

**BEFORE THE MANAWATŪ-WHANGANUI REGIONAL COUNCIL
INDEPENDENT HEARING PANEL**

IN THE MATTER of the Resource
Management Act 1991
("RMA" or "the Act")

AND

IN THE MATTER of resource consent
applications to
**MANAWATŪ-
WHANGANUI REGIONAL
COUNCIL** by **WINSTONE
PULP INTERNATIONAL
LIMITED** to discharge up
to 750m³/day of
condensate wastewater,
and land disturbance
together with any ancillary
diversion of water and
discharge of sediment for
the associated construction
of a wetland (ATH-
2010011593.03 and ATH-
202609463.00).

**SUPPLEMENTARY STATEMENT OF EVIDENCE OF SUKHDEEP KAUR SINGH
(SUKHI SINGH)
DATED 9 OCTOBER 2026**

1. INTRODUCTION

- 1.1 My name is Sukhdeep Kaur Singh (Sukhi Singh). I am the Technical Director – Planning at Babbage Consultants Limited.
- 1.2 I have outlined my qualifications, experience and commitment to comply with the Environment Court Expert Witness Code of Conduct in my evidence in chief dated 29 September 2026.

Purpose and scope of evidence

- 1.3 The purpose of this evidence is to provide:
- (a) An updated set of the applicant's proposed conditions, informed by discussions with the Council's experts (**Attachment 1**).

- (b) Provide a Submissions Table that sets out all submission points and how those have been addressed by reference to the s 42A Report, evidence in chief for WPI and the draft condition set (**Attachment 2**). The purpose of this summary table is to assist the Commissioners by consolidating the overall responses on each submission in one table.
- (c) Provide an updated assessment of the relevant One Plan provisions relevant to surface water quality, along with a summary table (**Attachment 3**).

2. **UPDATED DRAFT CONDITIONS**

- 2.1 Following the submission of the applicant's evidence in chief, the applicant has undertaken further discussions with Council's experts to refine the draft conditions package included in my evidence in chief.
- 2.2 An updated set of applicant's proposed conditions is included as **Attachment 1**. The changes proposed by the applicant are noted in the comments section in the draft conditions. In brief:
 - (a) Monitoring Provisions for the wastewater (Condition 21 of the discharge consent) – in the draft conditions in the s 42A Report, Ms Morton had proposed wastewater quality limits by average and maximum individual concentration samples. The applicant is proposing a monitoring regime by having two categories: wastewater discharge load limits for key parameters; and wastewater discharge load triggers for investigation for remaining parameters.
 - (b) Certification of ESCP and RAP (condition 13 of land use consent) – in order to avoid delays in the certification of the final ESCP and RAP, conditions are proposed to be refined to specify that council must within 20 days of receiving the ESCP and RAP either certify the documents or advice the consent holder which aspects of the documents do not comply with the required conditions.
 - (c) Certification of constructed erosion and sediment control measures (condition 16 of the land use consent) – in order to provide some flexibility in the final design of the ESCP, the condition has been refined to require certification of the constructed erosion and sediment control measures (as opposed to specifying a particular

solution for certification). It is noted that only the solutions certified by the Council will be constructed.

- (d) Duration and lapsing (condition 48 of land use consent) – the applicant accepts the five year lapse period for the earthworks.

3. **SUBMISSIONS TABLE**

- 3.1 As noted above, and to assist the Panel, **Attachment 2** contains a submissions table which records all submission points and how those have been addressed by reference to the s 42A Report, the applicant's evidence in chief, and the draft condition set.

4. **OBJECTIVES, POLICIES AND RULES FRAMEWORK ASSESSMENT**

- 4.1 In light of the submission from Ngāti Rangī, and given the changes that have been made to the conditions regarding wastewater monitoring, I have undertaken a further assessment of the objectives, policies and rules framework of the One Plan, as it relates specifically to surface water quality. The purpose of this assessment is to set out how the resource management issues of significance to iwi authorities have informed the objectives, policies and rules framework for discharges of wastewater into water in the One Plan.
- 4.2 **Attachment 3** of my supplementary evidence includes a table setting out the key provisions of the One Plan framework as it relates to surface water quality. I discuss this below.
- 4.3 The One Plan has a deliberate hierarchy, which begins with the identification of resource management issues, followed by the objectives sought to be achieved to address those issues, followed by the policies setting out the approach to be taken to achieve the objectives.
- 4.4 The One Plan – Regional Policy Statement (RPS) provides a resource management overview for the region. Section RPS-SRMR sets out the significant resource management issues for the region. The RPS identifies four keystone environmental issues of relevance for the region, one of these being surface water quality degradation. The RPS states that the proposed approach to address is to set water quality targets for ecosystems, recreation, cultural, and water-use values identified for catchment Water Management Sub-areas.
- 4.5 Section RPS-RMIA sets out the resource management issues of significance to iwi authorities. It states that management of water quality

and quantity throughout the Region does not provide for the special qualities significant to Māori. It states that lakes and streams have suffered degradation which continues and are considered culturally unclean. Access to and availability of clean water to exercise cultural activities such as food gathering and baptismal rituals are diminished.

4.6 Objective RPS-RMAI-01 sets out the goal to have regard to the mauri of natural and physical resources to enable hapū and iwi to provide for their social, economic and cultural wellbeing. This objective also states that particular regard must be given to kaitiakitanga, and relationship of hapū and iwi with their ancestral lands, water, sites, wahi tapu and other taonga (including wāhi tupuna) must be recognised and provided for through resource management processes.

4.7 Policy RPS-RMIA-P3 states that the Regional Council must have regard to the mauri of water by implementing RPS-RMIA-P1(1) to (9) and by restricting and suspending water takes in times of minimum flow consistent with LF-FW-P21. Policy RPS-RMIA-P1 sets out how the Regional Council will involve hapū and iwi authorities in resource management processes (in brief):

- P1(1) - memoranda of partnership;
- P1(2) - recognition of existing arrangements and agreements;
- P1(3) – development of catchment-based forums;
- P1(4) – development, where appropriate of hapū and iwi cultural indicator monitoring;
- P1(5) – assistance to facilitate research, projects, seminars and training;
- P1(6) – development of joint management agreements;
- P1(7) – having regard to iwi management plans lodged with Council; and
- P1(8) – Council adding and encouraging resource consent applicants to consult directly with hapū and iwi.

4.8 Policy RPS-RMIA-P4 states that the specific issues listed in RPS-RMIA (resource management issues of significance to iwi) which were raised by hapū and iwi must be addressed in the manner set out in Table 2. With

respect to surface water quality, specific to mauri, it is states that “*Human activities, application of impure agents, loss of water capacity and contaminants all affect the ability of the mauri to perform its role effectively, therefore resulting in a standard of water not suitable for hapū and iwi to perform their relevant tikanga Māori or cultural activities associated with its use*”. Table 2 sets out the relevant parts of the One Plan where this issue is addressed. Table 2 identifies rules pertaining to discharges to land and water as being one of the relevant parts of the One Plan where the issue of surface water quality is addressed.

- 4.9 Rule LF-LW-R38 provides for discharges of contaminants into the Whangaehu River as a Discretionary Activity. This rule is informed by and implements the strategic directions set out in the objectives and policies framework of the One Plan. As a Discretionary Activity, the planning framework contemplates such discharges to be considered on their merits through a resource consent process.
- 4.10 Policy RPS-LF-FW-P12 and Policy RP-LF-P4 set out the key assessment criteria to inform decisions on resource consent applications for point source discharges to water. Policy RP-LF-LW-P4 sets out the matters that the Regional Council must specifically consider and have regard to when making decisions on resource applications and setting consent conditions. My assessment of the matters set out in Policy RPS-LF-FW-P12 and RP-LF-LW-P4, and relevant objectives and policies is set out **Attachment 3**.
- 4.11 It is my overall conclusion that in drafting the One Plan, the provisions of RPS-RMIA illustrate that careful thought was given to the to the issues of significance to the region’s hapū and iwi. The RPS-RMIA framework provides explanations in the context of Māori belief and demonstrates how the Regional Council must address those matters. The RPS-RMIA framework has informed the rules framework for wastewater discharges.
- 4.12 It is my overall finding that the application is generally consistent with the relevant objectives and policies framework for discharges of contaminants to surface water as set out in the One Plan, and confirmed by the technical assessments.

ATTACHMENT 1 UPDATED CONDITION SET

ATTACHMENT A - AMENDMENTS PROPOSED BY THE APPLICANT

Dated 29 September 2026

<i>Note:</i>	
Underlined, strike through and highlighted text	Amendments proposed by the applicant as set out in Ms Singh's Statement of Evidence in Chief (dated 29 September 2026).
Underlined, strike through and highlighted text	Amendments proposed by the applicant (dated 9 October 2026).
• Numbering to be updated later	

**1. Discharge consent for wastewater to Whangaehu River,
~~condensate wastewater~~**

The following details the location, classifications and conditions associated with the activity.

Authorisation Number	ATH-2010011593.03
Activity Type	Discharge to Water
Activity Class	Discretionary Activity
Activity Primary Industry	Manufacturing, Processing or Production
Activity Primary Purpose	Waste Management Wastewater, Condensate or Leachate Management
Replaces Authorisation	ATH-2010011593.01

Location

The following summarises the authorised location for the consented activity.

Activity Location Description	STATE HIGHWAY 49 WAIOURU
Valuation Number	12700/052.00
Legal Description	LOTS 1 2 DP 70426 LOT 1 DP 70973 LOTS 1-3 5 DP 70969 SEC 1-6 SO 569642 LESS SUB LICENCE RT 460073 on SEC 4 SO 569642 - 4.92HA - ASSESSED AT 1270 / 05220
Map References	LOC-0000073830 (Centroid: BJ34:223-287)

Classifications

The following summarises the classifications associated with the application activity.

Groundwater Management Area	Whangaehu
Water Management Area	Whangaehu Catchment, Upper Whangaehu, Upper Whangaehu (Whau_1a)
Associated River	WHANGAEHU RIVER (331000)

DRAFT

Activity Specific Conditions for condition framework

Definitions – Applying to both authorisations:

Abnormal operating conditions: operating conditions outside the normal design parameters of the torrefaction process or Torr Gas burner that could materially alter condensate wastewater quality, including failure to achieve the minimum temperature or residence time required by **Condition 14**.

CMR: Commissioning Monitoring Report.

CTMP: Chemical Treatment Management Plan.

Commencement of the discharge: the date on which condensate wastewater is first discharged to the Whangaehu River under this consent following commissioning of the torrefaction plant and constructed wetland.

Construction Quality Assurance (CQA) documents means the Construction Quality Assurance Plan, associated inspection and testing records, certifications, as-built information, and the final Construction Quality Assurance Report required by these conditions.

Constructed stone wetland: the engineered wetland system authorised by the consents through which the condensate wastewater passes prior to discharge to the Whangaehu River.

ESCP: Erosion and Sediment Control Plan.

GWRC: Greater Wellington Regional Council, *Erosion and Sediment Control Guide for Land Disturbing Activities in the Wellington Region*, February 2021.

HDPE: High-density polyethylene.

Leak monitoring system: the system incorporated into the final wetland design to identify seepage or leakage from the constructed wetland beneath the HDPE liner.

Placeholder condition: A condition identified as a Placeholder condition represents the present condition framework based on the information available at the time of preparing this section 42A report. The wording and/or requirements of these conditions may be updated following consideration of the Applicant's section 41B evidence, evidence presented at the hearing and matters canvassed through the hearing process.

RAP: Remedial Action Plan.

SQEP: Suitably qualified and experienced person.

Virgin forestry material: For the purposes of this consent, virgin forestry material means wood or woody biomass that has not previously been used and has not been chemically treated, painted or coated, and excludes demolition or recycled timber.

Commented [SS1]: Item 1 above specifies that this is "condensate" wastewater. For consistency of use throughout the conditions, all references to "condensate" or "condensate wastewater" changed to "wastewater" generally.

Commented [SS2]: Under condition 26, this report is due at the same time as the first annual compliance report. It is not clear as to the purpose of this report, noting that these matters would largely be addressed in the annual report under condition 26/

Commented [SS3]: Clarify the specific type of wetland proposed.

Commented [SS4]: Not necessary anymore, as the revised Stone Wetland location avoids the potential for any wetland leakage over historic contamination.

Descriptive Specification

1. This consent authorises the discharge of condensate wastewater via the constructed wetland to the Whangaehu River located at the boundary of property legally described as LOTS 1 2 DP 70426 LOT 1 DP 70973 LOTS 1-3 5 DP 70969 SEC 1-6 SO 569642 LESS SUB LICENCE RT 460073 on SEC 4 SO 569642 - 4.92HA - ASSESSED AT 1270 / 05220 (the property) at approximate map reference NZTopo50 BJ34:223-287 which is shown in Site Plan LOC-0000073830 attached to and forming part of this resource consent.
2. The Consent Holder must undertake the activity in general accordance with the consent application including all accompanying plans and documents first lodged with the Manawatū-Whanganui Regional Council on **9 July 2026** including:
 - a. Document 4: Planning Report – Karioi Wood Processing for Winstone Pulp International Limited.” Prepared by Babbage Consultants Limited;
 - b. Document 5: Technical Memo 1 – Torrefaction Technical Memo. Prepared by Babbage Consultants Limited;
 - c. Document 6: Technical Memo 2 – Water Quality Assessment Memo. Prepared by Babbage Consultants Limited; and
 - d. Document 14: Response to the Section 92 Response – APP-2006012018.02, prepared by Babbage Consultants Limited and dated 11 June 2026, including the Torrefaction Process Diagram included as Attachment 1.Where there may be inconsistencies between information provided by the Applicant and conditions of the resource consent, the conditions of the resource consent will apply.

ADVICE NOTE: Any variance from the location, design concepts and parameters, implementation and / or operation may require a new resource consent or a change of consent conditions pursuant to section 127 of the Resource Management Act 1991.

Pre-Development Assurance

3. **Place holder condition.** The Consent Holder must advise the Manawatū-Whanganui Regional Council in writing at least **ten (10) working days** before the first discharge authorised by this consent commences.
4. The discharge authorised by this consent must not commence until the constructed wetland has been completed and commissioned in accordance with the relevant requirements of Land Use Consent **ATH-2026209463.00**, including provision of the required Construction Quality Assurance documentation.

Commented [SS5]: The wetland can't be "commissioned" without the discharge, hence, deleted.

5. Prior to the commencement of the discharge, the Consent Holder must have a flow meter installed by an accredited installer capable of continuously measuring the total condensate wastewater discharge volume and flow rate. The flow meter must:

- a. ~~be located on the condensate wastewater discharge line; and~~
- b. have a pulse counter output traceably calibrated to +/- 5% or better; and
- c. be capable of providing the daily volume of condensate wastewater discharged as well as a pulse counter output; and
- d. be positioned on the wastewater discharge line prior to the discharge to the stone wetland to measure the entire daily volume discharged under the authorisation of this consent; and
- e. be installed in accordance with the Resource Management (Measurement and Reporting of Water Takes) Amendment Regulations 2020; and
- f. be installed in accordance with the IrrigationNZ "The New Zealand Water Measurement Code of Practice" September 2018.

ADVICE NOTE: An accredited installer refers to an individual with a current accreditation certificate for water measurement installation from Irrigation New Zealand (also referred to as IrrigationNZ) represented by the 'Blue Tick' logo. A list of accredited installers can be found at www.irrigationnz.co.nz. An accredited installer may also include a SQEP specializing in installation of flow meters, including certified electricians and instrument engineers.

6. Prior to the commencement of the discharge the Consent Holder must install and maintain, in fully operational condition, a telemetry unit compatible with the Manawatū-Whanganui Regional Council's Telemetry System. The telemetry unit must:

- a. be installed on the condensate discharge wastewater line; and
- b. be traceably calibrated to +/- 5% or better; and
- c. be set to New Zealand Standard Time.

