

Site Compliance Report

Site No: REG606683
Site Owner: Waikato District Council
Site Name: Raglan WWTP: Wainui Rd, Raglan
Date: 21 November 2018

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 (doc ref 13170097) 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 2,600m³ per day of treated wastewater from the plant after treatment subject to a number of conditions.

The average daily discharge of treated effluent was 1,071 m³ over the reporting period. During the 2017-2018 monitoring period, median consent conditions were achieved for bacteriological treatment and cBOD5.

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 opportunities for improvement.

This report focusses on the people and data aspect, while compliance issues with the individual WWTPs have been reported previously (CH2MBeca March/April 2018).

Resource consent compliance could likely be improved at some WWTPs through more proactive operations and maintenance (O&M) as outlined in Appendix One.

The consent holder is progressing with a tertiary method of filtration being installed to reduce the amount of suspended solids being discharged from the site. Suspended solids have been the main issue of non-compliance at this site in the recent period. The consents for this discharge expire in 2020 and it is important that the site can demonstrate full compliance in the lead up to the replacement consent process.

2.1 PREVIOUS COMPLIANCE HISTORY

Date Period	Compliance status
1 July 2017 to 30 June 2018	High level of compliance
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

Resource consent	Condition Number	Action Required in last years audit
AUTH971390.01.01	10	Please arrange for Water Outlook to send monthly emails of data to WRC – <i>monthly reports are now submitted to WRC compliant</i>
AUTH971390.01.01	14	Take immediate action to resolve the issue of suspended solids in the discharge to within compliance limits. – <i>tertiary SSlds treatment is currently out to tender for the site - ongoing</i>
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. – <i>now submitted on time - compliant</i>
AUTH971390.01.01	20	Please ensure a register of incidents is maintained and submitted to WRC by 30 June each year – <i>non-compliant as no register details have been submitted</i>
AUTH971392.01.01	2	Provide information pertaining to this odour complaint investigation and cause – <i>WDC still do not provide information about complaints unless specifically requested to do so by WRC.</i>

3 COMPLIANCE ASSESSMENT

Unless otherwise specified in this document this assessment covers the period from **1 July 2017 to 30 June 2018**.

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.

AUTH971389.01.01 - Land - disturbance

Activity Authorised: Undertake soil disturbance activities within a high risk erosion area in association with the construction and modifications of the Raglan wastewater treatment site

Authorisation Compliance: Not assessed as construction is now complete.

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.
Evidence	<p>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 opportunities for improvement.</p> <p>This report focusses on the people and data aspect, while compliance issues with the individual WWTPs have been reported previously (CH2MBeca March/April 2018).</p> <p>Resource consent compliance could likely be improved at some WWTPs through more proactive operations and maintenance (O&M) as outlined in Appendix One.</p>
Status Reasoning	
Action Required	Full compliance
2	Suitable fencing shall be installed and maintained to ensure that livestock are at all times unable to access the wastewater treatment site.
Evidence	<p>The consent holder states in their annual report that:</p> <p><i>The site is suitably fenced to exclude livestock from accessing the wastewater treatment site.</i></p>
Status Reasoning	
Action Required	Full compliance
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 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

	<p>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.</p>
Evidence	<p><i>A Management and Contingency plan was submitted in June 2010 and accepted by Environment Waikato on 23 July 2010. (doc refs 1689543 & 1706292)</i></p> <p><i>An updated version was accepted by Waikato Regional Council in December 2013 with the requirement to update contact details. (doc ref 3186754)</i></p> <p><i>These details have been confirmed by Tainui Hapu representatives and submitted to Waikato Regional Council in September 2014. (doc ref 2189735)</i></p> <p><i>Treatment & disposal is generally in accordance with the approved management plan.</i></p> <p><i>A copy of the updated O&M Plan was sent to WRC in September 2014. (doc ref 3417453)</i></p>
Status Reasoning	
Action Required	The Management and Contingency Plan is due for a review by 30 June 2019 Full compliance
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>
Evidence	Contingency Plan is included in the Management Plan (see condition 4 above)
Status Reasoning	
Action Required	Full compliance
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</p>

