

Before the Independent Hearing Commissioners

under: the Resource Management Act 1991

in the matter of: *Combined hearings of Resource Consent Applications
APP.003839.1.03 and APP.002667.01.04*

applicant: Far North District Council

S42A Addendum Report of Laila Alkamil, on behalf of Northland Regional
Council

Dated: 12 October 2023

1. INTRODUCTION

Purpose and Scope of this Addendum

- 1.1. This addendum to the s42A report prepared and presented by Northland Regional Council is in response to the Commissioners Minute No. 3 dated 3 October 2023.
- 1.2. The Minute requests that this this addendum addresses matters raised in the hearing, the revised sets of conditions, further comments from submitters and a final recommendation regarding the applications.

2. STRUCTURE OF ADDENDUM

- 2.1 To avoid repetition, this addendum has been structured to respond to only areas that need updating from the s42A report. To do this, I turn my attention to;
 - a. Matters arising from the hearing;
 - i. An assessment of the matters in relation to the relevant objectives and policies of the Proposed Regional Plan for Northland 2017; and
 - ii. An updated analysis of the amended applications.
 - b. Revised consent conditions;
 - i. Applicant's revised consent conditions; and
 - ii. Comments received by submitters.
 - c. Final recommendation.

3. MATTERS ARISING FROM THE HEARING

PROPOSED REGIONAL PLAN FOR NORTHLAND – UPDATED VERSION (OCTOBER 2023)

- 3.1 I have been asked by the Hearing Commissioners to provide further comment on the application against the relevant provisions of the Proposed Regional Plan for Northland – October 2023 (PRPN), particularly Policies D.1.4, D.4.1, D.4.3, and D.4.4. The below sections consider these specific policies in relation to the applications.

Policy D.1.4 – Managing effects on places of significance to tāngata whenua

- 3.2 Policy D.1.4 states:

Resource for an activity may generally only be granted if the adverse effects from the activity on the values of Places of Significance to tāngata whenua in the coastal marine area and water bodies are avoided, remedied or mitigated so they are no more than minor.

- 3.3 In my opinion, within Policy D.1.4 the use of the word “generally” enables the consent authority to consider the overall effects of a proposal and to grant in exceptional circumstances once a weighting exercise has been undertaken. To expand on this, the policy essentially says that council should not grant consent if effects are “*more than minor*”

on a “*place of significance to tāngata whenua*” unless the adverse effects in the coastal marine area and water bodies are avoided, remedied or mitigated.

- 3.4 As discussed in my s42A report, the applications will have a significant adverse effect on the cultural values of the Hokianga Harbour – which is a Place of Significance to tāngata whenua. However, when assessing this against the need for wastewater discharge on an ongoing basis to serve the community and based on the information provided by the applicant that there is currently no viable alternative discharge method, I consider that the mitigation methods for addressing any adverse effects need to be given weight in the context of this policy. Such mitigation measures include the limited duration of consent to three years, the programmable tidal clock used to the wastewater pump system to control the time of the discharge and the suitable mixing zone for discharge to minimise adverse effects on water quality within the coastal marine area.
- 3.5 Taking these mitigation measures into consideration (which have been generally agreed by the applicant) and given the necessity of the proposal to serve the needs of the community, on balance, I consider that granting these consents would still be consistent with Policy D.1.4.

Policy D.4.1: Maintaining overall water quality

- 3.6 Policy D.4.1 sets a strong policy directive that any replacement for a wastewater discharge permit that is not currently complying with the water quality standards in Appendix H.3 of the PRPN must not be granted unless conditions are imposed to require the quality of discharge to be progressively improved (policy D4.1(4)) The ongoing issues of non-compliance with the WWTP's, Opononi in particular, was discussed at length during the hearing, in respect to the quality of the treated wastewater discharge entering the Hokianga Harbour. However, the Applicant is proposing a suite of upgrades to the WWTP's as part of these consents to be implemented within a three-year timeframe. Taking into account these proposed upgrades, which based on the information provided by the Applicant will result in the quality of the discharge being improved over the term of the consent, it is anticipated that there will be no further exceedance of proposed treated wastewater discharge standard conditions.. Given this, I consider that the discharge would not result in any exceedance of the Coastal water quality standards in Policy H.3.3 of the PRP and therefore the granting of these consents would be consistent with Policy D.4.1.

Policy D.4.3: Municipal, domestic and production land wastewater discharges

- 3.7 Policy D.4.3 states:

An application for resource consent to discharge municipal, domestic, horticultural or farm wastewater to water will generally not be granted unless:

1) the storage, treatment and discharge of the wastewater is done in accordance with recognised industry good management practices, and

2) a discharge to land has been considered and found not to be environmentally, economically or practicably viable.

- 3.8 The use of the word “generally” in this policy allows for applications to be granted in exceptional circumstances where a wastewater discharge is either not being done in accordance with recognised industry good management practices and for when a discharge to land has not been found to be viable. In terms of this application, I consider that the

current wastewater discharges from the WWTP's are not being undertaken in accordance with industry good management practices, as evidenced by the apparent lack of maintenance and frequent instances of treated wastewater exceeding consented trigger levels. . With regards to alternative discharges, as discussed in my s42A report, no options for discharge to land have been identified as being economically viable. On that basis, taking into account the exception provided for by this policy and noting the proposed upgrades to the WWTPs, I consider the granting of these consents based on the conditions proposed would not be inconsistent with Policy D.4.3.

3.9 Policy D.4.4 : Zone of reasonable mixing

3.10 The intent of Policy D.4.4 is to determine an appropriate zone of reasonable mixing. I note that in the evidence presented by Dr Beamsley on behalf of the applicant, an appropriate mixing zone for the Opononi wastewater discharge is considered to be one which extends upstream and downstream of the discharge, rather than a single point location¹. At the location of this discharge though the tidal influence is very strong, and the discharge will only be authorised to occur on an outgoing tide. Therefore, any adverse effect on coastal water quality would occur down current of the discharge point.

3.11 I note that Dr Beamsley agrees with my recommended discharge point for Kohukohu (being the existing discharge point downstream in the Channel Beacon)². For this reason, I consider that the zone of reasonable mixing is consistent with this policy.