ADVICE NOTE: The Manawatū-Whanganui Regional Council will monitor the logger to ensure compliance with the resource consent conditions.

7. The Consent Holder must ensure that the monitoring equipment detailed in **Conditions 5 and 6** in respect to the flow meter and telemetry equipment is located in a position where it can be read and safely accessed at all times.

Environmental Standard

8. The Consent Holder must ensure that only condensate wastewater associated with the processing of virgin forestry material is discharged under this consent.

Commented [SS6]: Included for clarity purposes.

Commented [SS7]: Condition 5(a) deleted and 5(d) updated to clarify that the flow meter will be installed on the wastewater line prior to the discharge into the wetland.

Commented [SS8]: This advice note is appears to be tailored for farm flow meters. The flow meter for this project will most likely be installed by a certified electrician or specialised instrument engineer (both of whom may not have a "blue tick"). Condition 5(e) and (f) ensure that the flow meter is installed as per the code of practice.

9. The Consent Holder must ensure that the volume of ~~condensate~~ wastewater entering the stone wetland ~~discharge to the Whangaehu River~~ must not exceed **750 m³/day** in any **24-hour period**.

ADVICE NOTE: The maximum volume limit of 750 m³/day in any 24-hour period does not include rainwater falling on the stone wetland.

10. The Consent Holder must ensure that after reasonable mixing, the discharge must not give rise to any of the following effects in the Whangaehu River:
- a. the production of conspicuous oil or grease films, scums or foams, or floatable or suspended materials;
 - b. any conspicuous change in the colour or visual clarity of the receiving water;
 - c. any emission of objectionable odour;
 - d. the rendering of the water unsuitable for consumption by farm animals; or
 - e. any significant adverse effects on aquatic life.

Operational Restrictions

11. The Consent Holder must ensure that all ~~condensate~~ wastewater authorised by this consent passes through the constructed stone wetland before the discharge into the Whangaehu River.
12. Within **three (3) months** of installation, the Consent Holder must have the flow meter (required by **Condition 5**) verified by an Irrigation New Zealand “Blue Tick” accredited verifier or a SQEP.

The flow meter shall be verified by an Irrigation New Zealand “Blue Tick” accredited verifier or a SQEP every five (5) years thereafter to ensure compliance with **Condition 5**. The Consent Holder shall provide evidence of the verification in writing to the Manawatū-Whanganui Regional Council’s Consents Monitoring Team within **one (1) month** of the verification being completed.

ADVICE NOTE: Written verification can be sent to the Consents Monitoring Team by email consents.monitoring@horizons.govt.nz –OR– mail addressed to C/- The Consents Monitoring Team, Horizons Regional Council, Private Bag 11025, Manawatū Mail Centre, Palmerston North 4442.

13. **Placeholder condition.** The constructed stone wetland must be operated and maintained so that the discharge pathway and hydraulic performance remain consistent with that described in the application, including the stated minimum residence time of not less than 4 hours ~~2-8 days~~.
14. **Placeholder condition.** The Consent Holder must ensure that the Torr Gas burner associated with generation of ~~wastewater condensate~~ be designed and operated so that the process gas achieves a residence time of at least **two seconds at a temperature of not less than 850°C** prior to condensation.

Commented [SS9]: Updated to align with refined stone wetland design parameters.

15. **Placeholder condition.** The Consent Holder must provide and maintain a means of preventing ~~wastewater condensate~~ generated during abnormal operating conditions from being discharged to the constructed ~~stone~~ wetland and/or the Whangaehu River where those abnormal conditions could ~~materially alter generate wastewater quality that results in non-compliance with Condition 21 condensate quality. The system must provide for detention, diversion or other appropriate management of that until operating conditions have returned to normal and the suitability of the condensate for discharge has been confirmed.~~

Commented [SS10]: The condensate is not created during start-up or shut down periods and can be ceased to be created during any periods of abnormal operations.

Monitoring Provision

16. The Consent Holder shall allow any Manawatū-Whanganui Regional Council staff member and its agents to attach monitoring or telemetry equipment to monitor volume and rate of the condensate wastewater discharge to ensure compliance with consent conditions and as part of the total catchment monitoring programme.
17. In the event that the equipment detailed in **Condition 5** in respect to the flow meter and/or **Condition 6** being the telemetry unit is removed for servicing or replacement, the Consent Holder shall notify the Manawatū-Whanganui Regional Council's Consents Monitoring Team within **one (1) working day**.
18. **Placeholder condition.** The Consent Holder must take representative samples of the ~~wastewater condensate~~ immediately prior to it entering the constructed ~~stone~~ wetland. For the first ~~six 12~~ months following commencement of the discharge, samples must be collected at least ~~fortnightly monthly~~. Following the initial ~~six 12-month period~~ ~~and the sampling results demonstrating compliance with Condition 21, the frequency of the samples must be collected must be reduced to at least one every 6 months monthly~~, unless the monitoring frequency is subsequently amended in accordance with **Condition 26**. All samples must be analysed for the following parameters:
- pH;
 - temperature (on-site measurement);
 - total suspended solids (TSS);
 - total ammoniacal nitrogen;
 - nitrite and nitrate nitrogen;
 - chloride;
 - sulphate;
 - mineral oil;
 - Total lead;
 - Total cadmium;
 - Total chromium;

Commented [SS11]: The applicant supports condition 18, however, amendments are included to provide for less frequent sampling collection regime where sampling results demonstrate over the previous year that compliance with condition 21 parameters are met. This reduces the time cost and financial cost of undertaking unnecessary sampling where compliance is being illustrated on a consistent basis.

- l. Total copper;
- m. Total mercury;
- n. Total nickel;
- o. Total zinc;
- p. polycyclic aromatic hydrocarbons (PAHs);
- q. carbonaceous biochemical oxygen demand over five days (cBOD₅);
- r. volatile organic compounds (VOCs);
- s. phenol; and
- t. furans.

19. **Placeholder condition.** All samples collected under **Conditions 18 and 20**, other than parameters required to be measured on site, must be analysed by an International Accreditation New Zealand (IANZ) accredited laboratory using accredited analytical methods, where available.

The Consent Holder must provide the analytical results to the Manawātū-Whanganui Regional Council within **ten (10) working days** of receiving the results from the laboratory.

The Consent Holder must take representative samples of the Whangaehu River water at least once per year. Samples shall be taken at a point approximately 100 m upstream of the discharge point and at the Tangiwai Memorial. Samples shall be analysed for the same parameters listed Condition 18. The Whangaehu River sampling shall be undertaken whilst the wastewater is being discharged in River, and is occurring and at a time of the year which corresponds to low flow river conditions.

Commented [SS12]: The applicant proposes this new condition, requiring sampling of the discharge at the Whangaehu River to ensure availability of robust data to illustrate compliance with the consent conditions.

20. **Placeholder condition.** Following an initial stabilisation period of **[period to be confirmed]** after full commissioning of the torrefaction plant and the constructed wetland, the Consent Holder must, for a period of 12 consecutive months, take representative samples of the final discharge leaving the constructed wetland. Samples must be collected at least monthly and, where practicable, on the same day as samples of the condensate entering the wetland are taken under **Condition 18**. Samples must be analysed for the same parameters specified in **Condition 18**.

Commented [SS13]: The function of the refined stone wetland design is to reduce wastewater temperature. The purpose/benefit of this proposed condition is not clear.

21. **Placeholder condition.** The Consent Holder must ensure that the quality of **wastewater condensate** immediately prior to entering the constructed **stone** wetland complies with the limits specified in Table 1.

Table 1: Wastewater load limits

Commented [SS14]: Refer to Evidence of Mr Duder and Mr Cortinho setting out an explanation on using units of discharge limits instead of concentration water quality limits.

Parameter	Limit
Volume	750m ³ /day
pH	5.5 to 8.5
Temperature	50 °C
Suspended Solids	10 kg/day
Ammonium and ammonia as N	4 kg/day
Nitrite and nitrate as N	4 kg/day
Chloride	12 kg/day
Sulphate	21 kg/day
Mineral oil	1 kg/day

Commented [SS15]: This was modelled at 3.45kg/day. This has been rounded up to 4kg/day

Commented [SS16]: This was modelled at 2.625kg/day. This has been rounded up to 4kg/day to provide a slight buffer.

Commented [SS17]: Was 0.8kg, rounded up to 1kg/day

Table 1A: Wastewater load trigger levels for investigation

Parameter	Trigger level
Total lead	0.0360 kg/day
Total cadmium	0.0040 kg/day
Total chromium	0.0400 kg/day
Total copper	0.0300 kg/day

Total mercury	0.0001 kg/day
Total nickel	0.0050 kg/day
Total zinc	0.9450 kg/day
cBOD ₅	1 kg/day
PAHs	<0.0001 kg/day
VOC	<0.0001 kg/day
Phenol Index	<0.02 kg/day

For parameters expressed as a concentration:

- a. the average concentration measured over any six month period where fortnightly sampling applies, or any 12 month period where monthly sampling applies, must not exceed the Average Concentration Limit specified in Table 1; and
- b. no individual sample must exceed the Maximum Individual Sample Limit specified in Table 1

Table 1: Condensate wastewater quality limits *

Parameter	Average concentration limit	Maximum individual sample
pH		Limit to be confirmed
Temperature		48°C**
Total suspended solids	3.4 mg/L	10.2 mg/L***
Total ammoniacal nitrogen	4.6 mg/L	13.8 mg/L
Nitrite and nitrate nitrogen	3.5 mg/L	10.5 mg/L
Chloride	15.3 mg/L	45.9 mg/L
Sulphate	27 mg/L	81 mg/L
Mineral oil	<1 mg/L	
Total lead	0.016 mg/L	0.048 mg/L
Total cadmium	0.0018 mg/L	0.0054 mg/L

Total chromium	0.0177 mg/L	0.0531 mg/L
Total copper	0.0137 mg/L	0.0411 mg/L
Total mercury	0.00006 mg/L	0.00018 mg/L
Total nickel	0.0021 mg/L	0.0063 mg/L
Total zinc	0.42 mg/L	1.26 mg/L
PAHs, sum of detected compounds	<0.00001 mg/L	To be confirmed
eBOD ₅	<2 mg/L	To be confirmed
Volatile organic compounds (VOCs)	<screening level laboratory detection limit	To be confirmed
Phenol	<screening level laboratory detection limit	To be confirmed
Furans	<screening level laboratory detection limit	To be confirmed

* Technical Memo 2, Water Quality Assessment

** Assessed condensate temperature before passage through the wetland.

*** Three times average concentration limit.

ADVICE NOTE: For parameters where Table 1 specifies a laboratory detection limit, the Consent Holder must ensure that the parameter is not detected above the specified analytical detection limit, unless otherwise confirmed through the section 41B evidence and hearing process.

22. **Placeholder condition:** Any exceedance of **wastewater load limits specified in Table 1** or **Average Concentration Limit** or **Maximum Individual Sample Limit** specified in Table 1 constitutes non-compliance with Condition 21 and must be managed in accordance with **Conditions 23 and 24**.

Where there are any exceedance of wastewater load trigger levels specified in Table 1A, the Consent Holder must undertake investigations by a suitably qualified and experienced person to assess whether the discharge resulted in greater effects than those assessed in the application. Should the assessment conclude that the discharge resulted in greater effects than those assessed in the application, it constitutes non-compliance with Condition 21 and must be managed in accordance with Conditions 23 and 24.

23. **Placeholder condition.** Where monitoring identifies a non-compliance under **Condition 22**, the Consent Holder must:
- notify the Manawatū-Whanganui Regional Council and Ngā Waihua o Paerangi Trust as soon as practicable and no later than **48 hours** after discovering the non-compliance;
 - investigate the cause of the non-compliance and undertake any immediate actions necessary to manage the discharge;

- c. within **ten (10) working days** of discovering the non-compliance, provide the Manawatū-Whanganui Regional Council with a written interim report setting out:
 - i. the investigation undertaken to date;
 - ii. the identified or likely cause of the non-compliance;
 - iii. any immediate corrective actions undertaken; and
 - iv. any further investigation or specialist assessment required under **Condition 24** below to prevent the non-compliance occurring again.

24. Where further investigation or specialist assessment is required under **Condition 22(b) or 23**, the Consent Holder must provide a final report prepared by a suitably qualified and experienced person within a **twenty (20) working days** of providing the interim report required by **Condition 23.c**.

The final report must:

- a. identify the cause of the non-compliance, where practicable;
- b. compare the monitoring results with the discharge **load limits** **quality values** specified in **Table 1** and **discharge load trigger levels specified in Table 1A** of **Condition 21**, including consideration of the actual discharge volume and contaminant loads;
- c. assess whether the discharge could result in greater effects than those assessed in the application; and
- d. identify any further corrective action required to prevent the non-compliance occurring again.

~~**ADVICE NOTE:** Corrective action may include changes to process operation, improvements in discharge quality, reduction in discharge volume, detention or diversion of condensate, or temporary cessation of the discharge where necessary.~~

Commented [SS18]: Not necessary, as appropriate corrective action will be determined in line with condition 24(d)

Post-Development Assurance

25. ~~**Placeholder condition.** Within **twenty (20) working days** following completion of the 12-month monitoring period required by **Condition 20**, the Consent Holder must provide the Manawatū-Whanganui Regional Council with a Commissioning Monitoring Report (CMR) prepared by a suitably qualified and experienced person (SQEP).~~

~~The report must:~~

- ~~a. summarise discharge volume and rate monitoring;~~
- ~~b. summarise the results of condensate and discharge quality monitoring;~~

Commented [SS19]: Addressed under condition 27. No clear purpose for condition 25.

- e. ~~assess compliance with the condensate wastewater quality limits in Table 1 of **Condition 21**;~~
- d. ~~identify any non-compliance with **Condition 21** and any corrective action undertaken~~
- e. ~~assess whether passage through the constructed wetland has materially changed discharge quality;~~
- f. ~~recommend the ongoing monitoring parameters and frequency appropriate for ongoing compliance monitoring.~~

26. ~~**Placeholder condition.** Following consideration of the Commissioning Monitoring Report, the monitoring frequency and/or parameter suite may be reduced where the Manawatu Whanganui Regional Council certifies in writing that the monitoring demonstrates sustained compliance with the conditions of this consent, including the limits in **Condition 21**, and that the reduced monitoring regime is consistent with the recommendations of the CMR.~~

Commented [SS20]: Same as above.

27. **Placeholder condition.** The Consent Holder must provide an annual compliance report to the Manawatu-Whanganui Regional Council within **twenty (20) working days** following each anniversary of commencement of the discharge.