	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.	
Evidence	Council's CRM database records all complaints from the public.	
Status Reasoning		
Action Required		Full compliance
8	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.	
Evidence	Discharge volumes from the Raglan WWTP did not exceed the consented volume. The maximum discharge volume during this compliance period was 2429m ³ /day.	
Status Reasoning		
Action Required		Full compliance
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.	
Evidence	A meter is installed to record quantities of effluent discharged. The meter was calibrated May 2014. (doc ref 3155995) A flow display panel visible to the public is installed on the roadside wall of the UV building.	
Status Reasoning		
Action Required	Calibration of the meter is due in May 2019	Full compliance
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.	
Evidence	Daily records are kept as required.	
Status Reasoning		
Action Required		Full compliance
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.	
Evidence	The consent holder states in their annual report that: <i>The treatment team have automated the system so that the pumps logic is set using an algorithm dictated by the NIWA tide charts. The accuracy of the automated pump settings are checked periodically.</i>	
Status Reasoning		
Action Required		Full compliance

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.					
Evidence	Monthly reports are submitted to WRC					
Status Reasoning						
Action Required		Full compliance				
13	There shall be no discharge of oil or grease or persistent surface foam as a result of the exercise of this consent.					
Evidence	WRC has not received any complaints relating to this authorised activity during this compliance period					
Status Reasoning						
Action Required		Full compliance				
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) an 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.					
Evidence	<p>Suspended solids have consistently been above the consented limits</p> <table> <tr> <td>Suspended solids median limit - 20 g/m³</td> <td>median actual result - 33.8 g/m³</td> </tr> <tr> <td>90%ile limit g/m³ - 30 g/m³</td> <td>90%ile actual result 39 g/m³</td> </tr> </table>		Suspended solids median limit - 20 g/m ³	median actual result - 33.8 g/m ³	90%ile limit g/m ³ - 30 g/m ³	90%ile actual result 39 g/m ³
Suspended solids median limit - 20 g/m ³	median actual result - 33.8 g/m ³					
90%ile limit g/m ³ - 30 g/m ³	90%ile actual result 39 g/m ³					
Status Reasoning	<p>There is non-compliance with limits or other direct controls on adverse effects; and</p> <p>The non-compliance has the potential for, or has resulted in, a less than minor increase in the level of effects authorised.</p> <p>Although above the limits for SSIDs the consent holder has been trialling and has now commenced an upgrade to improve compliance. The sample results although non-compliant are within the levels allowable in the permitted activity rules for earthworks.</p> <p><i>"Upgrade to the Raglan WWTP with installation of a tertiary membrane filter plant. This will remove solids from the Raglan WWTP discharge and improve consent compliance. Our staff with design Consultant BECA are currently preparing Contracts Documents and</i></p> <p><i>Procurement Planning to get the Tender out to the market in December 2018".</i></p>					
Action Required	Ensure the upgrade to the WWTP is undertaken as soon as possible to improve compliance with the suspended solids limits are achieved.	Low priority non-compliance				
15	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	
Status Reasoning	
Action Required	Full compliance
16	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.
Evidence	
Status Reasoning	
Action Required	Full compliance
17	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.
Evidence	
Status Reasoning	
Action Required	Full compliance
18	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 suspended 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	report was supplied to WRC
Status Reasoning	
Action Required	Full compliance
19	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 be undertaken to ensure future compliance.

Evidence	
Status Reasoning	
Action Required	Full compliance
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.
Evidence	The consent holder states in their annual report that: All incidents have been reported to WRC
Status Reasoning	
Action Required	Full compliance
Authorisation Compliance: High level of compliance	

AUTH971391.01.01 - Water - sewage

Activity Authorised: Retain existing treated wastewater pipeline, to enable discharge of treated wastewater to Harbour

Condition No.	Description
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.
Evidence	The consent holder states in their annual report that: <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>
Status Reasoning	
Action Required	Full compliance
2	The consent holder shall maintain the pipeline and outfall in a structurally safe condition at all times.
Evidence	The consent holder states in their annual report that: <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> Dive survey was undertaken (doc ref 10566185)
Status Reasoning	
Action Required	Full compliance
3	The consent holder shall maintain the outfall pipeline so as to minimise potential for the loss of components due to water action. Should the outfall pipeline become damaged, and material lost constitute a hazard to navigation, the Maritime Safety Authority or such other appropriate body

	shall be immediately informed. Damage to the pipeline shall be reported to Waikato Regional Council immediately and repairs shall be undertaken as soon as practicable. Note: A Separate resource consent may be required as a result of the need to undertake works on the foreshore and/or harbour bed. Any such consent shall be obtained by the consent holder at its sole expense prior to any works being undertaken.	
Evidence	The consent holder states in their annual report that: <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>	
Status Reasoning		
Action Required		Full compliance
Authorisation Compliance:		Full compliance