3.12 Updated Analysis of the Applications

3.13 After considering these policies, my assessment of the application against the relevant statutory provisions as outlined in the s42A report remains the same. As noted in my report, the cultural effects associated with the applications are significant and there is no true way of mitigating this effect without shifting to a land disposal alternative. However, I recognise that the applicant is proposing to work towards a land disposal alternative and the proposed consent duration (in conjunction with the other agreed conditions) need to be recognised as mitigating factors.

4. REVISED CONSENT CONDITIONS

4.1 Following the adjournment of the hearing, the Applicant was directed by the Commissioners in Minute 2 dated 7 July 2023 to provide a set of updated and revised consent conditions. A set of revised consent conditions was provided by the Applicant on 16 August 2023.

4.2 Of note, the revised conditions include the following changes:

- Requirement for a Site Management Plan (SMP) to be prepared and implemented to cover the operations and maintenance of the WWTPS and to undertake a review of the SMP at least once within the lifespan of the consents;
- Inclusion of a Community Liaison Group, consisting of tāngata whenua and invited representatives from community groups;
- Requirement to investigate land disposal options with the Community Liaison Group; and

¹ In paragraph 50.

² In paragraph 51.

- A revised consent duration of three years.

4.3 A meeting was held with the Applicant on 14 September 2023 to discuss the revised conditions dated 16 August 2023 and to confirm areas of acceptance or disagreement between Far North District Council and Northland Regional Council. As a result of these discussions, the Applicant provided an updated set of consent on 21 September 2023. I am in general agreement with the draft conditions put forward by the Applicant dated 21 September 2023, with minor amendments proposed (refer to the Attachment 1). Of the minor amendments I have recommended to the draft conditions, I consider that there are two which are worthy of further discussion, as set out below:

Stock Prevention (Condition 3)

4.4 The Applicant has amended Condition 3 which places the focus of the condition from ensuring no stock is allowed to enter the WWTP area to placing responsibility on the Far North District Council to install and maintain a "reasonable stock-proof fence". I disagree with these proposed changes, noting that the wording of Condition 3 as presented in my original s42A report was to provide a robust compliance metric to prevent damage to the WWTP systems by stock. Taking this into account, I consider that the word "reasonable" is not necessary, given the subjectivity of what this constitutes. On that basis, I recommend that Condition 3 reads as follows (changes proposed in *red*):

*The Consent Holder must install and maintain a **reasonable** stock-proof fence to prevent stock from entering any area that is utilised for the treatment of wastewater.*

Tidal Clock (Condition 18)

4.5 The Applicant has proposed to delete Condition 18 which requires the tidal clock used to control the discharge from the Opononi WWTP into the Hokianga to be calibrated at least annually. I understand from the Applicant that currently the Opononi WWTP operators do not use a specific piece of equipment for the tidal clock, rather they rely on tidal charts and use their personal clock to time the discharge.

4.6 It occurs to me that discharging on the outgoing tide is a key mitigating factor of the Opononi WWTP, and this has informed the effects assessment on the application. On that basis, I consider it important that Condition 18 is retained and strengthened to ensure a tidal clock is in place and at that it is utilised and calibrated on a regular basis. It is also important that this condition makes it clear that the tidal clock is connected to the pump system. Taking this into account, I recommend that Condition 18 reads as follows (changes proposed in *red*):

*The Consent Holder **must utilise a ~~shall calibrate the~~ programmable** tidal clock ~~used~~ that is connected to the wastewater pump system to control the time of the discharge to the Hokianga Harbour. **This tidal clock must be verified** at least **monthly annually** to ensure that the programmed high tide discharge time is, as far as practicable, the same as when high tide actually occurs at the site. Written verification from **the Consent Holder a suitably qualified person** that this calibration has been undertaken **each month during the previous 12-month period shall must** be **forwarded provided** to the Northland Regional Council's assigned monitoring **by the 15th of the following month officer by 1 May each year.***

COMMENTS RECEIVED FROM SUBMITTERS

- 4.7 The Hearing Panel received written comments from 25 submitters on the application on the revised consent conditions.
- 4.8 Written comments on the revised consent conditions were generally in relation to the following:
- Support for the reduced three year consent duration;
 - Seeking additional monitoring conditions and requirements;
 - Seeking electro-coagulation as an alternative to chemically assisted solids removal and UV disinfection treatment;
 - Concern regarding the proposed median and 90th percentile standards for *E.Coli*;
 - Support for the re-inclusion of the Community Liaison Group (noting comments have been received regarding the membership of this group); and
 - Seeking specific milestones in relation to alternative land-based discharge options and investigations.
- 4.9 With regards to the additional monitoring conditions, I note that written comments did not provide specific detail on what further monitoring should be undertaken. As noted in my s42A report, I consider the monitoring conditions put forward by the Applicant to be appropriate for the proposed discharges (including my recommended amendment to the tidal clock (proposed condition 18) discussed in section 4.5 and 4.6 above).
- 4.10 Regarding electro-coagulation as an alternative, I note this was raised frequently by submitters at the hearing. I have not received any technical information regarding what potential impact this form of treatment may have on the discharge quality of the wastewater entering the Hokianga Harbour, or the feasibility of implementing this. On that basis, I have not considered this further.
- 4.11 The Applicant has revised the monitoring conditions to rely on a percentile determination concentration and median in place of a maximum. While I note submitters' concerns with regards to these changes, I consider that this will provide greater consistency between consent conditions, and reliability in terms of achieving compliance.
- 4.12 I also note the written comments received regarding the membership of the Community Liaison Group, with a common theme in the written comments received being that this group should be elected by the community and not the Consent Holder. I also note written comments sought that the Community Liaison Group should meet on a six-monthly basis (instead of annually). I have considered these points, but consider that the proposed frequency and membership of the Community Liaison Group remains appropriate, particularly given the revised consent duration of three years and the challenges experienced previously with complying with this requirement in relation to establishing and operating the Community Liaison Group.
- 4.13 A number of comments received sought that specific milestones be included in the conditions to ensure a land-disposal alternative is found. Given the revised three-year consent duration offered by the Applicant, the purpose of this consent is now to allow enough time for alternatives to be found. This is reflected in the Community Liaison Group conditions put forward by the Applicant, which requires options and recommendations to be

discussed on an, at least, annual basis. I am not convinced that any additional requirements beyond this is realistic taking into account the significantly reduced consent duration.