The report must summarise, for the preceding 12-month period:

- a. the total volume and rate of condensate wastewater discharged;
- b. the results of monitoring required by this consent;
- c. any non-compliance identified under **Conditions 21 and 22**;
- d. any investigations, corrective actions or changes to process operation undertaken in response to monitoring results;
- e. any changes to the monitoring frequency or parameter suite certified by the Manawatu-Whanganui Regional Council ~~under **Condition 26**.~~

Review

28. The Regional Council may, during the three months following each anniversary of commencement of this consent, serve notice under section 128(1)(a) of the Resource Management Act 1991 of its intention to review the conditions of this consent for the purposes of:

- a. addressing any adverse effect arising from the exercise of the consent that was not anticipated at the time the consent was granted;
- b. responding to monitoring that demonstrates the volume or composition of the discharge differs materially from that assessed in the application;
- c. reviewing the adequacy of discharge quality, volume and process monitoring requirements;
- d. requiring changes to monitoring frequency, parameters or reporting; and

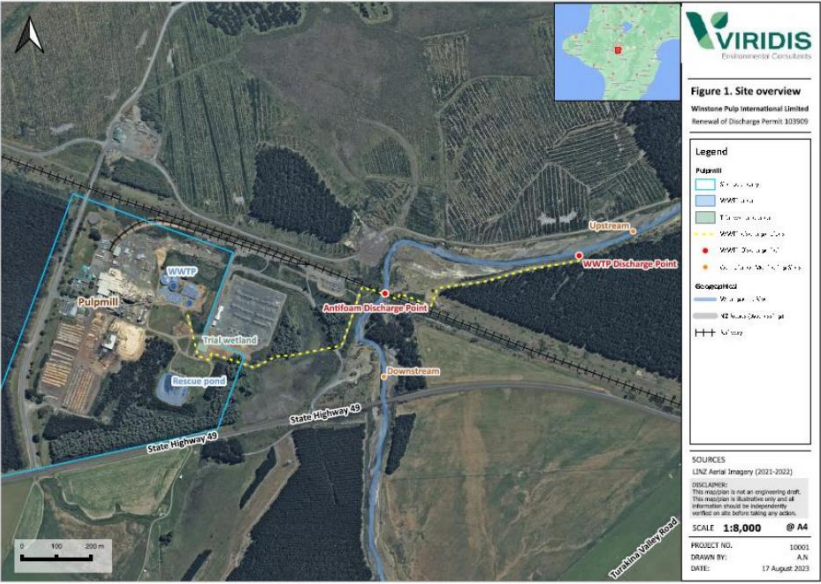
- e. requiring changes to discharge management where necessary to ensure the nature and magnitude of effects remain consistent with those assessed when the consent was granted.

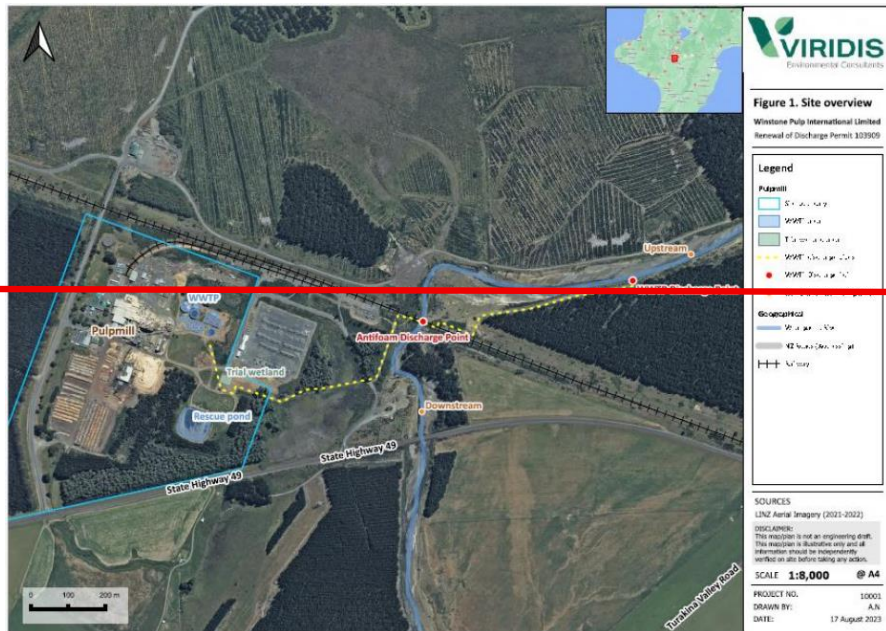
Lapsing

29. **Placeholder condition.** Pursuant to section 125 of the Resource Management Act 1991, this consent lapses ten five years from the date of the grant of this consent, after commencement unless it has been given effect to before that date.

Duration

30. **Placeholder condition.** This consent expires 20 years after the date of the first wastewater discharge authorised by this consent, and on 1 July 2039.





2. Land use consent, Land disturbance – wetland construction

The following details the location, classifications and conditions associated with the activity.

Authorisation Number	ATH-2026209463.00
Activity Type	Land Use, Land
Activity Class	Controlled
Activity Primary Industry	Commercial or Retail Trade
Activity Primary Purpose	Construction Water Abstraction or Control Structure

Location

The following summarises the authorised location for the consented activity.

Activity Location Description	STATE HIGHWAY 49 WAIOURU
Valuation Number	12700/056.00
Legal Description	SEC 3 BLK XI KARIOI SD
Map References	LOC-2026101715 (Centroid: BJ34:212-284)

Classifications

The following summarises the classifications associated with the application activity.

Groundwater Management Zone	Whangaehu
Water Management Zone	Whangaehu Catchment, Upper Whangaehu, Upper Whangaehu (Whau_1a)
Associated River	WHANGAEHU RIVER (331000)

Activity Specific Conditions

Descriptive Specification

1. This consent authorises land disturbance, together with any ancillary diversion of water and discharge of sediment arising from the land disturbance, for the purpose of constructing a wetland at the property legally described as SEC 3 BLK XI KARIOI SD (the property) at approximate map reference NZTopo50 BJ34:212-284 which is shown in Site Plan LOC-2026101715 attached to and forming part of this resource consent.

ADVICE NOTE: This consent does not authorise the discharge of contaminated soil, contaminated water, or contaminants associated with disturbed material to land or water, other than the discharge of sediment authorised by this consent. Any such discharge must either comply with the relevant permitted activity provisions of the One Plan or be separately authorised by resource consent before it occurs. In particular, the discharge of contaminated dewatering water may require resource consent under **Rule LF-LW-R38**.

2. The Consent Holder must undertake the activity in general accordance with the consent application including all accompanying plans and documents first lodged with the Manawatū-Whanganui Regional Council on **9 July 2026** including:
 - a. Document 4: Resource Consent Application APP-2006012018.02 Planning Report – Karioi Wood Processing, prepared by Babbage Consultants Limited and dated 30 April 2026, incorporated into APP-2006012018.03;
 - b. Babbage Consultants Limited 1002 State Highway 49, Tangiwai, Ohakune Wetland Construction – Erosion and Sediment Control Plan Rev 2.” Prepared by Cheal Consultants Limited and dated 10 June 2026; and
 - c. Karioi Wood Processing Remedial Action Plan Rev 2”, prepared by Babbage Consultants Limited and dated 10 June 2026 (RAP).

Where there may be inconsistencies between information provided by the Applicant and conditions of the resource consent, the conditions of the resource consent will apply.

ADVICE NOTE: Any variance from the location, design concepts and parameters, implementation and / or operation may require a new resource consent or a change of consent conditions pursuant to section 127 of the Resource Management Act 1991.

Pre-Development Assurance

3. The Consent Holder must be responsible for all contracted operations related to the exercise of this resource consent and must ensure contractors are made aware of the conditions of this resource consent and ensure compliance with those conditions.

4. A copy of this consent must be kept onsite at all times that physical works authorised by this resource consent are being undertaken and must be produced without unreasonable delay upon request from a Manawatū-Whanganui Regional Council officer.

ADVICE NOTE: Having a digital copy of this consent available onsite considered acceptable for complying with **Condition 4**.

5. Prior to activities commencing as authorised by this resource consent, the Consent Holder must appoint a representative(s) who must be the Manawatū-Whanganui Regional Council's principal contact person(s) in regard to matters relating to this resource consent. The Consent Holder must inform the Manawatū-Whanganui Regional Council of the representative's name and how they can be contacted, prior to this resource consent being exercised. Should that person(s) change during the term of this resource consent, the Consent Holder must immediately inform the Manawatū-Whanganui Regional Council and must also give written notice to the Manawatū-Whanganui Regional Council of the new representative's name and how they can be contacted.
6. The Consent Holder must inform the Manawatū-Whanganui Regional Council's Consents Monitoring Team of the intended start date of the works authorised by this resource consent no less than **ten (10) working days** prior to commencement. The Consent Holder must confirm the actual date on which physical works commence in writing within twenty-four (24) hours of commencement and must notify the Consents Monitoring Team within twenty-four (24) hours of completion of the works.

ADVICE NOTE: The Consents Monitoring Team can be contacted on Freephone 0508 800 800 OR consents.monitoring@horizons.govt.nz.

7. The Consent Holder must arrange and conduct a pre-construction site meeting and invite, with a minimum of **5 working days'** notice, the Manawatū-Whanganui Regional Council, the site representative(s) nominated under **Condition 5** of this consent, the contractor, and any other party representing the Consent Holder within **10 working days** of granting of this consent.

The following information must be made available at the pre-start meeting:

- a. Timeframes for key stages of the works authorised under this consent;
 - b. Resource consent conditions;
 - c. Finalised Remedial Action Plan; and
 - d. Finalised Erosion and Sediment Control Plan.
8. A pre-construction meeting must be held prior to the commencement of earthworks in each earthworks season between 1 October and 30 April during which works authorised by this resource consent are to be undertaken.

ADVICE NOTE: In the case that any of the invited parties, other than the site representative does not attend this meeting, the Consent Holder will have complied with this condition, provided the invitation requirement is met.

Remedial Action Plan

9. At least **ten (10) working days** prior to the commencement of bulk earthworks authorised by this resource consent, the Consent Holder must submit a Finalised Remedial Action Plan (RAP), prepared by a suitably qualified and experienced contaminated land practitioner, to the Manawatū-Whanganui Regional Council for technical certification.
10. The Finalised RAP must be based on the Karioi Wood Processing Remedial Action Plan Rev 2, prepared by Babbage Consultants Limited and dated 10 June 2026, and must incorporate any additional contaminated land management measures identified through detailed design, supplementary site investigations, construction planning, or consent requirements, and amendments necessary to reflect the final wetland design, Construction Quality Assurance Plan, Finalised ESCP and the conditions of this resource consent. The Finalised RAP must also:
 - a. set out the procedures for excavation, handling, reuse, containment and lawful disposal of potentially contaminated soil and anthropogenic material;
 - b. identify any potential pathways for the discharge of contaminants arising from the works and the measures that will be implemented to avoid or manage those pathways;
 - c. demonstrate how the works will be undertaken so that contaminated soil, contaminated water or contaminated soil-laden water is not discharged to land or water unless that discharge is otherwise lawfully authorised; and
 - d. identify any activities associated with implementation of the RAP that may require separate resource consent or other authorisation.

ADVICE NOTE: Technical certification of the Finalised RAP does not constitute approval of any activity that requires separate resource consent. The Consent Holder remains responsible for determining whether any additional resource consent is required and for obtaining that consent before undertaking the relevant activity.

Erosion and Sediment Control Plan

11. At least **ten (10) working days** prior to the commencement of construction activities authorised by this resource consent, the Consent Holder must submit a Finalised ESCP prepared by a Suitably Qualified and Experienced Person (SQEP) in erosion and sediment control to the Manawatū-Whanganui Regional Council for technical certification.

12. The Finalised ESCP must be prepared in accordance with Greater Wellington Regional Council's Erosion and Sediment Control Guide for Land Disturbing Activities in the Wellington Region (February 2021) (GWRC Guidelines) document.

The Finalised ESCP must include the following information:

- a. Details of all principles, procedures and practices that will be implemented to achieve compliance with relevant conditions of this resource consent;
- b. Identification of key personnel, including their roles, responsibilities, training and contact details;
- c. The overarching erosion and sediment control design standards and principles with reference to GWRC Guidelines;
- d. A general description of the stages of, and sequencing of works;
- e. The approach to establishing, modifying and/or decommissioning erosion and sediment control measures;
- f. Application and/or cross-referencing of other Management Plans where appropriate;
- g. A programme of any progressive site rehabilitation and/or re-vegetation proposed;
- h. Hourly and 24-hour rainfall trigger events proposed for monitoring frequency and evaluation of device performance;
- i. Rainfall response and contingency measures including procedures to minimise adverse effects in the event of extreme rainfall exceeding the applied rainfall trigger event and/or the failure of any key erosion and sediment control structures;
- j. Procedures for and timing of reviews and/or amendments to the certified Finalised ESCP; and
- k. Details on the frequency of inspections and monitoring of all stormwater and erosion and sediment control measures throughout the construction works including details of the person(s) responsible for inspections and monitoring.

13. Construction activities authorised under this resource consent may not commence until the ESCP and RAP have been certified in writing by the Manawatū-Whanganui Regional Council. Within 20 days of receiving the ESCP and RAP, the Manawatū-Whanganui Regional Council shall either

(a) certify the ESCP and RAP; or

(b) advise the consent holder in writing which aspects of the ESCP and/or the RAP do not comply with the requirements of conditions 10 and 12.

ADVICE NOTE: The ESCP and RAP should be provided to Council on email compliance.shared@horizons.govt.nz.

Commented [SS21]: The amendments below seek to ensure that there are no delays in the certification process, so it does not affect the construction timelines.

14. Any changes proposed to the certified Finalised ESCP must be confirmed in writing by the Consent Holder and certified in writing by the Manawātū-Whanganui Regional Council acting in a technical certification capacity, prior to the implementation of any changes proposed.
15. The Consent Holder must ensure that a copy of the certified ESCP, including any certified amendments, is kept onsite and this copy is updated within **5 working days** of any amendments being certified.
16. Prior to bulk earthworks commencing for each stage, a certificate signed by a suitably qualified and experienced person must be submitted to the Manawātū-Whanganui Regional Council, to certify that the erosion and sediment controls have been constructed in accordance with the erosion and sediment control plan.

~~Certified controls must include the dirty water diversions and clean water diversions. The certification of the constructed erosion and sediment control measures for these subsequent measures must be supplied immediately upon completion to Manawātū-Whanganui Regional Council of construction of those measures.~~ Information supplied if applicable, must include:

- a. Contributing catchment area;
- b. Shape and volume of the structure (dimensions of structure); and
- c. Stabilisation of the structure.

ADVICE NOTE: The format for certification is available on the Manawātū-Whanganui Regional Council website.

Flocculation

17. Should flocculation be proposed in the Finalised ESCP, prior to the commencement of activities authorised by this consent a Chemical Treatment Management Plan (CTMP) must be prepared by an appropriately qualified and experienced person and submitted to the Manawatu-Whanganui Regional Council for technical certification. No flocculation of sediment laden water may commence until written certification is provided by Council that the CTMP meets the requirements of GWRC Guidelines, and the measures referred to in that plan have been put in place.
18. The CTMP must include as a minimum:
 - a. Specific design details of a chemical treatment system based on a rainfall or flow activated methodology for any impoundment and treatment devices;
 - b. Monitoring, maintenance (including post storm) and contingency programme (including a record sheet);
 - c. Details of optimum dosage (including assumptions);
 - d. Results of initial chemical treatment trial;

Commented [SS22]: The ESCP does not include dirty water diversions and clean water diversions, it is planned to be a perimeter bund. The wording has been amended to provide flexibility in case the methodology changes as part of the final bulk earthworks.

- e. A spill contingency plan; and
 - f. Details of the person or bodies that will hold responsibility for long term operation and maintenance of the chemical treatment system and the organisational structure which will support this system.
19. Where a CTMP has been certified under **Condition 17**, any discharge to which the CTMP applies must be chemically treated throughout the duration of earthworks in accordance with the certified CTMP.
20. Any changes proposed to the CTMP must be confirmed in writing by the Consent Holder and certified in writing by the Manawatū-Whanganui Regional Council acting in a technical certification capacity, prior to the implementation of any changes proposed.