AUTH971392.01.01 - Air - odour

Activity Authorised: Discharge odour to the air associated with all aspects of the existing & proposed treatment system		
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.	
Evidence		
Status Reasoning		
Action Required		Full compliance
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).	
Evidence	The consent holder states in their annual report that: <i>Council's CRM database records all complaints from the public.</i> WRC has not received any complaints relating to this authorised activity during this compliance period	
Status Reasoning		
Action Required		Full compliance
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.	
Evidence	The consent holder states in their annual report that: <i>Council's CRM database records all complaints from the public.</i>	
Status Reasoning		
Action Required		Full compliance
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.	
Evidence	The consent holder states in their annual report that: <i>An updated Raglan WWTP Management Plan was submitted to WRC in September 2014</i>	
Status Reasoning		
Action Required		Full compliance
Authorisation Compliance:		Full compliance

4 SUMMARY OF COMPLIANCE

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

Authorisation	Authorisation Description	Compliance Status
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	High level of compliance
AUTH971390.01.01	Discharge up to 2600 cubic metres of treated wastewater per day into the Raglan Harbour	High level of 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	Full compliance

Overall Site Compliance: High level of compliance

5 DISCUSSION AND CONCLUSIONS

The only issue of non-compliance at the Raglan WWTP continues to be the level of suspended solids in the final discharge. WDC have now provided finance to install a membrane filtration system that should reduce the suspended solids in the final discharge to compliant levels. The specification has been sent out for tender and a decision on the contractor for the installation should be announced soon.

A summary of the performance of the WWTP was provided with the annual report and is shown below:

CONSENT SUMMARY REPORT



Data Summary		Jul-17	Jun-18	RC971390 - Raglan			
Inflow Summary Reporting		<i>m³</i>					
Average Daily Inflow		1,028					
Average Daily Inflow (Dec-May)		1,028					
Max Daily Inflow		1,028					
Average Monthly Total		31,183					
Max Monthly Total		31,868					
Annual Inflow Total		374,192					
PWWF/ADWF Ratio		1.0					
Outflow Summary Reporting		<i>Daily Limit - 2,600m³</i>					
Average Daily Flow		1,075					
Max Daily Flow		2,429					
90 th Percentile Daily Flow		2,369					
Average Monthly Total		32,586					
Max Monthly Total		44,496					
Annual Outflow Total		391,037					
Non-Consented Discharge		<i>Events</i>					
Max Monthly Non-Consented Discharge		-					
Average Monthly Non-Consented Discharge		-					
Annual Non-Consented Discharge Total		-					
Discharge Monthly Tests		<i>Consent Limit</i>		<i>Measured</i>		<i>Compliance</i>	
Parameter	Unit	Median	90 Percentile	Median	90 Percentile	Median	90 Percentile
pH between 6-9	pH	9.0		7.2	7.5	0 / 6	
cBOD5	ppm	10.0	20.0	6.1	8.2	1 / 12	0 / 12
Discharge Monthly Tests		<i>Consent value</i>		<i>Measured</i>		<i>Compliance</i>	
Total Suspended Solids	ppm	20.0	30.0	33.8	39.0	9 / 12	7 / 12
Discharge Weekly Tests Post UV		<i>Consent value</i>		<i>Measured</i>		<i>Compliance</i>	
Faecal Coliforms	cfu/100ml	14.0	43.0	2.0	6.6	0 / 13	0 / 13
Discharge Weekly Tests Post UV		<i>Consent value</i>		<i>Measured</i>		<i>Compliance</i>	
Enterococci	cfu/100ml		35.0	2.0	5.0		0 / 13

As can be seen in the submitted data that only suspended solids continues to be non-compliant and fortunately this level of suspended solids in the final fully treated effluent is not having a detrimental affect on the ability of the UV system to disinfect the final effluent.