FINAL RECOMMENDATION

- 4.14 Having carefully reviewed the evidence presented at the hearing along with the application amendments, revised conditions provided by the Applicant and written comments from submitters, I remain of the view that the applications should be granted subject to the proposed conditions in Attachment 1.
- 4.15 I have made recommendations to refine the conditions offered by the Applicant to potentially make these more workable and enforceable for all concerned. I am happy to provide further clarification of the above matters if required.

Yours sincerely,



Laila Alkamil
Consultant Planner

12 October 2023

ATTACHMENT 1: PROPOSED CONSENT CONDITIONS

KEY TO TEXT COLOURING

Red Text Changes proposed by Northland Regional Council to revised consent conditions provided by Far North District Council on 21 September 2023.

Black Text Agreed consent conditions between Far North District Council and Northland Regional Council (August – September 2023)

REVISED CONSENT CONDITIONS FOR OPONONI/ŌMAPERE WASTEWATER TREATMENT PLANT RESOURCE CONSENTS

FAR NORTH DISTRICT COUNCIL

To undertake the following activities associated with the operation of the Opononi Wastewater Treatment Plant on Part Taumatawiwi Survey Office Plan 405122 (aeration and detention ponds), Section 1 Survey Office 405122 (clean water tank), Part River Bed (part-of constructed wetland over the bed of the Waiarohia Stream), and Lot 1 Deposited Plan 167208 (majority of constructed wetlands):

Note: All location co-ordinates in this document refer to Geodetic Datum 2000, New Zealand Transverse Mercator Projection.

- AUT.002667.01.04 To discharge treated wastewater into the coastal marine area of the Hokianga Harbour, at or about location co-ordinates 1634768E 6069462N.
- AUT.002667.02.03 To discharge treated wastewater to land (seepage) from the base of a wastewater treatment system, at or about location co-ordinates 1635620E 6069420N and 1635800E 6069350N.
- AUT.002667.03.03 To discharge contaminants (primarily odour) to air from the operation of the wastewater treatment system, at or about location co-ordinates 1635620E 6069420N and 1635800E 6069350N.
- AUT.0022667.04.02 To occupy the bed of the coastal marine area of the Hokianga Harbour with an existing wastewater discharge pipeline structure.

Subject to the following conditions:

General Conditions

- 1 The Consent Holder must maintain the treatment system so that it operates effectively at all times and keep a written record of all maintenance required and undertaken ~~must be kept~~. A copy of this record must be forwarded to Northland Regional Council's assigned monitoring officer immediately upon request.
- 2 The Consent Holder must monitor the exercise of these consents in accordance with Schedule 1 (attached). The results of monitoring carried out for each calendar month in accordance with Schedule 1 must be forwarded to Northland Regional Council's assigned monitoring officer by the 15th of the following month, and also immediately on written request. This information must be in an electronic format that has been agreed to by the Northland Regional Council.
- 3 ~~To prevent damage to the wastewater treatment system t~~The Consent Holder must install and maintain a ~~reasonable~~ stock-proof fence to prevent stock from entering any area that is utilised for the treatment of wastewater.
- 4 The Consent Holder must ~~provide~~ ~~prepare~~ a Site Management Plan (SMP) that covers all operations and maintenance of the Opononi-Ōmapere Wastewater Treatment System (~~OPO-WWTP~~) and ~~submit it~~ to the Northland Regional Council' assigned monitoring officer within six months of the date of commencement of this consent.
- 5 The Consent Holder must complete a review of the SMP required by Condition 4 at least once

during the exercise term of this consent. The purpose of the review is to identify, evaluate and determine improvements to the operation and maintenance of the treatment plant and discharge to better ensure good plant performance and compliance with conditions of these consents. The SMP must be revised to address any findings from the review.

- 6 A written copy of the review's findings and any revised SMP must be provided to the Northland Regional Council's assigned monitoring officer within one month of completion of the review.
- 7 The Consent Holder must, as a minimum, operate and manage the wastewater treatment plant in accordance with the most recent reviewed version of the SMP that has been provided to the Northland Regional Council, required by Condition 4.
- 8 The Consent Holder must, within three months of the commencement of the ~~sesis~~ consents, form a Community Liaison Group and invite representatives from the following groups to be members ~~form a Community Liaison Group~~:
 - (a) Te Rūnanga o Te Rarawa;
 - (b) Te Rūnanga A Iwi o Ngāpuhi;
 - (c) Nga hapū o Hokianga;
 - (d) Ōmāpere and Opononi Communities (duly appointed) ;
- 9 The purpose of the Community Liaison Group is to provide a forum to:
 - (a) Share and discuss information on the performance of the wastewater treatment plant and monitoring of the Hokianga Harbour;
 - (b) Review, discuss, and make recommendations on the maintenance programme and opportunities to improve the quality of the wastewater discharge;
 - (c) Review, discuss, and make recommendations on alternative discharge options; and
 - (d) Address any other matters relating to the wastewater treatment plant as identified by the Community Liaison Group.
- 10 The Consent Holder must:
 - (a) Provide the Community Liaison Group with technical support from an independent person qualified and specialising in wastewater engineering and land disposal systems.
 - (b) Schedule and hold ~~regular~~ meetings for the duration of the Consent at least annually, unless the Community Liaison Group agrees to a less frequent schedule; and
 - (c) Prepare and circulate an agenda for each meeting and prepare minutes recording actions. A copy of the minutes must be provided to the members of the group within a reasonable period following a meeting; and
 - (d) ~~Report to the Northland Regional Council's assigned monitoring officer as to the outcome of each review of the treatment and/or discharge of wastewater; and~~
 - (e) ~~In the event of a recommendation is to change to land disposal, a~~ Advise the Northland Regional Council's Compliance Monitoring Manager ~~'s assigned monitoring officer whether or not it is if there is a committcommitment ing to a~~ the land disposal option and, ~~if so,~~ the anticipated timeframe to decommission existing infrastructure if it is to take place within the term of this consent.