Contaminated Land and Remedial Action Plan

21. At least **ten (10) working days** prior to any earthworks commencing, the Consent Holder must submit the final detailed wetland design and a Construction Quality Assurance Plan, prepared by suitably qualified and experienced persons, to the Manawatū-Whanganui Regional Council for technical certification. The final design and Construction Quality Assurance Plan must demonstrate how the engineered containment approach in the RAP will be achieved and must include, as a minimum:
- a. the final wetland footprint, cell layout, design levels and cut and fill arrangement, together with the specification and installation requirements for the high-density polyethylene (HDPE) liner, including subgrade preparation, seams, penetrations and anchoring;
 - b. quality assurance and quality control procedures, including inspection and testing sufficient to verify liner integrity prior to commissioning;
 - c. ~~a leak monitoring system and the means by which leakage from the wetland to underlying soils will be identified. The leak monitoring system shall be capable of demonstrating whether seepage beneath the HDPE liner has occurred and shall include trigger levels, investigation criteria and response actions; and~~
 - d. how the final wetland design, the RAP and the Finalised ESCP will operate together.
22. The Consent Holder must ensure that the RAP is reviewed by a suitably qualified and experienced contaminated land practitioner:
- a. prior to the commencement of bulk earthworks;
 - b. prior to the commencement of each subsequent stage of bulk earthworks; and
 - c. following any change to the proposed construction methodology or the discovery of unexpected contamination.

Commented [SS23]: A leak detection system is not warranted based on the refined location of the wetland, and commensurate level of risk identified.

23. Where a review identifies that changes to the certified Finalised RAP are required, those amendments must be submitted to the Manawātū-Whanganui Regional Council for technical certification before the relevant stage of works or changed methodology is implemented, except for immediate measures required to secure the affected area and prevent contaminant migration.

Environmental Standard

24. Unless site specific analysis provides evidence to the contrary, as detailed in the CTMP, the Consent Holder must ensure that the soluble aluminium concentration of any discharge to the receiving environment must not exceed 0.2 grams per cubic metre.
25. Unless site specific analysis provides evidence to the contrary, as detailed in the CTMP, the Consent Holder must ensure that the pH of any discharge to the receiving environment must not be less than 5.5 or greater than 8.5 pH units.

Operational Restrictions

26. There must be no discharge of airborne particulate matter that causes an adverse effect beyond the boundary of the site.

ADVICE NOTE: For the purpose of this consent, a Consents Monitoring Officer may assess the Frequency, Intensity, Duration, Offensiveness/Character and Location of Exposure (FIDOL) of any discharge to air to determine whether the discharge is Offensive, Objectionable, Noxious and/ or Dangerous; definitions of these are provided in the Air Chapter of the One Plan 2026, or any superseding Regional Plan.

27. Should airborne particulate matter resulting from the exercise of this consent generate a complaint, the Consent Holder must provide a written report to the Manawātū-Whanganui Regional Council within five (5) working days of the complaint being made known to the Consent Holder. The report must specify:
- The cause or likely cause of the event and any factors that influenced its severity;
 - The nature and timing of any measures implemented by the Consent Holder to avoid, remedy or mitigate any adverse effects;
 - The steps to be taken in future to prevent recurrence of similar events; and
 - If required by the Manawātū-Whanganui Regional Council, the Consent Holder must carry out immediate sealing of any problematic dust generating surfaces within the site using hydro-seed/hydro-mulch, polymer soil stabilisers or a similar dust control product to provide instant remediation of dust effects to the satisfaction of the Manawātū-Whanganui Regional Council.

28. The Consent Holder must ensure that an adequate supply of water for dust control and an effective means for applying that quantity of water is available at all times during construction, and until such time as the site is fully stabilised unless otherwise agreed in writing with the Manawatū-Whanganui Regional Council.

Winter works

29. The Consent Holder must ensure that the site is appropriately stabilised by **30 April** of each year unless otherwise certified in writing by the Manawatū-Whanganui Regional Council. Stabilisation must be undertaken by providing adequate measures (vegetative and/or structural and including, pavement, metalling, hydro-seeding, re-vegetation and mulching) that will minimise erosion of exposed soil to the extent practical.
30. Earthworks must not be conducted during the period **1 May to 30 September** inclusive during any year that this resource consent is current, apart from necessary maintenance works, unless certified in writing by the Manawatū-Whanganui Regional Council.
31. Requests to undertake earthworks during the period **1 May to 30 September inclusive**, for any year that this resource consent is current, must be submitted in writing to the Manawatū-Whanganui Regional Council by **1 April** and must be in the form of amendments to the finalised ESCP.
32. In considering a request for the continuation of winter earthworks, the Manawatū-Whanganui Regional Council will consider a number of factors including:
- a. The nature of the site and the winter soil disturbance works proposed;
 - b. The quality of the existing/proposed erosion and sediment controls;
 - c. The compliance history of the site/operator;
 - d. Seasonal/local soil and weather conditions;
 - e. Sensitivity of the receiving environment; and
 - f. Any other relevant factor.
33. Sediment losses to natural water arising from activities authorised by this resource consent must be minimised for the duration of the physical works authorised by this resource consent and until the expiry of the resource consent through the establishment, operation and maintenance of erosion and sediment control measures in accordance with GWRC Guidelines except where a higher standard is referred to in the Finalised ESCP, in which case the higher standard applies.
34. The Consent Holder must ensure that, as far as practicable, all clean water runoff from stabilised surfaces including catchment areas above works areas is diverted away from exposed areas via a stabilised system to prevent erosion, including erosion at any associated outfall(s).

35. The Consent Holder must, ten **(10) working days** prior to commencement of any dewatering on site, prepare and submit a Dewatering Management Plan to the Manawātū-Whanganui Regional Council. The Dewatering Management Plan must include but not be limited to the following information:

- a. Details of the anticipated location, timing, duration and volume or rate of any dewatering that will be necessary on-site during construction;
- b. Dewatering methodologies to be implemented;
- c. Any water quality criteria to be achieved as part of the dewatering activity. Consistent with Section G1.0 of the GWRC Guidelines;
- d. Alternatives to dewatering methodologies, including details of erosion and sediment controls, if dewatering activity cannot be implemented as envisaged;
- e. the anticipated quality of water to be dewatered, including the potential for contaminants associated with potentially contaminated soils within the wetland footprint; and
- f. the proposed treatment, reuse, discharge or disposal method for dewatered water, including how any contaminated water will be managed to prevent the mobilisation or discharge of contaminants.

ADVICE NOTE: This condition does not authorise any take, diversion or discharge of water that requires resource consent under the One Plan. If dewatering is required, the Consent Holder must determine whether the activity complies with the relevant permitted activity rules before dewatering commences and obtain any additional resource consent required.

36. The Consent Holder must ensure that site-sourced soil proposed for reuse within the wetland footprint must be screened visually during handling. Visible anthropogenic material, including concrete, rubber, wood, plastic and metal, must be separated from the soil, must not be placed as fill as part of the wetland construction, and must be removed to a facility lawfully authorised to receive it. Screening must also include observation for evidence of staining, odour, discolouration, free product, stressed vegetation, or other indicators of contamination.

37. An Unexpected Contamination Protocol must be implemented throughout the earthworks. If unexpected contamination is encountered, works in the affected area must stop and the material must be characterised by a suitably qualified and experienced contaminated land practitioner. That practitioner must determine whether the material is suitable for reuse beneath the wetland liner. Material that is not suitable for reuse must be removed to a facility lawfully authorised to receive it. The Consent Holder must notify the Manawatu-Whanganui Regional Council within 24 hours of discovery of unexpected contamination.

38. Following completion of profiling and cut and fill works, all site-sourced soil retained within the wetland footprint (underneath the wetland water flow path) must be encapsulated beneath the HDPE liner in accordance with the RAP and the certified final wetland design. Site-sourced soil

Commented [SS24]: This is to enable landscape planting outside the water flow path channel and ensure that the line is not damaged by the plant root systems.

from beneath the liner must not be used above the HDPE liner for wetland finishing or landscaping unless a suitably qualified and experienced contaminated land practitioner confirms in writing that the material is suitable for that use.

39. The HDPE liner and leak monitoring system must be installed in accordance with the certified final wetland design and Construction Quality Assurance Plan. Any damage, failed seam or other defect identified during installation or testing must be repaired and retested before the liner is covered or the affected wetland cell is commissioned.

Commented [SS25]: A leak detection system is not warranted based on the refined location of the wetland, and commensurate level of risk identified.

40. The Consent Holder must ensure that those areas of the site where earthworks have been completed must be stabilised against erosion as soon as practically possible and within a period not exceeding **five (5) days** after completion of any works authorised by this resource consent. Stabilisation must be undertaken by providing adequate measures (vegetative and/or structural) that will minimise sediment runoff and erosion to the satisfaction of the Manawatū-Whanganui Regional Council acting in a technical certification capacity. The Consent Holder must monitor and maintain the site until vegetation is established to such an extent that it prevents erosion and prevents sediment from entering any water body.

ADVICE NOTE: Stabilisation is defined within the GWRC Guidelines as “Means inherently resistant to erosion or rendered resistant to erosion through the application of the proven methods of stabilisation, specified in Section E3 of these guidelines, or alternative methods with the prior agreement of Wellington Regional Council. Where seeding, grassing or hydroseeding is used, the surface is considered stabilised once a minimum of 80% vegetative cover has been established over the entire surface.

41. The removal of any erosion and sediment control measure from any area where soil has been disturbed as a result of the exercise of this resource consent must only occur after consultation and written approval has been obtained from the Manawatū-Whanganui Regional Council acting in a technical certification capacity. In this respect, the main issues that will be considered by the Manawatū-Whanganui Regional Council include:

- a. The quality of the soil stabilisation and/or covering vegetation;
- b. The quality of the water discharged from the rehabilitated land; and
- c. The quality of the receiving water.

42. In the event that an archaeological site, wāhi tapu, taonga tūturu or kōiwi tangata is discovered or disturbed during the exercise of this resource consent, the Consent Holder must:

- a. immediately cease all works in the vicinity of the discovery and secure the affected area;
- b. immediately notify Ngā Waihua o Paerangi Trust on behalf of Ngāti Rangī, Heritage New Zealand Pouhere Taonga and the Manawatū-Whanganui Regional Council;

- c. where kōiwi tangata or other human remains are discovered, immediately notify the New Zealand Police; and
- d. not recommence works in the affected area until the appropriate statutory and tangata whenua processes have been completed and the Consent Holder has been advised that works may recommence.

ADVICE NOTE: In accordance with section 14(1) of the Coroners Act 2006, where human remains are discovered the New Zealand Police should be contacted immediately and works in the immediate vicinity must cease until advice is received that works may recommence.

Post-Development Assurance

43. Before the constructed wetland is commissioned, the Consent Holder must provide the Manawātū-Whanganui Regional Council with an as-built Construction Quality Assurance Report prepared by suitably qualified and experienced person(s). The report must include:

- a. as-built plans of the completed wetland;
- b. records and test results demonstrating that the HDPE liner has been installed and tested in accordance with the certified final wetland design and Construction Quality Assurance Plan;
- c. ~~confirmation that the leak monitoring system has been installed and commissioned;~~
- d. confirmation from a suitably qualified and experienced contaminated land practitioner that soil disturbance, reuse, capping and remediation works have been completed in accordance with the RAP;
- e. records of anthropogenic material and any soil unsuitable for reuse that was removed from the site, including the receiving facility;
- f. a photographic record of pond infilling, soil encapsulation and installation of the HDPE liner; and
- g. details of any departures from the certified final wetland design, Construction Quality Assurance Plan or RAP, and how those departures were addressed.

Commented [SS26]: A leak detection system is not warranted based on the refined location of the wetland, and commensurate level of risk identified.

44. Before the constructed wetland is commissioned, the Consent Holder must submit a Wetland Monitoring, Management and Aftercare Plan, prepared by suitably qualified and experienced persons, to the Manawātū-Whanganui Regional Council for technical certification. The plan must include:

- a. monitoring and response measures to verify that contaminants remain effectively contained and do not migrate beyond the constructed wetland footprint, and
- b. the methods and frequency of leak detection monitoring;
- c. groundwater monitoring where considered necessary by the SQEP;
- d. inspection and maintenance requirements for the HDPE liner and ~~leak monitoring system;~~ and

Commented [SS27]: A leak detection system is not warranted based on the refined location of the wetland, and commensurate level of risk identified.

- e. contingency and remedial measures to be implemented if leakage or saturation of underlying soils is identified, including measures to address the potential for anaerobic degradation of residual pulp and methane generation.

If the discharge operates for longer than the earthworks, then this condition should move to the discharge permit.

- 45. The Consent Holder must implement the certified Wetland Monitoring, Management and Aftercare Plan and maintain records of all monitoring, inspections, maintenance and remedial works undertaken in accordance with that plan. Those records must be provided to the Manawatū-Whanganui Regional Council on request.

DRAFT

Review

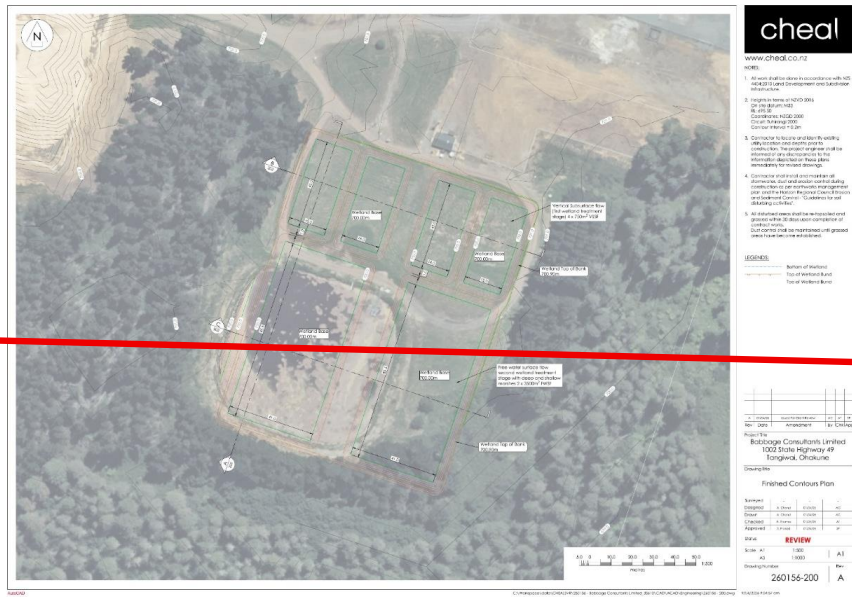
46. The Regional Council may, during the three months following each anniversary of the commencement of this consent, serve notice of its intention to review the conditions of this consent pursuant to section 128(1)(a) of the Resource Management Act 1991 for the purposes of:
- a. dealing with any adverse effect on the environment arising from exercise of the consent that was not anticipated when the consent was granted;
 - b. responding to monitoring that identifies leakage, loss of containment, mobilisation of contaminants or inadequacy of erosion and sediment controls;
 - c. reviewing the adequacy of the Final ESCP, Remedial Action Plan, Wetland Monitoring, Management and Aftercare Plan or associated monitoring requirements; and
 - d. requiring additional monitoring or remedial measures where reasonably necessary to ensure contaminated and potentially contaminated soils remain isolated from environmental receptors

Duration and Lapsing

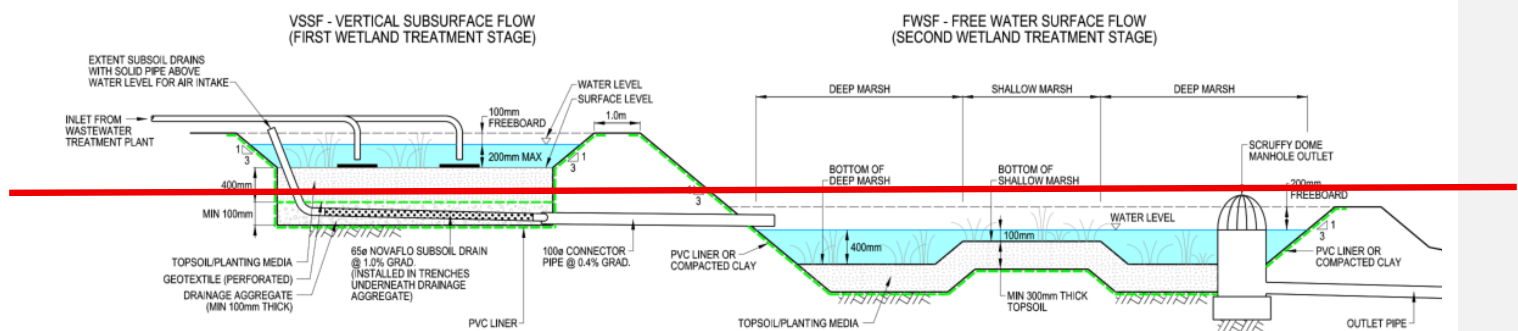
47. Pursuant to section 125 of the Resource Management Act 1991, this consent lapses five years after the date of commencement unless it is given effect to before that date, or the Regional Council grants an extension of the lapse period.
48. Once this consent has been given effect to, all earthworks authorised by the consent, together with associated stabilisation and establishment works, must be completed within five years of the date on which physical works first commence.

