up-coming year to improve the environmental performance of the wastewater treatment system; and (v) recommendations on alterations to the monitoring required by conditions 14,15,16 and 17 of this resource consent.

**Evidence**

The annual report was submitted on 10 October 2017

**Status Reasoning**

Report was 10 days overdue. 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

**Action Required**

Please ensure that all annual monitoring reports are submitted by the due deadline.

**Minor technical non-compliance**

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The consent holder shall notify the Waikato Regional Council as soon as practicable and as a minimum requirement within 24 hours, of the consent holder becoming aware of the limits specified in conditions 8,11,14, 15, 16, and 17 of this resource consent being exceeded and/or of any accidental discharge, plant breakdown, or other circumstances which are likely to result in the limits of this resource consent being exceeded. The consent holder shall, within 7 days of the incident occurring, provide a written report to

	the Waikato Regional Council, identifying the exceedance, probable causes, steps undertaken to remedy the effects of the incident and measures that will undertaken to ensure future compliance.	
<b>Evidence</b>	Total suspended solids results exceeded both median and 90th percentile limits as presented above.	
<b>Status Reasoning</b>		
<b>Action Required</b>		<b>Full compliance</b>
20	The consent holder shall maintain a register of all incidents that result in an exceedance of the limits specified in conditions 9,12,15,16,17 and 18 of this resource consent. This register shall be made available for inspection by Waikato Regional Council staff at all reasonable times. This register shall be forwarded to the Waikato Regional Council by 30 June each year.	
<b>Evidence</b>	<p>The condition requires that:</p> <p><i>The consent holder shall maintain a register of all incidents that result in an exceedance of the limits specified in conditions 9,12,15,16,17 and 18 of this resource consent. This register shall be made available for inspection by Waikato Regional Council staff at all reasonable times. This register shall be forwarded to the Waikato Regional Council by 30 June each year.</i></p>	
<b>Status Reasoning</b>	No register of incidents was received by 30 June 2017	
<b>Action Required</b>	<b>Please ensure a register of incidents is maintained and submitted to WRC by 30 June each year</b>	<b>Minor technical non-compliance</b>
<b>Authorisation Compliance:</b>		<b>Partial compliance</b>

#### **AUTH971391.01.01 - Water - sewage**

<b>Activity Authorised: Retain existing treated wastewater pipeline, to enable discharge of treated wastewater to Harbour</b>		
<b>Condition No.</b>	<b>Description</b>	
1	The existing pipeline and outfall shall be operated and maintained in general accordance with the document titled "Resource Consent Application and Assessment of Environmental Effects, Volume 1 – Report", "Resource Consent Application and Assessment of Environmental Effects, Volume 2 – Report", and "Raglan Wastewater Treatment and Disposal System, Request for Further Information " dated 15 September 1998, unless superseded by the following document "Raglan Wastewater Treatment Upgrade Assessment of Environmental Effects" dated October 2002, or inconsistent with the resource consent conditions below, which shall prevail. The condition shall not preclude the Council from modifying the design or layout of elements of the Raglan Wastewater Treatment and Disposal System to incorporate other treatment technologies which may prove beneficial for the treatment process or environmental outcomes, provided that it meets the conditions of this consent.	
<b>Evidence</b>	<p>The consent holder states that:</p> <p><i>This structure is a relatively new piece of infrastructure and as expected there have been nil reports of any issues which would compromise the structural integrity of this pipeline.</i></p>	
<b>Status Reasoning</b>		
<b>Action Required</b>		<b>Full compliance</b>
<b>Authorisation Compliance:</b>		<b>Full compliance</b>