Advice Note: Should the Consent Holder authorise, construct and commission infrastructure to discharge treated wastewater to land within the 3-year consent term, then Resource Consent AUT.002667.01.04 will be surrendered. The terms of the surrender are expected to be set out in any consent that authorises that discharge to land.

- 11 The Consent Holder must, on becoming aware of any discharge associated with the Consent Holder's operations that is not authorised by these consents:
- (a) Immediately take such action, or execute such work as may be necessary, to stop and/or contain the discharge; and
 - (b) Immediately notify the Northland Regional Council by telephone of the discharge; and
 - (c) Take all reasonable steps to remedy or mitigate any adverse effects on the environment resulting from the discharge; and
 - (d) Report to the Northland Regional Council's Compliance Monitoring Manager in writing within one week on the cause of the discharge and the steps taken, or being taken, to effectively control or prevent the discharge.
 - (e) For telephone notification during the Northland Regional Council's opening hours, the Northland Regional Council's assigned monitoring officer for these consents must be contacted. If that person cannot be spoken to directly, or it is outside of the council's opening hours, then the Environmental Hotline must be contacted.
- 12 The Council may, in accordance with Section 128 of the Resource Management Act 1991, serve notice on the Consent Holder of its intention to review the conditions annually during the month of May for any one or more of the following purposes:
- (a) To deal with any adverse effects on the environment that may arise from the exercise of the consents and which it is appropriate to deal with at a later stage, or
 - (b) To require the adoption of the best practicable option to remove or reduce any adverse effect on the environment.

The Consent Holder must meet all reasonable costs of any such review.

AUT.002667.01 and AUT.002667.02 – Discharges to Coastal Water and Land

- 13 The quantity of treated wastewater discharged to the Hokianga Harbour ~~must~~ not exceed 450 cubic metres per day.
- 14 Notwithstanding Condition 13, the Consent Holder ~~must~~ minimise, as far as practicable, any stormwater inflow and infiltration into the sewage reticulation network and treatment system. This ~~must~~ include the prevention, as far as practicable, of stormwater run-off from the surrounding land entering the treatment system. For compliance purposes, the Consent Holder ~~must~~ record the daily wastewater inflow volume to the treatment plant.
- 15 The Consent Holder ~~must~~ maintain a meter on both the inlet to, and the outlet from, the treatment system that has a measurement error of +/- 5% or less. These meters must be used to determine compliance with Conditions 13 and 14.
- 16 The Consent Holder ~~must~~ re-calibrate the meters required by Condition 15 at least annually to ensure the specified accuracy is maintained. Written verification from a suitably qualified person that the meter has been calibrated during the previous 12-month period ~~must~~ be ~~provided~~ forwarded to the Northland Regional Council's assigned monitoring officer by 1 May each year.
- 17 Treated wastewater ~~must~~ only be discharged to the Hokianga Harbour in the three-hour period between one hour and four hours after high tide via the discharge pipeline from the treatment system.
- 18 The Consent Holder ~~must utilise a~~ ~~shall calibrate the~~ programmable tidal clock ~~used that is connected to the wastewater pump system~~ to control the time of the discharge to the Hokianga Harbour. This tidal clock must be verified at least monthly ~~annually~~ to ensure that the

programmed high tide discharge time is, as far as practicable, the same as when high tide actually occurs at the site. Written verification from ~~the Consent Holder a suitably qualified person~~ that this calibration has been undertaken ~~each month during the previous 12 month period~~ ~~must shall~~ be ~~provided forwarded~~ to the Northland Regional Council's assigned monitoring ~~by the 15th of the following month~~ ~~officer by 1 May each year~~.

- 18 The Consent Holder must:
- (a) within three years of the date of commencement of these consents, implement chemically assisted solids removal and install UV disinfection treatment; and
 - (b) provide an annual update to Northland's Regional Council's assigned monitoring officer by 1 May each year regarding the progress of the planned upgrades to the wastewater treatment system.
- 19 The quality of the treated wastewater, as measured at the final outlet from the treatment plant prior to the discharge pipeline, must meet the following standards based on the results of samples collected in accordance with Schedule 1 (attached):

Determinant	Median Concentration Prior to completion of upgrade required at Condition 18	90 th Percentile Concentration <u>prior to</u> completion of upgrade required at Condition 18	90 th Percentile Concentration <u>after</u> completion of upgrade required at Condition 18
5 day Biochemical Oxygen Demand (grams per cubic metre)	20	35	35
Escherichia Coli (per 100 millilitres)	4,400	24,000	3,000
Total ammoniacal nitrogen (grams per cubic metres)	30	43	43
Total suspended solids (grams per cubic metre)	35	80	35

For clarity, compliance with the median for Escherichia Coli and Total Suspended Solids cease once the plant has been upgraded in accordance with Condition 18(a).

- 20 The Consent Holder ~~must shall~~ ensure safe and easy access to Northland Regional Council sampling site 101580 is maintained at all times, so that treated wastewater samples can be collected.
- 21 There ~~must shall~~ be no discharge of contaminants onto or into land, or into water, from any part of the treatment system except via seepage from the base of the treatment system and the designated outlet pipe from the treatment system into the Hokianga Harbour.
- 22 The discharge of contaminants to land via seepage from the base of the treatment system ~~must shall~~ not result in any adverse change to the concentration of Escherichia Coli in ~~of~~ the Waiarohia Stream at NRC Sampling Site 100756. For compliance purposes, the concentration of Escherichia Coli at NRC Sampling Site 100756 ~~must shall~~ be compared with the background concentration of Escherichia Coli upstream at NRC Sampling Site 101579. The error of the analytical method, or measuring instrument, at the 90th percentile confidence level ~~must shall~~ be taken into account.
- 23 Notwithstanding any other conditions, the discharge of any contaminant (either by itself or in combination with the same, similar or other contaminants or water) ~~must shall~~ not result in any of the following effects in the water quality of the Hokianga Harbour, as measured at any point ~~at~~, or down-current of that point, where the treated wastewater first contacts the

surface of the Hokianga Harbour:

- (a) The production of conspicuous oil or grease films, scums or foams, floatable or suspended materials;
- (b) Any conspicuous change in the colour or visual clarity;
- (c) Any emissions of objectionable odour;
- (d) Any significant adverse effects on aquatic life; and
- (e) No more than minor adverse change in either the Escherichia coliform or Enterococci concentration.