Site plan LOC-2026101715





Wetland Concept Design



ATTACHMENT 2 – SUBMISSION TABLE

ATTACHMENT 2: Submissions Response Table

Submission number, name and position	Summary of submission points
Submission 1 Ohakune Business Network Support	<p><u>Submission:</u></p> <p><u>Economic benefits</u></p> <ul style="list-style-type: none"> “it will not only support new employment and business opportunities...” “the employment opportunities will keep our youth in the area and also provide transport and business opportunities” <p><u>Water quality</u></p> <ul style="list-style-type: none"> “the treated water is of a better quality, with a PH of 7 neutral, than the actual water in the river” “It is not the treated water discharge that discolours the river water, but the overflow from the crater of Mt Ruapehu” <p><u>Response:</u></p> <p>Positive / Economic</p> <ul style="list-style-type: none"> The applicant agrees that the initiation of the Te Ara Hiko Project will “re-activate the Site, providing construction and on-going employment opportunities for the local community, all contributing to overall positive socio-economic outcomes.” – EIC Ms Singh (planning), para 8.6 “Without investment funding, the proposed Biocoal facility will not be established and therefore none of the positive benefits with respect to employment, support to the local economy or support for New Zealand’s move away from fossil coal use will be realised.” - EIC Mr Duder (corporate – Te Ara Hiko), para 8.5(a) <p><u>Water quality</u></p> <ul style="list-style-type: none"> “pH, metals, and suspended solids in the river are naturally outside recommended guideline limits due to the influence of the crater lake, and are not expected to significantly change due to the discharge, even in the assessed low flow conditions.” — EIC Mr Coutinho (water quality), para 4.6 “In my opinion, the proposed condensate discharge will result in less than minor adverse effects on the water quality of the Whangaehu River.” — EIC Mr Coutinho (water quality), para 4.8 “As with any new industrial process, the actual condensate quality will ultimately require verification once the facility becomes operational.” — EIC Mr Coutinho (water quality), para 6.8 “The source of the Whangaehu River is the outlet of Mt Ruapehu’s Crater Lake, which profoundly influences the river’s water quality.” — Dr Ausseil (water quality & ecology), s42A para 25 “Very acidic waters: median pH of 2.6 upstream of the discharge over the last 5 years” — Dr Ausseil (water quality & ecology), s42A para 25(a) “The effects of the proposed discharge on the water quality of the Whangaehu River will generally not be detectable and will be no more than minor overall” — Dr Ausseil (water quality & ecology), s42A para 46(a) “I also expect that the discharge will not cause exceedances of any RMA S107(1) water quality standards, specifically ... (d) (conspicuous change in water clarity or colour)” — Dr Ausseil (water quality & ecology), s42A para 46(d).

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Submission number, name and position	Summary of submission points
<p>Submission 2</p> <p>Taranaki Fish & Game Council</p> <p>Support</p>	<p><u>Submission</u></p> <p><u>Positive / Economic</u></p> <ul style="list-style-type: none"> • <i>“The proposal to create torrefied solid biofuel from radiata pine at the site is supported.”</i> <p><u>Water quality</u></p> <ul style="list-style-type: none"> • <i>“The project will result in a reduced volume of higher quality effluent to discharge to the Whangaeahu River and this is also supported.”</i> • <i>“the proposal to filter the generated effluent through a constructed wetland prior to discharge to the Whangaeahu is supported”</i> <p><u>Contaminated soils</u></p> <p><i>“our preference is for any contaminated soils at the proposed wetland site to be disposed of as either cleanfill or managed fill at a selected disposal facility, rather than left in situ.”</i></p> <p>Response:</p> <p><u>Positive / Economic</u></p> <ul style="list-style-type: none"> • The applicant agrees that the initiation of the Te Ara Hiko Project will <i>“re-activate the Site, providing construction and on-going employment opportunities for the local community, all contributing to overall positive socio-economic outcomes.”</i> - EIC Ms Singh (planning), para 8.6 • <i>“Without investment funding, the proposed Biocoal facility will not be established and therefore none of the positive benefits with respect to employment, support to the local economy or support for New Zealand’s move away from fossil coal use will be realised.”</i> - EIC Mr Duder (corporate – Te Ara Hiko), para 8.5(a) <p><u>Water quality</u></p> <ul style="list-style-type: none"> • Both Dr Ausseil and Mr Coutinho agree that the effects of the proposed discharge on the water quality of the Whangaeahu River will generally not be detectable and will be no more than minor overall” — Dr Ausseil (water quality & ecology), s42A para 46(a) • <i>“The proposed discharge has a maximum volume of 750 m³/day, representing a substantial reduction compared with the previously consented discharge regime for the Site (5,200m³/day).”</i> — EIC Mr Coutinho (water quality), para 1.2 • <i>“the assessment of discharge effects does not rely on contaminant reductions potentially achieved by the wetland and therefore represents a conservative assessment of potential effects.”</i> — EIC Mr Coutinho (water quality), para 5.5 <p><u>Contaminated soils</u></p> <ul style="list-style-type: none"> • <i>“As the material below the arsenic exceedance will be removed, this addresses Taranaki Fish & Game Council’s concerns regarding the wetland construction over contaminated land.”</i> — EIC Mr Garcia (contaminated soil), para 5.3 • <i>“The revised wetland design and new location avoids the former discharge pond where the zinc exceedance (WA18) was reported”</i> — EIC Mr Garcia (contaminated soil), para 5.2(a). • <i>“Subject to implementation of the RAP, appropriate liner installation and QA, and the inclusion of ongoing monitoring and aftercare measures, SLR considers the contaminated land risks associated with the proposal remain low and manageable.”</i> — Mr Blackwell, SLR (contaminated land), Submission Review memo s5.0

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Submission number, name and position	Summary of submission points
Submission 3 Grayson Assemblies Ltd Support	<p><i>Submission:</i></p> <p><u>Positive / Economic</u></p> <ul style="list-style-type: none"> • “WPI provides a huge positive economic and social impact on our community.” • “Our community needs a big industrial company like WPI to financially support other smaller companies within our area.”
	<p><i>Response:</i></p> <p><u>Positive / Economic</u></p> <ul style="list-style-type: none"> • The applicant agrees that the initiation of the Te Ara Hiko Project will “re-activate the Site, providing construction and on-going employment opportunities for the local community, all contributing to overall positive socio-economic outcomes.” - EIC Ms Singh (planning), para 8.6 • “Without investment funding, the proposed Biocoal facility will not be established and therefore none of the positive benefits with respect to employment, support to the local economy or support for New Zealand’s move away from fossil coal use will be realised.” - EIC Mr Duder (corporate – Te Ara Hiko), para 8.5(a)
Submission 4 Port of Napier Limited Support	<p><i>Submission:</i></p> <p><u>Positive / Economic</u></p> <p>“Having this consent in place, will enable prospective investors to seriously consider reinvesting in the Mill, creating employment, and generating well needed economic recovery for the region.”</p>
	<p><i>Response:</i></p> <p><u>Positive / Economic</u></p> <ul style="list-style-type: none"> • The applicant agrees that the initiation of the Te Ara Hiko Project will “re-activate the Site, providing construction and on-going employment opportunities for the local community, all contributing to overall positive socio-economic outcomes.” - EIC Ms Singh (planning), para 8.6 • “Without investment funding, the proposed Biocoal facility will not be established and therefore none of the positive benefits with respect to employment, support to the local economy or support for New Zealand’s move away from fossil coal use will be realised.” - EIC Mr Duder (corporate – Te Ara Hiko), para 8.5(a)

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Submission number, name and position	Summary of submission points
Submission 5 Federated Mountain Clubs of New Zealand Inc. <i>Neutral</i>	<p><i>Submission:</i></p> <p><u>Positive / Economic</u></p> <ul style="list-style-type: none"> • “granting this consent will also have positive societal impacts for the local region” <p><u>Water quality</u></p> <ul style="list-style-type: none"> • “the current application, impressively, has reduced discharge levels to less than 20% of the original application.” • “both applications did not seek to use anti-foaming agent, which has been a known source of eye irritation in paddlers using the river. The current application also commits to wetland treatment of the waste.” <p><u>Recreation / Amenity</u></p> <ul style="list-style-type: none"> • “a level and type of discharge that is likely to have a negligible impact on recreational activity, specifically, whitewater paddling.” • “It would be considered regionally significant in terms of recreational whitewater use.” <p>“paddlers are unlikely to be subject to increased health risks from the discharge.”</p> <p><i>Response:</i></p> <p><u>Positive / Economic</u></p> <ul style="list-style-type: none"> • The applicant agrees that the initiation of the Te Ara Hiko Project will “re-activate the Site, providing construction and on-going employment opportunities for the local community, all contributing to overall positive socio-economic outcomes.” - EIC Ms Singh (planning), para 8.6 • “Without investment funding, the proposed Biocoal facility will not be established and therefore none of the positive benefits with respect to employment, support to the local economy or support for New Zealand’s move away from fossil coal use will be realised.” - EIC Mr Duder (corporate – Te Ara Hiko), para 8.5(a) <p><u>Water quality and recreation amenity</u></p> <ul style="list-style-type: none"> • Dr Ausseil states that the discharge will not cause exceedances of any RMA S107(1) water quality standards, specifically S107(1)(c) (films scums or foam). - Dr Ausseil (water quality & ecology), s42A para 46(d) • Both Dr Ausseil and Mr Coutinho agree that the effects of the proposed discharge on the water quality of the Whangaeahu River will generally not be detectable and will be no more than minor overall. — Dr Ausseil (water quality & ecology), s42A para 46(a); EIC Mr Coutinho (water quality), para 4.8 • “With respect to contact recreation, including swimming and rafting, the assessment shows that E. coli concentrations are low and often below detection limits, indicating a low risk to human health.” — EIC Ms Singh (planning), para 12.2(c) • “The proposed discharge is not expected to materially alter water appearance, clarity, or conditions relevant to contact recreation. Any effects on recreation and amenity values are therefore assessed as no more than minor.” — EIC Ms Singh (planning), para 12.3

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Submission number, name and position	Summary of submission points
Submission 6 Carla Doolan-Blackburn <i>Support</i>	<p><i>Submission:</i></p> <p><u>Positive / Economic</u></p> <ul style="list-style-type: none"> • “WPI provided stable employment, supporting local Māori and non-Māori alike, and contributed significantly to the economic resilience of the region.” <p><u>Water quality</u></p> <ul style="list-style-type: none"> • “I have seen the results of monthly testing that started in April 2024 ... and I have concluded there is no scientific evidence that the water quality has improved since the mill's closure.” <p><u>Ecology</u></p> <ul style="list-style-type: none"> • “The awa today remains the same highly changeable colour, with mixed clarity, pungent sulphur smell and no signs of aquatic life living in it.” <p><u>Cultural effects</u></p> <ul style="list-style-type: none"> • “I understand and respect the cultural, spiritual, and historical significance of the Whangaehu awa to mana whenua and the wider community.” <p><u>Other</u></p> <p><i>“I strongly support ... a 20 year consent term for each activity and a 10 year lapse period.”</i></p> <p><i>Response:</i></p> <p><u>Positive / Economic</u></p> <ul style="list-style-type: none"> • The applicant agrees that the initiation of the Te Ara Hiko Project will “re-activate the Site, providing construction and on-going employment opportunities for the local community, all contributing to overall positive socio-economic outcomes.”- EIC Ms Singh (planning), para 8.6 • “Without investment funding, the proposed Biocoal facility will not be established and therefore none of the positive benefits with respect to employment, support to the local economy or support for New Zealand's move away from fossil coal use will be realised.”- EIC Mr Duder (corporate – Te Ara Hiko), para 8.5(a) <p><u>Water quality</u></p> <ul style="list-style-type: none"> • “the “historical” discharge from the pulp mill was very different (in terms of its quantity and quality) from the new, proposed discharge. Information about the historical discharge and its effects on the Whangaehu River (including river monitoring data downstream of the discharge point) is not directly relevant to the consent application under consideration” — Dr Ausseil (water quality & ecology), s42A para 36. <p><u>Ecology</u></p> <ul style="list-style-type: none"> • Ms Barnett states that: “The consistently naturally very low pH is an ecologically limiting factor in the river, resulting in a naturally very low macroinvertebrate abundance and diversity, and no native fish.” — EIC Ms Barnett (ecology), para 1.3 • “the magnitude of the effect of the discharge will be negligible (very slight change from the existing baseline condition), resulting in a Very Low level of ecological effect.” — EIC Ms Barnett (ecology), para 6.5

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Submission number, name and position	Summary of submission points
	<ul style="list-style-type: none"> “fish generally do not appear to be present in the mainstem of the Whangaeahu River; however, there are sporadic records of obligatory migratory fish species (e.g. longfin eel, or tuna) in some of the Whangaeahu River’s tributaries” — Dr Ausseil (water quality & ecology), s42A para 33 “macroinvertebrate communities in the Whangaeahu River near the proposed point of discharge tend to be characterised by low abundance and diversity of macroinvertebrates species.” — Dr Ausseil (water quality & ecology), s42A para 34.
Submission 7 Andrew Chamley Support	<p><i>Submission:</i></p> <p><u>Positive / Economic</u></p> <ul style="list-style-type: none"> “It would help secure new manufacturing operations on the site, bringing substantial positives benefits to the region. New jobs would reduce reliance on government assistance, families who have left may return, school roles would recover.” “Revitalising this site is not just an economic decision – it’s an investment in the long-term wellbeing, stability and future of our community.” <p><u>Water quality</u></p> <p>“The revised volume quality/colour and treatment process will have a negligible impact on the Whangaeahu River and in many cases improve the river water quality.”</p> <p><i>Response:</i></p> <p><u>Positive / Economic</u></p> <ul style="list-style-type: none"> The applicant agrees that the initiation of the Te Ara Hiko Project will “re-activate the Site, providing construction and on-going employment opportunities for the local community, all contributing to overall positive socio-economic outcomes.”- EIC Ms Singh (planning), para 8.6 “Without investment funding, the proposed Biocoal facility will not be established and therefore none of the positive benefits with respect to employment, support to the local economy or support for New Zealand’s move away from fossil coal use will be realised.”- EIC Mr Duder (corporate – Te Ara Hiko), para 8.5(a) <p><u>Water quality</u></p> <ul style="list-style-type: none"> Both Dr Ausseil and Mr Coutinho agree that the effects of the proposed discharge on the water quality of the Whangaeahu River will generally not be detectable and will be no more than minor overall.
Submission 8 Allan Gudsell Support	<p><i>Submission:</i></p> <p><u>Positive / Economic</u></p> <ul style="list-style-type: none"> “it is vital for the sustainable development of the Ruapehu District.” “This renewal will enable the district to continue fostering employment opportunities and driving economic growth” <p><u>Other</u></p> <p>“we can balance environmental management with social and economic wellbeing”</p>