#### **AUTH971392.01.01 - Air - odour**

<b>Activity Authorised: Discharge odour to the air associated with all aspects of the existing &amp; proposed treatment system</b>
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Condition No.	Description
1	The wastewater treatment system shall be operated and maintained in general accordance with the documents titled "Resource Consent Application and Assessment of Environmental Effects, Volume 1 – Report" Resource Consent Application and Assessment of Environmental Effects, Volume 2 – Report", and "Raglan Wastewater Treatment and Disposal System, Request for Further Information " dated 15 September 1998, unless superseded by the following document "Raglan Wastewater Treatment Upgrade Assessment of Environment Effects" dated October 2002, or consistent with the resource consent conditions below, which shall prevail. This condition shall not preclude the Council from modifying the design or layout of elements of the Raglan Wastewater Treatment and Disposal System to incorporate other treatment technologies which may prove beneficial for the treatment process or environmental outcomes, provided that it meets the conditions of this consent.
<b>Evidence</b>	The wastewater treatment and disposal system has been designed, operated and maintained in accordance with the documents listed above and as assessed in the conditions below.
<b>Status Reasoning</b>	
<b>Action Required</b>	<b>Full compliance</b>
2	There shall be no odour as a result of the activities authorised by this resource consent that causes an objectionable or offensive effect beyond the boundary of the site, being that land defined by: • Gazette Notice, 1974, page 2548 (Land taken for Sanitary Works situated in Block I, Karioi Survey District, described as part lot 1, DP 13913, and Part Rakaunui 1C2A2 Block); • Gazette Notice, 1999 page 3849 (Land acquired for Wastewater Treatment described as Part Lot 1, DP 13913 (part C.T/ 47C/740).
<b>Evidence</b>	The consent holder states in their annual report:  <i>There was one complaint recorded during the year which related to odour around the Raglan treatment plant.</i>  <i>Based on the available data there were nil events which would have caused significant environmental effects during the reporting period.</i>
<b>Status Reasoning</b>	Insufficient information pertaining to the odour complaint pertaining to its investigation and source has been supplied.
<b>Action Required</b>	<b>Provide information pertaining to this odour complaint investigation and cause</b> <b>Low priority non-compliance</b>
3	The consent holder shall maintain and keep a complaints register for all odour complaints in respect of the wastewater treatment facility received by the consent holder. The register shall record: (i) the date, time and duration of the event/incident that has resulted in a complaint; (ii) the location of the complainant when the event/incident was detected; (iii) the possible cause of the event/incident (iv) the weather conditions and wind direction at the site when the odour event allegedly occurred; (v) any corrective action undertaken by the consent holder in response to the complaint. The register shall be made immediately available to the Waikato Regional Council upon request. Any event/incident with the potential to cause emissions resulting in adverse effects on the environment shall be reported to the Waikato Regional Council as soon as practicable and in any event within 24 hours of the incident occurring.
<b>Evidence</b>	Council's CRM database records all complaints from the public.
<b>Status Reasoning</b>	
<b>Action Required</b>	<b>Full compliance</b>
4	The consent holder shall provide the Waikato Regional Council with a management plan which details the procedures that will be implemented to operate in accordance with the conditions of this resource consent and the procedures that will be put into place avoid the potential for the discharge of odours that cause an offensive and objectionable effect beyond the boundary of the Raglan Wastewater Treatment site. This plan shall be lodged with the Waikato Regional Council within 12 months of the date of commencement of the consent as defined in section 116 of the Resource Management Act 1991. (i) a description of the entire treatment system facility, including - the filter treatment system, facultative, maturation and holding ponds, and ultra-violet (UV) disinfection unit, - discharge pumps - discharge pump

	activation/deactivation and monitoring systems, including a back up system to ensure failsafe operation of the discharge pumps on the outgoing tide; and - discharge and outfall pipeline. (ii) a description of routine maintenance procedures to be undertaken; (iii) an outline of the methods to be utilised to monitor the treatment plant in an operational sense including; - monitoring of influent waste water; - monitoring of treatment performance (iv) specific management procedures for operation of the wastewater treatment system, discharge and outfall pipeline; (v) procedures for recording routine maintenance and all repairs that are undertaken; (vi) contingency measures in place to deal with unusual events; (vii) other actions necessary to comply with the requirements of this resource consent; (viii) procedures for improving and/or reviewing the management plan. The consent holder shall provide an opportunity to the Tainui Hapu to have the draft management plan presented and explained to it and shall consider any comments made by the Tainui Hapu prior to lodgement of the management plan with the Waikato Regional Council for approval. The consent holder shall on submitting the management plan for approval, provide the Waikato Regional Council with a commentary on the above discussions with Tainui Hapu for the Council's consideration. The management plan shall be reviewed and updated by the consent holder as a minimum at 1-year intervals. The consent holder shall provide opportunities to the Tainui Hapu to comment on any proposed changes to the plan. Any proposed changes to the plan shall be submitted in writing for approval by the Waikato Regional Council. The consent holder shall undertake the treatment and disposal of wastewater in accordance with the approved management plan.	
<b>Evidence</b>	An updated Raglan WWTP Management Plan was submitted to WRC in September 2014.	
<b>Status Reasoning</b>		
<b>Action Required</b>		<b>Full compliance</b>
<b>Authorisation Compliance:</b>		<b>High level of compliance</b>