For compliance purposes, ~~the down-current~~ water quality ~~must~~shall be compared to the background water quality of the Hokianga Harbour at an up-current site that is not affected by this discharge. The error of the analytical methods and measuring instrument at the 90th percentile confidence level ~~must~~shall be included in determining all parameters.

AUT.002667.03 – Discharge to Air

- 24 The exercise of this consent must not result in the discharge of contaminants to air which are deemed by a Monitoring Officer of the Northland Regional Council to be noxious, dangerous, offensive or objectionable at or beyond the boundary of the area legally occupied by the wastewater treatment plant.

AUT.002667.04 – Discharge Pipeline Structure

- 25 This consent only authorises use of the existing structure as installed at the date of commencement of this consent.
- 26 The Consent Holder mustshall, at all times, ensure the pipeline;
- (a) remains buried at all times;
 - (b) is maintained to ensure its structural integrity; and
 - (c) is identifiable at the surface of the water by a permanent marker buoy.

Advice Note: If the marker buoy becomes sunfixed from its position, it should be reinstated as soon as is practicable and safe to do so.

- 27 The Consent Holder ~~must~~shall undertake an inspections of the bed of the Hokianga Harbour where the pipeline is installed and ~~also~~ the outlet of the pipeline on at least ~~on~~ one occasion during the term of this within the duration of the consent. Within one month of the inspection being undertaken, A written report on the results of the inspection ~~must~~shall be ~~forwarded~~ provided to the Northland Regional Council's assigned monitoring officer and the representatives of the Community Liaison Group, and must be made available on the Consent Holder's website ~~by 1 May every two years from the date of commencement of this consent.~~

EXPIRY DATE: Three years from the date of commencement of the consents, as in accordance with section 116 of the RMA.

SCHEDULE 1

MONITORING PROGRAMME

The Consent Holder ~~must~~ undertake the following monitoring:

1. **AVERAGE DRY WEATHER FLOW**
The Consent Holder ~~must~~ keep a written record of both the daily, midday to midday, inflow volumes to the treatment system and the wastewater discharge volume using the meters required by Condition 15 of the ~~these~~ Consents.

2. **WASTEWATER TREATMENT SYSTEM**

- 2.1. **Sampling and Analysis**

The following sampling and analyses ~~must~~ be undertaken on at least one occasion each calendar month. During the winter months, the sampling ~~must~~ be undertaken during, or immediately after, a rain event on at least three occasions.

Determinant
5 day Biochemical Oxygen Demand (grams per cubic metre)
Escherichia Coli (per 100 millilitres)
Total ammoniacal nitrogen (grams per cubic metres)
Total suspended solids (grams per cubic metre)

A wastewater sample ~~must~~ be collected from the final outlet of the treatment system, prior to it entering the discharge pipeline (at ~~Northland Regional Council~~ ~~NRC~~ Sampling Site 101580).

Temperature, pH and dissolved oxygen concentration ~~must~~ be recorded in the wastewater sample using an appropriate meter, and in accordance with standard procedures.

- 2.2. **Wastewater Concentrations**

The median value for the determinants listed ~~must~~ be a "rolling" median calculated on the 12 most recent treated wastewater samples collected.

The 90th percentile value ~~must~~ be calculated annually for the period 1 May to 30 April using, as a minimum, the results from the monthly sampling required by Section 2.1. 2-

Compliance with the median for Escherichia Coli and Total Suspended Solids ceases once the plant has been upgraded as required by Condition 18(a).

3. ~~**WAIAROHIA STREAM SAMPLING RECEIVING WATER QUALITY**~~

The following sampling and analysis ~~must~~ occur on a quarterly basis starting on 1 May and ending on 30 April each year. During the winter months, this sampling ~~must~~ be undertaken during, or immediately after, a rain event on at least three occasions.

A sample of water ~~mustshall~~ be collected from the following sampling sites:

- (a) 101579: Waiarohia Stream upstream of treatment plant, approximate location coordinates 1635907E 6069331N; and
- (b) 100756: Waiarohia Stream downstream of treatment plant, approximate location coordinates 1635728E 6069372N.

These water samples ~~mustshall~~ then be analysed for Escherichia coli concentration.

4. COLLECTION OF SAMPLES

~~All samples must be collected using National Environmental Monitoring Standards (NEMS) procedures and stored in appropriate laboratory supplied containers.~~

~~All samples collected must be transported in accordance with NEMS procedures to the laboratory.~~

~~All samples must be analysed at an accredited laboratory with registered quality assurance procedures, and all analyses are to be undertaken using standard methods, where applicable. Registered Quality Assurance Procedures are procedures which ensure that the laboratory meets recognised management practices and would include registrations such as ISO 9000, ISO Guide 25, Ministry of Health Accreditation.~~

~~All samples shall be collected using standard procedures and in appropriate laboratory-supplied containers.~~

~~All samples collected as part of this monitoring programme shall be transported in accordance with standard procedures and under chain of custody to the laboratory.~~

~~All samples taken shall be analysed at a laboratory with registered quality assurance procedures, and all analyses are to be undertaken using standard methods, where applicable.~~

5. NON-COMPLIANCE WITH CONSENT CONDITIONS

The Consent Holder ~~mustshall~~ notify the Regional Council of any non-compliance of the “rolling median” or any adverse effects on the water quality of the Waiarohia Stream, immediately after the results of the monitoring required by Section 3 are known.

If the Consent Holder detects any noxious, dangerous, offensive or objectionable odours at the legal boundary of the treatment system, then Northland Regional Council ~~mustshould~~ be notified immediately.

REVISED CONSENT CONDITIONS FOR KOHUKOHU WASTEWATER TREATMENT PLANT RESOURCE CONSENTS

FAR NORTH DISTRICT COUNCIL

To undertake the following activities associated with the operation of the Kohukohu Wastewater Treatment Plant on Part Section 86 Block X Mangamuka Survey District:

Note: All location co-ordinates in this document refer to Geodetic Datum 2000, New Zealand Transverse Mercator Projection.