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Submission number, name and position	Summary of submission points
	<p>Response:</p> <p><u>Positive / Economic</u></p> <ul style="list-style-type: none"> The applicant agrees that the initiation of the Te Ara Hiko Project will re-activate the Site, providing construction and on-going employment opportunities for the local community, all contributing to overall positive socio-economic outcomes. Without investment funding, the proposed Biocoal facility will not be established and therefore none of the positive benefits with respect to employment, support to the local economy or support for New Zealand's move away from fossil coal use will be realised. <p><u>Water quality</u></p> <p>Both Dr Ausseil and Mr Coutinho agree that the effects of the proposed discharge on the water quality of the Whangaehu River will generally not be detectable and will be no more than minor overall. — Dr Ausseil (water quality & ecology), s42A para 46(a); EIC Mr Coutinho (water quality), para 4.8</p>
<p>Submission 9</p> <p>Gustav Bam</p> <p>Support</p>	<p>Submission:</p> <p><u>Water quality</u></p> <p><i>“The application is for a small volume of low impact naturally discharged water”</i></p> <p>Response:</p> <p><u>Water quality</u></p> <ul style="list-style-type: none"> The proposed discharge has a maximum volume of 750 m³/day, representing a substantial reduction compared with the previously consented discharge regime for the Site (5,200m³/day). — EIC Mr Coutinho (water quality), para 1.2 Both Dr Ausseil and Mr Coutinho agree that the effects of the proposed discharge on the water quality of the Whangaehu River will generally not be detectable and will be no more than minor overall. — Dr Ausseil (water quality & ecology), s42A para 46(a); EIC Mr Coutinho (water quality), para 4.8
<p>Submission 10</p> <p>Pure Turoa Limited</p> <p>Support</p>	<p>Submission:</p> <p><u>Positive / Economic</u></p> <ul style="list-style-type: none"> <i>“Re-establishing significant employment at the site would benefit not only those directly employed, but also tradespeople, contractors, transport operators, accommodation providers, retailers, hospitality businesses”</i> <p><i>“Strong manufacturing, forestry and processing industries provide year-round employment and economic activity that complement tourism”</i></p> <p>Response:</p> <p><u>Positive / Economic</u></p> <ul style="list-style-type: none"> The applicant agrees that the initiation of the Te Ara Hiko Project will <i>“re-activate the Site, providing construction and on-going employment opportunities for the local community, all contributing to overall positive socio-economic outcomes.”</i> - EIC Ms Singh (planning), para 8.6

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Submission number, name and position	Summary of submission points
	<ul style="list-style-type: none"> “Without investment funding, the proposed Biocoal facility will not be established and therefore none of the positive benefits with respect to employment, support to the local economy or support for New Zealand’s move away from fossil coal use will be realised.”- EIC Mr Duder (corporate – Te Ara Hiko), para 8.5(a)
Submission 11 Highline Produce Ltd Support	<p>Submission:</p> <p><u>Positive / Economic</u></p> <ul style="list-style-type: none"> “The reopening of the site is important for the local economy and gives to opportunity of more employment for local people” <p><u>Water quality</u></p> <ul style="list-style-type: none"> “Discharge of treated water is not going to adversely effect the water quality of the Whangaehu River” <p>“The water discharge infrastructure is already in place and was working well for the previous consent.”</p> <p>Response:</p> <p><u>Positive / Economic</u></p> <ul style="list-style-type: none"> The applicant agrees that the initiation of the Te Ara Hiko Project will “re-activate the Site, providing construction and on-going employment opportunities for the local community, all contributing to overall positive socio-economic outcomes.”- EIC Ms Singh (planning), para 8.6 “Without investment funding, the proposed Biocoal facility will not be established and therefore none of the positive benefits with respect to employment, support to the local economy or support for New Zealand’s move away from fossil coal use will be realised.”- EIC Mr Duder (corporate – Te Ara Hiko), para 8.5(a) <p><u>Water quality</u></p> <p>Both Dr Ausseil and Mr Coutinho agree that the effects of the proposed discharge on the water quality of the Whangaehu River will generally not be detectable and will be no more than minor overall. — Dr Ausseil (water quality & ecology), s42A para 46(a); EIC Mr Coutinho (water quality), para 4.8</p>
Submission 12 Byford’s Readimix Limited Support	<p>Submission:</p> <p><u>Positive / Economic</u></p> <p>“Economic growth for the region. Employment opportunities in the region.”</p> <p>Response:</p> <p><u>Positive / Economic</u></p> <ul style="list-style-type: none"> The applicant agrees that the initiation of the Te Ara Hiko Project will “re-activate the Site, providing construction and on-going employment opportunities for the local community, all contributing to overall positive socio-economic outcomes.”- EIC Ms Singh (planning), para 8.6 “Without investment funding, the proposed Biocoal facility will not be established and therefore none of the positive benefits with respect to employment, support to the local economy or support for New Zealand’s move away from fossil coal use will be realised.”- EIC Mr Duder (corporate – Te Ara Hiko), para 8.5(a)

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Submission number, name and position	Summary of submission points
Submission 13 Hamish Blackburn <i>Support</i>	<p><i>Submission:</i></p> <p><u>Positive / Economic</u></p> <ul style="list-style-type: none"> “Having this consent in place is, in our view, critical to making the site attractive to potential buyers or operators.” <p><u>Water quality</u></p> <ul style="list-style-type: none"> “The proposed reduction in discharge volumes gives us further comfort that environmental effects are well understood and manageable.” <p><u>Other</u></p> <p>“We trust that Horizons Regional Council’s monitoring framework will continue to ensure compliance and environmental protection.”</p> <p><i>Response:</i></p> <p><u>Positive / Economic</u></p> <ul style="list-style-type: none"> The applicant agrees that the initiation of the Te Ara Hiko Project will “re-activate the Site, providing construction and on-going employment opportunities for the local community, all contributing to overall positive socio-economic outcomes.” - EIC Ms Singh (planning), para 8.6 “Without investment funding, the proposed Biocoal facility will not be established and therefore none of the positive benefits with respect to employment, support to the local economy or support for New Zealand’s move away from fossil coal use will be realised.” - EIC Mr Duder (corporate – Te Ara Hiko), para 8.5(a) <p><u>Water quality</u></p> <ul style="list-style-type: none"> The proposed discharge has a maximum volume of 750 m³/day, representing a substantial reduction compared with the previously consented discharge regime for the Site (5,200m³/day). — EIC Mr Coutinho (water quality), para 1.2 Both Dr Ausseil and Mr Coutinho agree that the effects of the proposed discharge on the water quality of the Whangaeahu River will generally not be detectable and will be no more than minor overall. — Dr Ausseil (water quality & ecology), s42A para 46(a); EIC Mr Coutinho (water quality), para 4.8 The applicant agrees to conditions of resource consent specifying the monitoring requirements for the wastewater discharge. — EIC Ms Singh (planning), para 6.5(d)
Submission 14 Graeme Curwen <i>Neutral</i>	<p><i>Submission:</i></p> <p><u>Water quality</u></p> <ul style="list-style-type: none"> “It is pleasing to see that Winstone has refined their application to a much lower level of discharge, that there will be no anti-foaming agent in the discharge and that discharge will pass through a wetland.” “It was not discussed if the condensate was a pure H2O stream or whether there would be other volatile compounds from within the wood included.” <p><u>Recreation / Amenity</u></p> <p>“It would be very much appreciated if pH measurements at these two locations were made available alongside flow.”</p> <p><i>Response:</i></p>

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Submission number, name and position	Summary of submission points
	<ul style="list-style-type: none"> The proposed discharge has a maximum volume of 750 m³/day, representing a substantial reduction compared with the previously consented discharge regime for the Site (5,200m³/day). — EIC Mr Coutinho (water quality), para 1.2 Both Dr Ausseil and Mr Coutinho agree that the effects of the proposed discharge on the water quality of the Whangaehu River will generally not be detectable and will be no more than minor overall. — Dr Ausseil (water quality & ecology), s42A para 46(a); EIC Mr Coutinho (water quality), para 4.8 <i>“Torrefaction occurs in a Torrefaction reactor and involves heating the wood chips in a low oxygen environment to around 280-300 degrees Celsius. This evaporates off further residual moisture plus volatile organic compounds.”</i> — EIC Mr Duder (corporate – Te Ara Hiko), para 5.4 <i>“Given the Te Ara Hiko facility has yet to be constructed we cannot take a sample of the actual condensate that will be produced and test its composition. Therefore, we have relied upon laboratory analysis of condensate samples taken from a commercial Polytechnik biomass combustion plant operating in Hillerød, Denmark.”</i> — EIC Mr Duder (corporate – Te Ara Hiko), para 6.5 <i>“The available information indicates that the condensate is expected to contain low concentrations of contaminants and very low organic loading.”</i> — EIC Mr Coutinho (water quality), para 6.2 <i>“the concentrations of organic compounds (such as volatile organic compounds, dioxins and furans, terpenes, organic acids etc.) in the condensate are expected to be “very low.”</i> — Dr Ausseil (water quality & ecology), s42A para 22(b) <i>“Condensable gases - mainly water, with small amounts of organic acids such as acetic acid, alcohols such as methanol, furans such as furfural, aldehydes such as formaldehyde and acetaldehyde, phenols, and terpenes.”</i> — Ms Simpson, (air quality), memo s4 <p><u>Recreation / Amenity</u></p> <ul style="list-style-type: none"> <i>“Horizons currently do not undertake any high-frequency (‘continuous’) monitoring of pH in the Whangaehu River. Such monitoring was undertaken historically at three sites (Tangiwai flood gauge, Karioi and SH49) but was discontinued at different times”</i> — Dr Ausseil (water quality & ecology), s42A para 44(b) <i>“the low and variable pH of the Whangaehu River is principally a characteristic of its volcanic source rather than an effect of the proposed discharge. ... I therefore do not consider that provision of real-time pH information is necessary to avoid, remedy or mitigate an adverse effect arising from this application.”</i> — Ms Morton (planning), s42A para 82
<p>Submission 15</p> <p>Ngā Waihua o Paerangi Trust/ Ngāti Rangi</p> <p><i>Oppose</i></p>	<p><i>Submission:</i></p> <p><u>Positive / Economic</u></p> <ul style="list-style-type: none"> <i>“although we recognize and support the socio-economic health and wellbeing of local communities, and the sustainable production of kai, of industry, our first concern is the long-term health, maintenance and improvement in the quality of our air, water, and whenua.”</i> <p><u>Water quality</u></p> <ul style="list-style-type: none"> <i>“The volume of daily wastewater discharge exceeds the Ngāti Rangi standards.”</i> <i>“Since wood chip condensate releases all matter from the wood except ash, this would have more contaminants than torr gas, so Ngāti Rangi wishes to take a precautionary approach.”</i>

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Submission number, name and position	Summary of submission points
	<ul style="list-style-type: none"> “None of the contaminants are of concern after mixing, and furthermore heavy metals should be absorbed by plants in the wetland. To ensure that the wetland and the mixing is effective, there should be upstream and downstream monitoring of copper, cadmium and zinc.” <p><u>Ecology</u></p> <ul style="list-style-type: none"> “Copper and zinc could also have levels that are harmful to soil organisms in the immediate vicinity of the wetland site, including the nearby natural wetland.” <p><u>Contaminated soils</u></p> <ul style="list-style-type: none"> “The consent as written requires two discharges into the Whangaeahu River. Direct discharge of torr condensate, and eventual discharge of contaminated soil or water from the proposed wetland site.” “The present wetland site has unacceptable levels of contamination. This site should either be abandoned in favour of an alternative non-contaminated site, or it should be constructed in such a way that all soil is capped and sealed within the PCV and clay liner.” “It would be more appropriate to use the criteria for ‘Areas of ecological significance’, given the special nature of the Whangaeahu catchment, and the presence of a natural wetland nearby.” “Leaching of arsenic and chromium into the river at harmful levels is a distinct possibility.” “Part of the sediment management plan is to create an earth bund out of soil from these sites.” <p><u>Cultural effects</u></p> <ul style="list-style-type: none"> “The discharge of wastewater condensate into the Whangaeahu River does not align to the principles of Te Mana Tupua meaning that kawa ora, mouri ora, manawa ora and finally wai ora (the river’s life-giving properties) are diminished.” “The discharge is slightly upstream to a wahi tapu that is significant not only to iwi but to all New Zealanders, being the memorial site to the Tangiwai disaster in 1953 that claimed 152 lives.” “we consider not only the effects of a single consent application, which may be minor, but the cumulative effects of discharges, disturbances and other alterations to our taiao.” “All cultural aspects in relation to Te Mana Tupua will be upheld through consultation with Ngāti Rangi.” <p><u>Other</u></p> <ul style="list-style-type: none"> “Ngāti Rangi declines the application in its present form.” “Should modifications to your proposed application occur Ngāti Rangi would consider supporting the application only if torr concentrate is to be discharged through an agreed wetland site, and at a volume no greater than that allowed by the consent.” “That the applicant is granted 10 years with a right to a further 10 years. The applicant must agree to five year reviews of the activity to ensure all environmental affects are being upheld.” “There should be monitoring of the following contaminants upstream and downstream of the discharge site. Ammonium, nitrate, copper, cadmium, zinc, lead.”

ATTACHMENT 2: Submissions Response Table

Submission number, name and position	Summary of submission points
	<ul style="list-style-type: none"> • <i>“This monitoring is to be done jointly with Ngāti Rangī to ensure that Te Mana Tupua and Ngā Toka Tupua are provided for.”</i> • <i>“If the present wetland site is chosen, then monitoring should include arsenic and chromium.”</i> <p><i>“Planting will be planned in discussion with Ngāti Rangī and the hapū.”</i></p> <p>Response:</p> <p>Note – refer to the full evidence package and applicant’s legal submission.</p> <p><u>Positive / Economic</u></p> <ul style="list-style-type: none"> • The applicant agrees that the initiation of the Te Ara Hiko Project will <i>“re-activate the Site, providing construction and on-going employment opportunities for the local community, all contributing to overall positive socio-economic outcomes.”</i> - EIC Ms Singh (planning), para 8.6 • <i>“Without investment funding, the proposed Biocoal facility will not be established and therefore none of the positive benefits with respect to employment, support to the local economy or support for New Zealand’s move away from fossil coal use will be realised.”</i> - EIC Mr Duder (corporate – Te Ara Hiko), para 8.5(a) <p><u>Contaminated soils</u></p> <ul style="list-style-type: none"> • The applicant has amended the location of the wetland, which is longer to be placed over former discharge pond. — EIC Mr Garcia (contaminated soil), para 5.3 • Mr Garcia considers that the application of the commercial/industrial land use ECO-SGV is considered appropriate for the assessment of ecological risk. — EIC Mr Garcia (contaminated soil), para 4.11 • Mr Blackwell considers that the use of the commercial / industrial Eco-SGVs in the Babbage DSI assessment are suitable given the current and ongoing proposed Site use. — Mr Blackwell, SLR (contaminated land), Submission Review memo s3.4 • Both Mr Garcia and Mr Blackwell consider that subject to the implementation of the RAP, appropriate liner installation, and inclusion of on-going monitoring conditions, the contaminated land risks associated with the proposal remain low and are manageable. — Mr Blackwell, SLR (contaminated land), Submission Review memo s5.0; EIC Mr Garcia (contaminated soil), para 4.11. <p><u>Water quality</u></p> <ul style="list-style-type: none"> • Dr Ausseil states that “provided the HDPE liner is correctly installed, quality assured and maintained, seepage should be near-zero and the risk of contaminants from the underlying soils entering the wetland discharge and subsequently the Whangaehu River would be low.” — Dr Ausseil (water quality & ecology), s42A para 43. • The applicant has agreed to condition of consent for the monitoring of the wastewater discharge, including sampling at the Whangaehu River, upstream and downstream of the discharge location. — EIC Mr Duder (corporate – Te Ara Hiko), para 7.4(c) • As requested by Ngāti Rangī, the discharge is proposed to a wetland prior to the discharge into the Whangaehu River. — EIC Mr Coutinho (water quality), para 5.1 <p><u>Other</u></p> <ul style="list-style-type: none"> • The applicant supports Ngāti Rangī being involved in the monitoring regime. — EIC Mr Duder (corporate – Te Ara Hiko), para 7.4(d)