Consent: -1						Quality Compliance			
Condition #	8	11	12	11	11	Condition #	14	15	16
Parameter	Total Daily Discharge	Total Daily Pumping	Pumping Outside Tide Limit	Ops - KaramuRainfallTotal	Compliance Minutes Discharge	Parameter	TSS	cBOD5	FC
Limit	2,600	11	0	20	20	Limit	20	10	14
Units	m ³	hrs	min	mm	mm	Units	ppm	ppm	cfu/100mL
Sat 01/12/18	763	0	0	12	4	Lab Results:			
Sun 02/12/18	733	0	0	1	1	July 2018	92	36.5	5
Mon 03/12/18	806	0	0	19	12	August 2018	37	6	10
Tue 04/12/18	931	0	0	33	21	September 2018	33	7	5
Wed 05/12/18	964	0	0	3	2	October 2018	31	6	1
Thu 06/12/18	1,650	0	0	5	10	November 2018	59	11	5
Fri 07/12/18	1,183	0	0	0	1	December 2018	32	8	3
Sat 08/12/18	909	0	0	0	1	January 2019	38	6	30
Sun 09/12/18	809	0	0	0	1	February 2019			50
Mon 10/12/18	840	0	0	0	1	March 2019			13
Tue 11/12/18	839	0	0	0	0	April 2019			
Wed 12/12/18	776	0	0	0	0	May 2019			
Thu 13/12/18	367	0	0	0	0	June 2019			
Fri 14/12/18	587	0	0	22	51	Compliance Limit Check			
Sat 15/12/18	2,084	0	0	1	3	Median Limit	20	10	14
Sun 16/12/18	1,797	0	0	1	1	# Samples Above Limit	7/12	2/12	2/12
Mon 17/12/18	1,501	0	0	0	1	Compliance:	No	Yes	Yes
Tue 18/12/18	628	0	0	0	0	90th Percentile Limit	30	20	43
Wed 19/12/18	1,055	0	0	9	5	# Samples Above Limit	7/10	1/10	1/10
Thu 20/12/18	1,141	0	0	22	46	Compliance:	No	Yes	Yes
Fri 21/12/18	919	0	0	3	4	Summer Sampling for Enterococci			
Sat 22/12/18	838	0	0	0	1	Weekly Sampling 15 Dec to 30 Jan			
Sun 23/12/18	674	0	0	12	10	43426	00/01/00		
Mon 24/12/18	798	0	0	33	24	43431	00/01/00		
Tue 25/12/18	1,522	0	0	11	13	43434	10/01/00		
Wed 26/12/18	2,194	0	0	0	1	43440	01/01/00		
Thu 27/12/18	1,888	0	0	0	0	43444	05/01/00		
Fri 28/12/18	1,591	0	0	0	0	43451	05/01/00		
Sat 29/12/18	1,396	0	0	0	0	43461	05/01/00		
Sun 30/12/18	1,260	0	0	0	0	43468	05/01/00		
Mon 31/12/18	1,188	0	0	0	0	Limit: Max for 5 of 6 weekly samples:		35	
Minimum	367	0	0	0	0	Max for 5 of 6 weekly samples:		Less Than 6 Samples	
Average	1,117	0	0	6	7	Compliance:			
Maximum	2,194	0	0	33	51				
Total	34,633	0	0	188	210				
Notes									
1	The High Tide and Low Tide used in the calculations for pumping during tide restrictions are calculated using Waikato Regional Council Tide Level data at Raglan Wharf.								
2	Adverse Weather is determined when WRC Data from Ops - KaramuRainfallTotalToday or Compliance Minutes Discharged Outside Consent have a rainfall greater than 20 mm. Allowance has been made for three days following adverse weather to flush through the treatment plant.								
3	If Lab Data is <X, then 0.5X is used in analysis. If Lab Data is >X, then 1X is used in analysis								
Month End Certification and Comment									
Results Checked By:	Compliance Checking:			Consent Comment:					
	Flow	Pumping	Lab Data						
#REF!	#REF!	#REF!	#REF!	#REF!					

6 SUMMARY OF ACTIONS REQUIRED

The following actions are required to be undertaken:

Resource consent	Condition Number	Action Required
AUTH971390.01.01	4	The Management and Contingency Plan is due for a review by 30 June 2019
AUTH971390.01.01	9	Calibration of the meter is due in May 2019
AUTH971390.01.01	14	Ensure the upgrade to the WWTP is undertaken as soon as possible to improve compliance with the suspended solids limits are achieved.

7 RECOMMENDATIONS FOR WAIKATO REGIONAL COUNCIL

I recommend the following:

- The site retains its priority 1 status due to its imminent consent replacement
- Liaise with WDC to ensure the filtration system is installed and commissioned as soon as possible



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

Date: 6 March 2019

7.1 Decision

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



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

Date: 2 April 2019

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.