- AUT.003839.01.03 To discharge treated wastewater into the coastal marine area of the Hokianga Harbour at or about location co-ordinates 1648970E 6085775N.
- AUT.003839.02.03 To discharge treated wastewater to land (seepage) from the base of a wastewater treatment system at or about location co-ordinates 1648970E 6085775N.
- AUT.003839.03.03 To discharge contaminants (primarily odour) to air from the operation of the wastewater treatment system at or about location co-ordinates 1648970E 6085775N.

Subject to the following conditions:

General Conditions

- 1 The Consent Holder must maintain the treatment system so that it operates effectively at all times and keep a written record of all maintenance required and undertaken. A copy of this record must be forwarded to Northland Regional Council's assigned monitoring officer immediately upon written request.
- 2 The Consent Holder must monitor the exercise of these consents in accordance with Schedule 1 (attached).
- 3 ~~The results of monitoring carried out for each calendar month in accordance with Schedule 1 must be forwarded to Northland Regional Council's assigned monitoring officer by the 15th of the following month, and also immediately on written request. This information must be in an electronic format that has been agreed to by the Northland Regional Council. The Consent Holder must forward the results of monitoring carried out in accordance with Schedule 1 to Northland Regional Council's assigned monitoring officer within one month of each monitoring visit.~~
- 4 The Consent Holder must prepare a System Management Plan that covers all operations, maintenance and repairs of the Kohukohu Wastewater Treatment System and submit it to the Northland Regional Council's assigned monitoring officer within six months of the date of commencement of this consent. The System Management Plan ~~must~~ shall cover, but not be restricted to, the operation and maintenance of:
 - (a) All septic tanks that are a part of the common effluent drainage service (CEDS). This section must include the Septage Management Plan required by Condition 8;
 - (b) The reticulation network and associated pumping stations;
 - (c) The facultative pond. This section should include measures which would be implemented to remedy low concentrations of dissolved oxygen;

- (d) The surface flow wetland. This section should include a programme that covers how the Consent Holder will maintain the vegetation cover that is established around the constructed wetland. It should also include measures to prevent the re-establishment of pampas grass on any of the embankments around and within the wetland;
 - (e) The perimeter fencing and access arrangements. This section should include measures to avoid illegal dumping of septage at the site; and
 - (f) Contingency measures for unforeseen or emergency situations.
- 5 The Consent Holder must complete a review of the System Management Plan at least once during the exercise of this consent. The purpose of the review is to identify, evaluate and determine improvements to the operation and maintenance of the treatment plant and discharge to better ensure good plant performance and compliance with conditions of these consents. The System Management Plan must be revised to address any findings from the review.
- 6 A written copy of the review's findings and any revised System Management Plan must be provided to the Northland Regional Council's assigned monitoring officer and the Working Group within one month of completion of the review.
- 7 The Consent Holder must, as a minimum, operate and manage the wastewater treatment plant in accordance with the most recent version of the System Management Plan that has been provided to the Northland Regional Council, required by Condition Error! Reference source not found.
- 8 Within three months of the date of commencement of these consents, the Consent Holder must commission a suitably qualified and experienced person to prepare a Septage Management Plan to demonstrate how the septic tanks that are a part of the common effluent drainage service (CEDS) are to be operated and maintained. The Septage Management Plan must, at minimum, contain the following information:
- (a) A suitable record of each individual tank connected to the CEDS that contains, at minimum, the following information:
 - i. Location details (i.e. GPS coordinates) of the septic tank on each property
 - ii. Basic property information (legal description, address)
 - iii. Contact information for the property owner
 - iv. The number of years the septic tank has been in service (the age of the septic tank).
 - (b) A protocol for tank inspections which includes
 - i. The frequency at which tanks will be inspected;
 - ii. The methods of inspection that may be used.
 - (c) Details on how education and advice will be shared with properties connected to the CEDS for proper septic tank use and operation.
 - (d) A template for recording tank inspection information which generally follows tank inspection requirements under AS/NZS 1547:2012.
 - (e) A desludging programme for the septic tanks connected to the CEDS which recognises that older tanks may need to be desludged more frequently than newer tanks.
 - (f) A works programme for the implementation of any repairs, maintenance or upgrade works required to fully implement the Septage Management Plan.

- 9 The Consent Holder must inspect and maintain the Septic tanks that are a part of the CEDS in accordance with the Septage Management Plan required by Condition 8.
- 10 The Consent Holder must, within three months of commencement of this Consent, invite representatives from the following groups to form a Community Liaison Group:
- (a) Te Rūnanga o Te Rarawa;
 - (b) Te Rūnanga A Iwi o Ngāpuhi;
 - (c) Nga hapū o Hokianga; and
 - (d) Broader Kohukohu community (duly appointed).
- 11 In the event the invitations are accepted, the Consent Holder must appoint two senior officers as representative(s) of the Consent Holder in the Community Liaison Group.
- 12 The purpose of the Community Liaison Group is to provide a forum to:
- (a) Input into the drafting, preparation, and development of the plans to be prepared by the Consent Holder as set out in the conditions of this consent;
 - (b) Share and discuss information on the performance of the wastewater treatment plant and monitoring of the Hokianga Harbour;
 - (c) Review, discuss and make recommendations on upgrades to the wastewater treatment plant, the maintenance programme, and opportunities to improve the quality of the wastewater discharge;
 - (d) The further assessment of land disposal options for the treated wastewater;
 - (e) In the event that land disposal is not feasible, the further assessment of upgrade options to maintain or improve the health and wellbeing of the receiving waters of the Hokianga Harbour; and
 - (f) Address any other matters relating to the wastewater treatment plant as identified by the Group.
- 13 The Consent Holder must:
- (a) Provide the Community Liaison Group with technical support from an independent person qualified and specialising in wastewater engineering and land disposal systems ~~(appointed by the Community Liaison Group).~~
 - (b) Schedule and hold ~~regular~~ meetings for the duration of the Consent, at least annually, unless the Community Liaison Group agrees a less frequent schedule;
 - (c) Prepare and circulate an agenda for each meeting and prepare minutes recording actions. A copy of the minutes must be provided to the members of the group within a reasonable period following a meeting; ~~and~~
 - (d) ~~Report to the Northland Regional Council's assigned monitoring officer as to the outcome of each review of the treatment and/or discharge of wastewater; and~~
 - (e) ~~Advise the Northland Regional Council's Compliance Monitoring Manager if there is a commitment to a land disposal option and the anticipated timeframe to decommission existing infrastructure if it is to take place within the term of this consent. In the event the recommendation is to change to land disposal, advise the Northland Regional Council's assigned monitoring officer whether or not it is committing to the land disposal option and, if so, the anticipated timeframe to decommission the existing infrastructure if it is to take place within the term of this consent.~~