ATTACHMENT 2: Submissions Response Table

Submission number, name and position	Summary of submission points
	<ul style="list-style-type: none"> The applicant supports consultation with Ngāti Rangī to prepare the wetland planting plan. — EIC Mr Duder (corporate – Te Ara Hiko), para 7.4(f)
Submission 16 David George Scott <i>Support</i>	<p><i>Submission:</i></p> <p><u>Water quality</u></p> <p><i>“With the new water treatment and soakage system proposed by WPI, will not damage water quality existing in Tangiwai River.”</i></p> <p><i>Response:</i></p> <ul style="list-style-type: none"> The proposed discharge has a maximum volume of 750 m³/day, representing a substantial reduction compared with the previously consented discharge regime for the Site (5,200m³/day). — EIC Mr Coutinho (water quality), para 1.2 Both Dr Ausseil and Mr Coutinho agree that the effects of the proposed discharge on the water quality of the Whangaeahu River will generally not be detectable and will be no more than minor overall. — Dr Ausseil (water quality & ecology), s42A para 46(a); EIC Mr Coutinho (water quality), para 4.8
Submission 17 Health New Zealand Te Whatu Ora – National Public Health Service <i>Neutral</i>	<p><i>Submission:</i></p> <p><u>Water quality</u></p> <ul style="list-style-type: none"> <i>“the condensate discharge is not expected to contain faecal contaminants and therefore is unlikely to adversely affect microbiological water quality.”</i> <i>“If combustion is incomplete, contaminants such as phenols, volatile organic compounds and other by-products could enter the condensate stream and ultimately the river.”</i> <i>“Health NZ considers the proposed discharge of condensate wastewater via a constructed polishing wetland to present a low risk to public health, provided the wetland is constructed, operated, maintained, and monitored in accordance with consent requirements.”</i> <p><u>Ecology</u></p> <ul style="list-style-type: none"> <i>“Constructed wetlands can have other benefits such as improved biodiversity and ecosystem services”</i> <p><u>Contaminated soils</u></p> <ul style="list-style-type: none"> <i>“Health NZ acknowledges the remediation action plan for contaminated soils during construction of the wetland which will help to reduce any health risk from this activity.”</i> <p><u>Recreation / Amenity</u></p> <ul style="list-style-type: none"> <i>“the discharge is not anticipated to materially alter the current recreational health risk profile of the receiving environment.”</i> <p><u>Air</u></p> <ul style="list-style-type: none"> <i>“measures to manage potential odour from high biochemical oxygen demand wastewater entering the wetland”</i> <p><u>Other</u></p> <ul style="list-style-type: none"> <i>“routine monitoring of condensate quality and final discharge quality to verify assumptions regarding contaminants of concern and treatment effectiveness”</i> <i>“ongoing inspection, maintenance and performance assessment of the polishing wetland to ensure treatment objectives are achieved”</i>

ATTACHMENT 2: Submissions Response Table

Submission number, name and position	Summary of submission points
	<ul style="list-style-type: none"> • <i>“Emergency plans for a large lahar or other flooding of the wetland are recommended.”</i> <p>Response:</p> <p><u>Water quality</u></p> <ul style="list-style-type: none"> • Dr Ausseil agrees that there should not be any microbiological water quality concerns associated with the condensate water. — Dr Ausseil (water quality & ecology), s42A para 45 • Ms Simpson agree that if the torr gas burner is not operated as stated in the application, there could be incomplete combustion which would change the nature of contaminants present in the condensate. Ms Simpson, T+T (air quality), memo s5 • As recommended by Ms Simpson, the applicant has agreed to a condition of resource consent requiring the torr gas burner to be designed to achieve two-second residence time at 850 °C. — Ms Simpson, T+T (air quality), memo s5 • Ms Simpson confirms that that the start-up conditions are expected to be primarily relevant to discharges to air, rather than condensate quality. Ms Simpson, T+T (air quality), memo s5. — Ms Simpson, T+T (air quality), memo s5 • The applicant notes that the high level of consistency of the Radiata Pine fuel source, which is the source of the discharge contaminants, is expected to result in very stable condensate concentrations without significantly peaking values. — EIC Mr Duder (corporate – Te Ara Hiko), para 8.3(a) • The applicant has agreed to a condition of consent limiting the biomass to be processed or combusted on the site to virgin forest material. — EIC Mr Duder (corporate – Te Ara Hiko), para 7.6(a) • To ensure there are no odour issues associated with the wetland, the applicant has agreed to a condition of consent requiring the preparation of a wetland management plan to ensure its long-term maintenance. — EIC Mr Duder (corporate – Te Ara Hiko), para 7.6(c) • The applicant has agreed to comprehensive monitoring conditions relating to the discharge quality. — Ms Morton (planning), s42A para 347
Submission 18 Electrical Engineering Solutions NZ Ltd <i>Support</i>	<p>Submission:</p> <p><u>Positive / Economic</u></p> <ul style="list-style-type: none"> • <i>“Granting this consent is essential for attracting a successor who can revive operations and continue the positive legacy and foundations WPI has put in place”</i> <p><u>Water quality</u></p> <p><i>“WPI has an established record of full compliance with all consent limits”</i></p> <p>Response:</p> <p><u>Positive / Economic</u></p> <ul style="list-style-type: none"> • The applicant agrees that the initiation of the Te Ara Hiko Project will <i>“re-activate the Site, providing construction and on-going employment opportunities for the local community, all contributing to overall positive socio-economic outcomes.”</i> - EIC Ms Singh (planning), para 8.6

ATTACHMENT 2: Submissions Response Table

Submission number, name and position	Summary of submission points
	<ul style="list-style-type: none"> “Without investment funding, the proposed Biocoal facility will not be established and therefore none of the positive benefits with respect to employment, support to the local economy or support for New Zealand’s move away from fossil coal use will be realised.”- EIC Mr Duder (corporate – Te Ara Hiko), para 8.5(a) <p><u>Water quality</u></p> <ul style="list-style-type: none"> The proposed discharge has a maximum volume of 750 m³/day, representing a substantial reduction compared with the previously consented discharge regime for the Site (5,200m³/day). — EIC Mr Coutinho (water quality), para 1.2 Both Dr Ausseil and Mr Coutinho agree that the effects of the proposed discharge on the water quality of the Whangaeahu River will generally not be detectable and will be no more than minor overall. — Dr Ausseil (water quality & ecology), s42A para 46(a); EIC Mr Coutinho (water quality), para 4.8 The applicant agrees to conditions of resource consent specifying the monitoring requirements for the wastewater discharge. — EIC Ms Singh (planning), para 6.5(d)
Submission 19 Pukeatua Farming Company Limited <i>Neutral</i>	<p><i>Submission:</i></p> <p><u>Contaminated soils</u></p> <ul style="list-style-type: none"> “Info regarding water , air, soil and noise would be very helpful.” <p><u>Other</u></p> <ul style="list-style-type: none"> “I have not be consulted with as an historic effected party and member of the Whangaeahu River group set up some 20yrs ago.” “I reserve my right to this decision at this stage as I churn through info.” “My other concerns are regarding the disposal of waste from furnace etc and the use of the worm farm operation next to us which after extensive documentation and clear breaches in their consent, which was poorly done, you decided not to prosecute.” <p><i>Response:</i></p> <ul style="list-style-type: none"> the available site information confirms that groundwater levels recorded in nearby investigation and production bores are generally at 4.5-7 m below ground level. Whangaeahu River water quality information is detailed in Technical Memo 2 in the application package. The application was publicly notified, enabling Pukeatua Farming Company Limited to participate in the process. On receiving the submission, the applicant contacted Mr Andrew Sherratt to discuss his concerns. Mr Sherratt raised the concern that due to the soil type on the site, the proposed wetland could result in leaching into the ground and therefore, it must be sealed. The applicant confirmed that the proposed wetland is to be lined with an impermeable layer to avoid leaching of wastewater into the ground. Mr Sherratt sought clarification as to where the ash from the plant is to be disposed to. He had significant concerns regarding the MyNoke worm farm operations that was previously using the ash provided by the WPI operations. The applicant notes that wood ash has beneficial properties as fertiliser additive. The applicant has had discussions to delivery ash to MyNoke at their Taupo site. The applicant notes the operation of the worm farm by MyNoke is not is connected to the wastewater proposal application. Any compliance issues associated with the worm farm are to be addressed via the monitoring of that resource consent application.

ATTACHMENT 2: Submissions Response Table

Submission number, name and position	Summary of submission points
	<ul style="list-style-type: none"> Mr Sherratt stated that he is concerned about noise pollution from the logs in the de-barker and the reversing beepers from the loaders in the log yard. The applicant will ensure that the operations comply with the noise requirements of the district plan. With respect to the noise from the reversing beepers, the applicant will investigate whether the loaders are able to use some form of broadband directional alarm as opposed to basic tonal beeper in the future operations.
Submission 20 Steve Dowman <i>Support</i>	<p><i>Submission:</i></p> <p><u>Positive / Economic</u></p> <p><i>“My employment — and the employment of many others in the Ruapehu district — relies on the continued operation of WPI or new business taking its place at this location.”</i></p> <hr/> <p><i>Response:</i></p> <p><u>Positive / Economic</u></p> <ul style="list-style-type: none"> The applicant agrees that the initiation of the Te Ara Hiko Project will <i>“re-activate the Site, providing construction and on-going employment opportunities for the local community, all contributing to overall positive socio-economic outcomes.”</i> - EIC Ms Singh (planning), para 8.6 <i>“Without investment funding, the proposed Biocoal facility will not be established and therefore none of the positive benefits with respect to employment, support to the local economy or support for New Zealand’s move away from fossil coal use will be realised.”</i> - EIC Mr Duder (corporate – Te Ara Hiko), para 8.5(a)

ATTACHMENT 3 – ONE PLAN FRAMEWORK TABLE

Attachment 3: Relevant key provisions relating to surface water quality from One Plan - Consolidated Regional Policy Statement, Regional Plan and Regional Coastal Plan for the Manawātū-Whanganui Region)

Part 2 – Regional Policy Statement (RPS)

RPS-SRMR – Significant resource management issues for the region

The Plan identifies the four keystone environmental issues of relevance for the region, one of these being surface water quality degradation.

Plan Proposed approach:

Set water quality targets for ecosystems, recreation, cultural and water-use values identified for catchment Water Management Sub-areas.

RPS-RMIA – Resource management issues of significance to iwi authorities

RMIA-I1: Water quality and demand

1. Management of water* quality and quantity throughout the Region does not provide for the special qualities significant to Māori.
2. Hazardous substances* and nitrate run-off need to be better managed to avoid contaminants* entering water*.
3. Lakes* and streams (for example, Punahau/Waipunahau (Lake Horowhenua) and Hokio Stream) have suffered degradation which continues and are considered culturally unclean.
4. Access to and availability of clean water* to exercise cultural activities such as food gathering and baptismal rituals have diminished.
5. Marae groundwater bore* supply is affected in some areas during seasonal drought.
6. Excessive groundwater abstraction can adversely affect water* and existing groundwater users.
7. Water* diversion from one catchment to another is considered culturally abhorrent.
8. Sewage* disposed to water*, in treated form or otherwise, is culturally abhorrent. Land-based treatment is preferred.

RMIA-I5: Monitoring and enforcement

Monitoring and enforcement of environmental standards, including those contained in regional plans, district plans and resource consents, are insufficient at times.

Objectives RMIA-01

1. To have regard to the mauri of natural and physical resources to enable hapū and iwi to provide for their social, economic and cultural wellbeing.
2. Kaitiakitanga must be given particular regard and relationship of hapū and iwi with their ancestral lands, water, sites, wahi tapu and other taonga (including wāhi tupuna) must be recognised and provided for through resource management processes.

Policy RMIA-P1: Hapū and iwi involvement in resource management

The Regional Council must enable and foster kaitiakitanga and the relationship between hapū and their ancestral lands, water, sites, wāhi tapu and other taonga (including wāhi tupuna) through increased involvement of hapū and iwi in resource management processes including:

1. memorandum of partnership between the Regional Council and hapū or iwi which set clear relationship and communication parameters to address resource management objectives,
2. recognition of existing arrangements and agreements between resource users, local authorities and hapū* or iwi*,
3. development of catchment-based forums, involving the Regional Council, hapū*, iwi*, and other interested groups including resource users, for information sharing, planning and research,
4. development, where appropriate, of hapū* and iwi* cultural indicator monitoring programmes by the Regional Council,
5. assistance from the Regional Council to hapū* or iwi* to facilitate research, projects, seminars and training,
6. development of joint management agreements^ between the Regional Council and hapū* or iwi* where appropriate,
7. the Regional Council having regard to iwi management plans* lodged with Council,
8. involvement of hapū* or iwi* in resource consent^ decision-making and planning processes in the ways agreed in the memoranda of partnership and joint management agreements^ developed under (1) and (6) above, and
9. the Regional Council advising and encouraging resource consent^ applicants to consult directly with hapū* or iwi* where it is necessary to identify:
 - a. the relationship of Māori and their culture and traditions with their ancestral lands*, water*, sites*, wāhi tapu* and other taonga* (including wāhi tūpuna*), and
 - b. the actual and potential adverse effects* of proposed activities on those relationships.

Policy RMIA-P2: Wāhi tapu, wahi tupuna and other sites of significance

1. Wāhi tapu, wahi tupuna and other sites of significance to Māori are identified:
 - a. In the Regional Coastal Plan and district plans^,
 - b. as historic reserves under the Reserves Act 1977,
 - c. as Māori reserves under the Te Ture Whenua Māori Act 1993,
 - d. as sites recorded in the New Zealand Archaeological Association's Site Recording Scheme, and
 - e. as registered sites under the Heritage New Zealand Pouhere Taonga Act 2014must be protected from inappropriate subdivision, use or development that would cause adverse effects on the qualities and features which contribute to the values of these sites.
2. The Regional Council must facilitate hapū* and iwi* recording the locations of wāhi tapu*, wāhi tūpuna* and other sites* of significance to Māori in an appropriate publicly available database.
3. Potential damage or disturbance (including that caused by inappropriate subdivision*, use or development) to wāhi tapu*, wāhi tūpuna* and other sites* of significance to Māori not identified (for confidentiality and sensitivity reasons) by hapū* or iwi* under (1), above, must be minimised by the Regional Council facilitating the compilation of databases by hapū* and iwi* to record locations which need to remain confidential.

- The Regional Council must ensure that resource users and contractors have clear procedures in the event wāhi tapu* or wāhi tūpuna* are discovered.

Policy RMIA-P3: the mauri of water

- The Regional Council must have regard to the mauri of water by implementing RMIA-P1(1) to (9) and by restricting and suspending water takes in times of minimum flow consistent with LF-FW-P21.
- In exceptional circumstances the Regional Council, following advice and guidance from hapū or iwi and consultation with potentially affected resource users, may facilitate a voluntary rāhui – temporary cessation of resource activities (with the exception of public water supply).

Policy RMIA-P4: other resource management issues

The specific issues listed in RPS-RMIA which were raised by hapū and iwi must be addressed in the manner set out in Table 2 below.