#### 4 SUMMARY OF COMPLIANCE

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

<b>Authorisation</b>	<b>Authorisation Description</b>	<b>Compliance Status</b>
AUTH971389.01.01	Undertake soil disturbance activities within a high risk erosion area in association with the construction and modifications of the Raglan wastewater treatment site	Not assessed
AUTH971390.01.01	Discharge up to 2600 cubic metres of treated wastewater per day into the Raglan Harbour	Partial compliance
AUTH971391.01.01	Retain existing treated wastewater pipeline, to enable discharge of treated wastewater to Harbour	Full compliance
AUTH971392.01.01	Discharge odour to the air associated with all aspects of the existing & proposed treatment system	High level of compliance

**Overall Site Compliance:**

**Partial compliance**

#### 5 DISCUSSION AND CONCLUSIONS

The main issue of concern for this site remains the elevated total suspended solids (TSS) which remains non-compliant again this year. The consent holder has been trialling various methods and equipment to reduce the TSS concentration in the final effluent and it is important that some action is taken to reduce TSS levels now to avoid further enforcement action being considered for this long running non-compliance. A solution to the elevated TSS levels needs to be implemented as soon as possible and by no later than the next annual audit (October 2018). By reducing the TSS to compliant levels the possibility of

further enforcement action will be reduced and a fully compliant discharge will be desirable in the forthcoming resource consent replacement process due in 2020.

The remaining issues that require action relate primarily to the recording and reporting of compliance and complaints. The consent holder has moved across to the WaterOutlook compliance tool and this is capable of sending monthly updates of compliance via email to the compliance officer at Waikato Regional Council. This notification system has yet to be fully implemented between the consent holder and the Waikato Regional Council.

Details of any complaints relating to this activity should be provided by the consent holder to Waikato Regional Council as part of their annual reporting requirement and this has not been done.

It appears there was a mis-labelling of an influent wastewater sample in January that was analysed for enterococci and labelled as fully treated wastewater. The result was hugely higher (750,000cfu/100ml) than all the other samples taken during this season which were all below 10cfu/100ml and could definitely be seen as an outlier or the result of an error at the lab or in the labelling/collection of the sample. I recommend that the sample collection staff are made aware of this issue and that further training or advice is given to prevent a re-occurrence of this type of error.

## 6 SUMMARY OF ACTIONS REQUIRED

The following actions are required to be undertaken:

Resource consent	Condition Number	Action Required
AUTH971390.01.01	10	Please arrange for Water Outlook to send monthly emails of data to WRC
AUTH971390.01.01	14	Take immediate action to resolve the issue of suspended solids in the discharge to within compliance limits.
AUTH971390.01.01	17	Please ensure that this issue is investigated and that sampling staff are advised and if necessary receive further training to prevent a re-occurrence of this type of incident.
AUTH971390.01.01	18	Please ensure that all annual monitoring reports are submitted by the due deadline.
AUTH971390.01.01	20	Please ensure a register of incidents is maintained and submitted to WRC by 30 June each year
AUTH971392.01.01	2	Provide information pertaining to this odour complaint investigation and cause

## 7 RECOMMENDATIONS FOR WAIKATO REGIONAL COUNCIL

I recommend that:

- This site maintains its priority 1 status
- That a Letter of Direction be issued requiring a response from the consent holder as to what action they intend to take to reduce TSS in the final discharge to within compliant limits and a timeframe for this action to occur.



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

**Date: 21 December 2017**

**7.1 Decision**

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



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

**Date: 21 December 2017**

**APPENDIX 1****Compliance Status for Individual Conditions**

<b>Compliance Status</b>	<b>Description</b>
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**

<b>Compliance Status</b>	<b>Description</b>
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.