~~14 The Consent Holder must keep a record of all wastewater flows to the treatment plant. Records must be provided to Northland Regional Council's assigned monitoring officer upon~~

~~written request.~~

- 15 The Consent Holder must, on becoming aware of any discharge associated with the Consent Holder's operations that is not authorised by these consents:
- (a) Immediately take such action, or execute such work as may be necessary, to stop and/or contain the discharge; and
 - (b) Immediately notify the Northland Regional Council by telephone of the discharge; and
 - (c) Take all reasonable steps to remedy or mitigate any adverse effects on the environment resulting from the discharge; and
 - (d) Report to the Northland Regional Council's Compliance Monitoring Manager in writing within one week on the cause of the discharge and the steps taken, or being taken, to effectively control or prevent the discharge.

For telephone notification during the Northland Regional Council's opening hours, the Northland Regional Council's assigned monitoring officer for these consents must be contacted. If that person cannot be spoken to directly, or it is outside of the council's opening hours, then the Environmental Hotline must be contacted.

- 16 The Council may, in accordance with Section 128 of the Resource Management Act 1991, serve notice on the Consent Holder of its intention to review the conditions annually during the month of May for any one or more of the following purposes:
- (a) To deal with any adverse effects on the environment that may arise from the exercise of the consents and which it is appropriate to deal with at a later stage, or
 - (b) To require the adoption of the best practicable option to remove or reduce any adverse effect on the environment.

AUT.003839.01 and AUT.003839.02 – Discharges to Coastal Marine Area and Land

- 17 The quantity of treated wastewater discharged to the Hokianga Harbour must not exceed 40 cubic meters per day.
- 18 The Consent Holder must keep a record of all wastewater inflows to the treatment plant. Records must be provided to Northland Regional Council's assigned monitoring officer immediately upon written request.
- 19 The Consent Holder must maintain easy and safe access to the NRC Sampling Sites 323 and 2051 at all times.
- 20 Prior to the completion of the upgrade required by Condition 2021, if the median concentration of faecal coliforms, based on the five most recent samples collected from the NRC Sampling Site 323 (discharge from the wetland), exceeds 5,000 per 100 millilitres or if the concentration of faecal coliforms in any one sample collected from NRC Sampling Site 323 exceeds 15,000 per 100 millilitres, then additional monitoring must be carried out in accordance with Schedule 1 (attached).

Advice note: This condition ceases to have effect once the treatment plant is upgraded in accordance with Condition 2021.

- 21 The Consent Holder must, no later than 1 July 2025, de-sludge the facultative pond, remove the excess vegetation present in the wetland, install baffles and move the influent inlet to the north-eastern corner of the pond, as recommended in the *Kohukohu WWTP Issues and Options Report, prepared by Jacobs, dated 15 October 2020, ref.IZ134400*.

- 22 Once the treatment plant has been upgraded in accordance with Condition 20, the quality of the treated wastewater, as measured at NRC Sample Site 323 (discharge from the wetland), must meet the following standards based on the results of samples collected in accordance with Schedule 1 (attached):

Parameter	Unit	Median	90 th Percentile
Ammoniacal Nitrogen	g/m ³	20	32
Faecal Coliforms	CFU/100ml	2,500	24,000

- 23 ~~Notwithstanding Condition 22, if~~ at any time the concentration of total ammoniacal nitrogen in any sample taken from NRC Sampling Site 323 (discharge from the wetland) exceeds 40 grams per cubic metre, then additional monitoring ~~of the receiving water quality must~~~~shall~~ be undertaken in accordance with Section 2 of Schedule 1 (attached).
- 24 Notwithstanding any other conditions of this Consent, the discharge ~~must~~~~shall~~ not cause the water quality of the Hokianga Harbour, as measured at NRC Sampling Site 231, to fall below the following standards:
- The natural pH of the water ~~shall~~~~must~~ not be changed by more than 0.2 units.
 - The median concentration of faecal coliform bacteria in the water ~~shall~~~~must~~ not exceed 14 per 100 millilitres and the 90th percentile concentration ~~shall~~~~must~~ not exceed 43 per 100 millilitres, based on not fewer than 10 (ten) samples taken over any 30 day period.
 - The visual clarity of the water ~~shall~~~~must~~ not be reduced by more than 20%.
 - There ~~shall~~~~must~~ be no production of significant oil or grease films, scums or foams, floatable or suspended materials, or emission of objectionable odour.
 - The dissolved oxygen concentration ~~shall~~~~must~~ not be reduced below 80% of saturation.
 - The concentration of total ammoniacal nitrogen ~~shall~~~~must~~ not exceed the following:

Salinity – 10 g/kg					
pH	10°C	15°C	20°C	25°C	30°C
7.0	16	12	7.7	5.4	3.6
7.2	9.9	7.2	4.9	3.4	2.3
7.4	6.4	4.4	3.0	2.1	1.5
7.6	4.1	2.8	2.0	1.4	0.99
7.8	2.6	1.8	1.2	0.91	0.62
8.0	1.6	1.2	0.80	0.57	0.39
8.2	1.1	0.72	0.51	0.36	0.26
8.4	0.67	0.46	0.34	0.24	0.17
8.6	0.44	0.30	0.22	0.16	0.12
8.8	0.28	0.21	0.15	0.12	0.09
9.0	0.19	0.14	0.11	0.08	0.07