Table 2 – Resource management issues of significance to hapū and iwi**

Resource issue of significance to hapū* and iwi* <i>He take rauemi e hirahira ana ki ngā hapū me ngā iwi</i>	Resource issue in the context of tikanga Māori ^A <i>He take rauemi me te tikanga Māori</i>	Relevant part of One Plan where issue is addressed <i>Te wāhanga o te One Plan ka kōrerotia te take</i>
1. Management of water* quality and quantity throughout the Region does not provide for the special qualities significant to Māori. <i>Kāore te whakahaeretanga o te kounga me te nui o te wai huri noa i te Rohe i te whakarato wāhanga ki ngā āhuatanga e hirahira ana ki te Māori.</i>	Mauri* Mauri Wai Māori (pure water*) is essential to hapū* and iwi* in the Region to ensure activities conducted for cultural purposes, such as spiritual cleansing, baptismal rituals and food gathering, are achievable. <i>He mea nui te Wai-Māori ki ngā hapū me ngā iwi o te Rohe kia hua ai ka taea te whakatutuki i ngā mahi tikanga Māori pērā i te whakanoa, te tohi, me te kohikohi kai.</i> <i>Mauri*</i> acts as a balancing agent to ensure the life-supporting qualities within the water* are maintained. <i>Ko tā te Mauri he whakatautika kia hua ai ka puritia tonutia ngā āhuatanga tuku oranga o te wai.</i> Human activities, application of impure agents, loss of water* capacity, and contaminants* all affect the ability of the mauri* to perform its role effectively, therefore resulting in a standard of water* not suitable for hapū* and iwi* to perform their relevant tikanga Māori ^A or cultural activities associated with its use. <i>Ka pāngia kinotia te mauri me tōna āhei ki te whakatutuki pai i tōna kaupapa e te mahi a te tangata me te whakamahi mea paruparu, te mimiti o te wai hoki, me te uru mai o ngā paru kino. Ko te hua he wai kāore i te pai ki ngā hapū me ngā iwi hei whakatutuki i ō rātou tikanga e pā ana ki te whakamahi i te wai.</i>	Surface water* quality <i>Te kounga o te wai mata</i> RPS– RMIA – Resource management issues of significance to iwi authorities RPS – RMIA – O1 RPS – RMIA – P3 RPS – RMIA Methods RPS – LF – FW – Fresh Water* RPS – LF – FW – O3 RPS – LF – FW – P4 RPS – LF – FW Methods Rules RP – LF – LW – Discharges* to Land* and Water* Wāhanga RPS – RMIA – RPS – RMIA – O1 RPS – RMIA – P2 Ngā mahi kei RPS – RMIA RPS – LF – FW – Wai RPS – LF – FW – O3 RPS – LF – FW – P3 Ngā mahi kei RPS – LF – FW RP – LF – Te Tuku Parakaingaki ki te Whenua me ngā Wai

RPS-LF-Freshwater	Ms Singh's Comments
<p>Objective LF-FW-03: Water management values</p> <p>Surface waterbodies and their beds are managed in a manner which safeguards their life supporting capacity and recognises and provides for the Values in RP-SCHED2.</p>	<p><u>RP-SCHED2 – Surface water Management Values</u></p> <ul style="list-style-type: none"> The proposed discharge is located within Water Management Area Whau_1 (Upper Whangaeahu) and Water Management Sub-area Whau_1a. RP-SCHED2 identifies the following values for the Upper Whangaeahu (Whau_1a): <ul style="list-style-type: none"> <u>Area-wide values:</u> <ul style="list-style-type: none"> LSC – Life Supporting Capacity AE – Aesthetics CR – Contact Recreation Mau - Mauri IA² – Industrial Abstraction I² – Irrigation SW - Stockwater E1 – Existing Infrastructure CAP³ – Capacity to assimilate pollution. NS – Natural State SOS-A – Sites of Significance – Aquatic SOS-R – Sites of Significance – Riparian <u>Site/Reach-specific values</u> <ul style="list-style-type: none"> DFS – Domestic food supply With respect to Sites of Significance – Aquatic, Whangaeahu River itself is not included in the sites listed in RP-SCHED2 for Whau_1a. With respect to Sites of Significance – Riparian, no riparian habitat values are specified for Whau_1a in RP-SCHED2 table. <p><u>RP-SCHED2 Surface Water Management Objectives</u></p>

Objective LF-FW-04: Water quality

Surface water quality is managed to ensure that:

- a. Water quality is maintained in those rivers and lakes where the existing water quality is at a level sufficient to support the Values in RP-SCHED2.
 - b. Water quality is enhanced in those rivers and lakes where the existing water quality is not at a level sufficient to support the Values in RP-SCHED2.
 - c. accelerated eutrophication and sedimentation of lakes* in the Region is prevented or minimised
- the special values of rivers* protected by water conservation orders^ are maintained.

- The relevant Management Objectives for individual Values relevant to this application are set out below.

Individual Value	Management Objective
Life Supporting Capacity	The waterbody and its bed support healthy aquatic life.
Aesthetics	The aesthetic values of the waterbody and its bed are maintained or enhanced.
Contact Recreation	The waterbody and its bed are suitable for contact recreation
Mauri	The mauri of the waterbody and its bed are maintained or enhanced.
Industrial Abstraction	The water is suitable as water source including for hydroelectricity generation.
Irrigation	The water is suitable as water source for irrigation.
Stockwater	The water is suitable as supply of drinking water for livestock.
Existing Infrastructure	The integrity of existing infrastructure is not compromised.
Capacity to assimilate pollution	The capacity of waterbody and the bed to assimilate pollution is not exceeded.
Natural State	The river and its bed are maintained in their natural state.

RP-SCHED5 Surface Water Quality Targets

- The water quality targets for Whau_1a are set out below. The second column sets out the overall effects on the water quality targets after reasonable mixing as outlined in the application.
- It illustrates that the existing PH of the Whangaehu River is on average 2.8 due to the natural state of this river (as opposed to the specified target of 7 – 8.2).
- With respect to SIN, the water quality data shows that the current SIN is between 0.1 and 0.4, which exceeds the water quality target. The proposal is not expected to change current SIN value of the river.

	Water quality targets for Whau_1a in RP SCHED5	Water quality values after reasonable mixing as outlined in the application
PH	7 – 8.2	Existing PH is average of 2.8 (due to the natural state of the river) and this is not expected to change.
Temperature	19	Average existing temperature is 10.4, and this is not expected to change by more than 0.2 °C. (which is well within the allowable range of 2 °C)
DO (%SAT)	80	Not expected to change.
scBODs (g/m ³)	1.5	Not expected to change
POM (g/m ³)	5	
Periphyton	50	Not expected to change
DRP (g/m ³)	0.006	Not expected to change
SIN (g/m ³)	0.070	Existing SIN is between 0.1 and 0.4 and this is not expected to change.
Deposited sediment cover (%)	15	Not expected to change
MCI	120	Not expected to change
Ammonical Nitrogen (g/m ³)	0.320	Existing average is 0.07. The proposal will potentially increase to 0.09.
Tox	99	
Visual Clarity (m)	3	Not expected to change

Policy LF-FW-P4: Water Management Areas and Values

For the purposes of managing water quality, water quantity and activities in the beds of rivers and lakes, the catchments in the Region have been divided into Water Management Areas and Water Management Sub

With respect to Objective LF-FW-03, LF-FW-04, Policy LF-FW-P4 and Policy LF-FW-P5, I note that:

- The findings of the water quality expert is that the effects of the proposed discharge on water quality of the Whangaehu River will generally not be detectable and will be no more than minor overall.

<p>Areas in RP-SCHED1... The rivers and lakes and their beds must be managed in a manner which safeguards their life supporting capacity and recognises and provides for the RP-SCHED2 Values when decisions are made on avoiding, remedying or mitigating the adverse effects of activities...The individual values and their associated management objectives are set out in RP-SCHED2 Surface Water Management Values Key and repeated in Table 7.</p>	<ul style="list-style-type: none"> • The findings of the ecology experts is that the effects of the wastewater discharge on aquatic ecology within the Whangaehu River will be no more than minor. • Based on the findings of the water quality and ecology experts, it is concluded that proposal aligns with the management objectives for individual values set out for the Whau_1a .
<p>Policy LF-FW-P5: Water quality targets</p> <p>In RP-SCHED5, water quality targets relating to RP-SCHED2 Values (repeated in Table 7) are identified for each Water Management Sub-area. Other than where they are incorporated into permitted activity rules as conditions to be met, the water quality targets in RP-SCHED5 must be used to inform the management of surface water quality in the manner set out in LF-FW-P6, LF-FW-P7 and LF-FW-P8.</p>	
<p>Policy LF-FW-P6: Ongoing compliance where water quality targets are met</p> <ol style="list-style-type: none"> 1. Where existing water quality meets the relevant RP-SCHED5 water quality targets within the Water Management Sub-area, water quality must be maintained in a manner which ensures that water quality targets continue to be met beyond the zone of reasonable mixing (where mixing is applicable). 2. For the avoidance of doubt: <ol style="list-style-type: none"> a. In circumstances where the existing water quality of a Water Management Sub-area meets all of the water quality targets for the sub-area (1) applies to every water quality target for the Sub-area 	<p>With respect water quality targets for Whau_1a set out in SCHED5:</p> <ul style="list-style-type: none"> • Except for 2 parameters (PH and SIN), all other existing parameters meet the specified water quality targets for Whau_1a. • The existing PH of the Whangaehu River is on average 2.8 due to the natural state of this river (as opposed to the specified target of 7 – 8.2). The application is not expected to change this. • With respect to SIN, the water quality data shows that the current SIN is between 0.1 and 0.4, which exceeds the water quality target. The proposal is not expected to change the current SIN value of the river. • Overall, the proposal is not expected to change the water quality targets, as such, the water quality will continue to be maintained beyond the zone of reasonable mixing.

<p>b. In circumstances where the existing water quality of the Water Management Sub-area meets some of the water quality targets for the Sub-area (1) applies only to those water quality targets that are met.</p> <p>For the purposes of (1) reasonable mixing is only applicable to a discharge from an identifiable location.</p>	
<p>Policy LF-FW-P7: Enhancement where water quality targets are not met</p> <p>1. Where the existing water quality does not meet the relevant RP-SCHED5 water quality targets within a Water Management Sub-area water quality within that Sub-area must be managed in a manner that enhances existing water quality in order to meet:</p> <p>a. The water quality target for the Water Management Area in RP-SCHED5, and/or</p> <p>b. The relevant RP-SCHED2 Values and management objectives that the water quality target is designed to safeguard.</p> <p>2. For the avoidance of doubt:</p> <p>a. In circumstances where the existing water quality of a Water Management Sub-area does not meet all of the water quality targets for the Sub-area, (1) applies to every water quality target for the Sub-area.</p> <p>In circumstances where existing water quality of a Water Management Sub-area does not meet some of the water quality targets for the Sub-area, (1) applies only to those water quality targets not met.</p>	<ul style="list-style-type: none"> • The existing PH of the Whangaehu River is on average 2.8 due to the natural state of this river (as opposed to the specified target of 7 – 8.2). The application is not expected to change this. In light of the natural state of the river, enhancement approach is not considered to be appropriate. • With respect to SIN, the water quality data shows that the current SIN is between 0.1 and 0.4, which exceeds the water quality target. The proposal is not expected to change the current SIN value of the river.
<p>Policy LF-FW-P8: Management of water quality in areas where existing water quality is unknown</p>	<p>Not applicable, as water quality composition is sufficiently known.</p>

<p>1. Where there is insufficient data to enable a comparison of existing water quality with relevant RP-SCHED5 water quality targets, water quality within the Water Management Sub-area must be managed in a manner which, beyond the zone of reasonable mixing (where reasonable mixing is applicable):</p> <ol style="list-style-type: none"> Maintains or enhances the existing water quality. has regard to the likely effect of the activity on the relevant RP-SCHED2 Values that water quality target is designed to safeguard. has regard to relevant information about the existing water quality in upstream or downstream Water Management Sub-areas, where such information exists. <p>2. For the avoidance of doubt:</p> <ol style="list-style-type: none"> In circumstances where there is insufficient data to enable a comparison of the existing water quality with all the water quality targets for a Water Management Sub-area (1) applies to every water quality target for the Sub-area. In circumstances where there is insufficient data to enable a comparison of the existing water quality with some of the water quality targets for a Water Management Sub-area (1) applies only to those water quality targets with insufficient data. <p>For the purpose of (1) reasonable mixing is only applicable to a discharge from an identifiable location.</p>	
<p>Policy LF-FW-P12: Point source discharges to water</p> <p>The management of point source discharges into surface water must have regard to the strategies for surface water quality management set out in RPS-LF-FW-P6, LF-FW-P7 and LF-FW-P8, while having regard to:</p>	<ul style="list-style-type: none"> With respect to item 1 – based on the findings of the water quality and ecology experts, it is concluded that proposal aligns with the management objectives for individual values set out for the Whau_1a . With respect to item 2 – the water quality assessment used factual water quality data from directly upstream, which includes all upstream discharges (point and non-point).

<ol style="list-style-type: none"> 1. The degree to which the activity will adversely affect the RP-SCHED2 Values for the relevant Water Management Sub-area 2. Whether the discharge in combination with other discharges, including non-point source discharge will cause the RP-SCHED5 water quality targets to be breached. 3. The extent to which the activity is consistent with contaminant treatment and discharge best management practices. 4. The need to allow for reasonable time to achieve any required improvements to the quality of the discharge. 5. Whether the discharge is of a temporary nature or is associated with necessary maintenance or upgrade work and the discharge cannot practicably be avoided. 6. Whether the adverse effects resulting from the discharge can be offset by way of a financial contribution set out in accordance with RP-FC. <p>Whether it is appropriate to adopt best practicable option.</p>	<ul style="list-style-type: none"> • With respect to item 3 – the condensate discharge is expected to be of high quality, and will be discharged using best management practices. • With respect to item 4 – The proposed conditions require extensive monitoring in the first year, and discharge is expected to be of high quality. • With respect to item 5 – this is not a temporary discharge. • With respect to item 6 – Not relevant.
Part 3 – Regional Plan (RP)	Ms Singh's Comments
RP-LF-LW- Discharges to land and water	
<p>Objective LF-LW-O2: Management of discharges to land and water and land uses affecting groundwater and surface water quality</p> <p>The management of discharges onto or into land (including those that enter water) or directly into water and land use activities affecting groundwater and surface water quality in a manner that:</p> <ol style="list-style-type: none"> 1. Safeguards the life supporting capacity of water and recognises and provides for the Values and management objectives in RP-SCHED2, 2. Provides for the objectives and policies of RPS-LF as they relate to surface water and groundwater quality; and <p>Where a discharge is onto or into land, avoids, remedies or mitigates adverse effects on surface water or groundwater.</p>	<p>See responses above.</p>

Policy LF-LW-P4: Consent decision-making for discharges to water

When making decisions on resource consent applications and setting consent conditions, for discharges of water or contaminants into water, the Regional Council must specifically consider:

1. The objectives and RPS-LF-FW-P5 to RPS-LF-FW-P9 and RPS-LF-FW-P13 of RPS-LF, and have regard to:
2. Avoiding discharges which may contain any persistent contaminants that are likely to accumulate in a waterbody or its bed,
3. The appropriateness of adopting the best practicable option to prevent or minimise adverse effect in circumstances where:
 - a. It is difficult to establish discharge parameters for a particular discharge that give effect to the management approaches to water quality and discharges set out in RPS-LF, or
 - b. The potential adverse effect are likely to be minor, and the costs associated with the adopting of the best practicable option are small in comparison to the costs of investigating the likely effects on land and water, and

The objectives and policies of RPS-RMIA, RPS-EIT, RPS-ECO, RPS-HCV, RPS-NATC, RPS-NFL, RPS-HAZ, and RP-IP to the extent that they are relevant to the discharge.

See assessment above.

- With respect to item 2 - No persistent contaminants that are likely to accumulate in a waterbody or its bed is expected from the discharge.
- With respect to item 3 – the discharge parameters are clearly defined in the draft conditions.