Salinity – 20 g/kg					
pH	10°C	15°C	20°C	25°C	30°C
7.0	17	12	8.0	5.4	3.9
7.2	11	7.4	5.1	3.6	2.5
7.4	6.7	4.6	3.4	2.2	1.6
7.6	4.4	2.8	2.1	1.4	0.99
7.8	2.8	1.9	1.3	0.91	0.64
8.0	1.7	1.2	0.82	0.59	0.41
8.2	1.1	0.77	0.54	0.39	0.26
8.4	0.69	0.49	0.36	0.25	0.18
8.6	0.46	0.34	0.23	0.16	0.12

8.8	0.30	0.21	0.16	0.12	0.09
9.0	0.20	0.15	0.11	0.08	0.07

Salinity – 30 g/kg					
pH	10°C	15°C	20°C	25°C	30°C
7.0	18	12	9.1	6.0	4.5
7.2	12	8.0	5.4	3.9	2.6
7.4	7.2	4.9	3.4	2.4	1.6
7.6	4.6	3.0	2.6	1.5	1.1
7.8	2.8	2.0	1.4	0.99	0.67
8.0	1.8	1.3	0.91	0.62	0.44
8.2	1.2	0.82	0.57	0.41	0.28
8.4	0.74	0.51	0.36	0.26	0.19
8.6	0.49	0.34	0.25	0.18	0.13
8.8	0.30	0.22	0.16	0.12	0.09
9.0	0.21	0.16	0.12	0.09	0.07

APP.003839.03 – Discharge to Air

- 25 The exercise of this consent must not result in the discharge of contaminants to air ~~of odour~~ which is deemed by a Monitoring Officer of the Northland Regional Council to be noxious, dangerous, offensive or objectionable at or beyond the boundary of the area legally occupied by the wastewater treatment system.
- 26 The Consent Holder must prepare an Odour Management Plan in consultation with representatives of Tauteihihi Marae that details the management measures to be followed to ensure that odour does not impact Tauteihihi Marae and the customary practices required for a functioning marae and, once agreed, must:
- (a) provide a copy to the Northland Regional Council's assigned monitoring officer; and
 - (b) implement any agreed measures within six months of the commencement of the consent.

EXPIRY DATE: Three years from the commencement of the se consents, as in accordance with section 116 of the RMA.

SCHEDULE 1

MONITORING PROGRAMME

The Consent Holder must undertake the monitoring specified in this schedule.

1. WASTEWATER TREATMENT SYSTEM

1.1. Sampling and Analysis

At no more than monthly intervals, the following samples and analyses ~~shall~~must be undertaken. The time of sampling is to vary for each sampling visit.

At NRC Sampling Site 323 (discharge from the wetland) a composite* sample of wastewater will be undertaken and analysed for the following:

Determinant
5 day Biochemical Oxygen Demand (grams per cubic metre)
Faecal Coliforms (per 100 millilitres)
Total ammoniacal nitrogen (grams per cubic metres)
Total suspended solids (grams per cubic metre)

** A sample made up of equal volumes from three samples taken at least five minutes apart during the same sampling event.*

Temperature, pH and dissolved oxygen concentration are to be recorded at NRC Sampling Site 323 using an appropriate meter, and in accordance with standard procedures.

1.2. Wastewater Concentrations

The median value for the determinants listed ~~shall~~must be a "rolling" median calculated on the 12 most recent composite wastewater samples collected at NRC Sampling Site 323. ~~Until such time as 12 composite wastewater samples have been collected, the results of sampling to date shall be utilised for compliance purposes.~~

The 90th percentile value ~~shall~~must be calculated using the 12 most recent composite wastewater samples collected at NRC Sampling Site 323. ~~Until such time as 12 composite wastewater samples have been collected, the results of sampling to date shall be utilised for compliance purposes.~~

2. RECEIVING WATER QUALITY

The following sampling and analyses ~~shall~~must occur at least bi-annually.

Sampling at NRC Sampling Sites 231, 323, 2051, 2052 and 5815 (see attached map) is to occur on the same day and is to be undertaken on the ebb tide as close to low ~~time~~tide as is practicable.

2.1. NRC Sampling Sites 323, 2051 and 2052

(a) At NRC Sampling site 323 a composite* sample ~~shall~~must be taken.

- (b) At NRC Sampling Sites 2051 and 2052, ~~there~~ three samples of equal volume ~~shall~~must be taken at least five minutes apart.

All samples taken at NRC Sampling Sites 323, 2051 and 2052 ~~shall~~must be analysed for the following:

Determinant
Total ammoniacal nitrogen (grams per cubic metres)
Faecal coliforms (grams per cubic metre)

**A sample made up of equal volumes from three samples taken at least five minutes apart during the same sampling event.*

Temperature, pH and dissolved oxygen concentration are to be recorded at NRC Sampling Sites 323, 2051 and 2052 using an appropriate meter and in accordance with standard procedures.

2.2. NRC Sampling Sites 231 and 5815

- (a) At NRC Sampling Site 231 and 5815, ten samples of equal volume ~~shall~~must be taken at least five minutes apart.

All samples taken at NRC Sampling Site 231 and 5815 ~~shall~~must be analysed for the following:

Determinant
Total ammoniacal nitrogen (grams per cubic metres)
Faecal coliforms (grams per cubic metre)

Temperature, pH, dissolved oxygen concentration and salinity are to be measured at NRC Sampling Sites 231 and 5815 using an appropriate meter, and in accordance with standard procedures.

6. COLLECTION OF SAMPLES

All samples must be collected using National Environmental Monitoring Standards (NEMS) procedures and stored in appropriate laboratory supplied containers.

All samples collected must be transported in accordance with NEMS procedures to the laboratory.

All samples must be analysed at an accredited laboratory with registered quality assurance procedures, and all analyses are to be undertaken using standard methods, where applicable. Registered Quality Assurance Procedures are procedures which ensure that the laboratory meets recognised management practices and would include registrations such as ISO 9000, ISO Guide 25, Ministry of Health Accreditation.

7. NON-COMPLIANCE WITH CONSENT CONDITIONS

The Consent Holder must notify the Regional Council of any non-compliance immediately after the results of the monitoring are known.

If the Consent Holder detects any noxious, dangerous, offensive or objectionable odours at the legal boundary of the treatment system, then Northland Regional Council must be notified immediately.

Monitoring Locations:

