Discussion Draft

AFFCO Rangiuru Meat Processing Plant

Suggested Conditions for Consent to Discharge Treated Wastewater to the Kaituna River

May 18 2022

AFFCO NZ Limited

Pursuant to the Resource Management Act 1991, the **Bay of Plenty Regional Council**, by a decision dated XXXX, **Hereby Grants** to:

AFFCO NZ LIMITED P O Box 132 TE PUKE

A discharge permit pursuant to section 15(1)(a) of the Resource Management Act 1991 (RMA) to Discharge Treated Waste Water From The Rangiuru Meat Processing Plant Into The Kaituna River subject to the following conditions:

1 Purpose

- 1.1 The activity authorised under this consent shall be undertaken in general accordance with:
 - i. the application for this resource consent; and
 - ii. all information provided in support of the application for this resource consent, in particular:

AFFCO NZ Limited, Rangiuru Processing Plant, Discharges to Kaituna River, Assessment of Environmental Effects February 2017 ("AEE")

except where otherwise required in the resource consent conditions below.

1.2 This resource consent authorises the discharge of treated wastewater from the AFFCO Rangiuru Meat Processing Plant, into the Kaituna River.

2 Discharge Quantity and Rate

- 2.1 The daily dry weather quantity discharged shall not exceed 6,500 cubic metres.
- 2.2 The daily wet weather quantity discharged shall not exceed 6,500 cubic metres plus the quantity attributable to rainfall (refer Advice Note 1).

2.3 The rate of discharge shall not exceed 90 litres per second, except under a significant rainfall event, where a high rate may be required for the purpose of preventing any accidental discharges outside the area occupied by the wastewater infrastructure (refer Advice Note 2).

3 Location

3.1 AFFCO Rangiuru discharge pipe, Kaituna River, as shown on BOPRC Plan Number RC24932/1.

4 Map Reference

4.1 At or about map reference NZTM 1897300E 5811600N

5 Legal Description

5.1 Pukaingataru Block B No. 3 Section 5A and 5B Block III Maketu SD, (Western Bay Of Plenty District).

6 Notifying the Regional council

- 6.1 Within one month of granting this consent the consent holder shall notify the Regional Council or delegate the details of who is to be responsible for site management and compliance with consent conditions.
- 6.2 The Consent Holder shall notify the Regional Council as soon as practicable and, as a minimum requirement, within 48 hours of any accidental discharge, plant breakdown or other incident which is likely to result in an exceedance of the limits of this resource consents.

7 Monitoring of Treated Wastewater

- 7.1 The consent holder shall monitor the volume of wastewater discharging to the Kaituna River on a daily basis to an accuracy of \pm 5%.
- 7.2 The consent holder shall collect a representative sample of effluent at a point immediately following the final part of the wastewater treatment system prior to discharge into the Kaituna River, on any one day per calendar week. The effluent samples shall be analysed for the following constituents:
 - 5-day carbonaceous biochemical oxygen demand,
 - Total suspended solids,
 - Total nitrogen,
 - Total oxidised nitrogen,
 - Total ammoniacal-nitrogen,
 - Dissolved reactive phosphorus,
 - Total phosphorus.

- 7.3 The consent holder shall, within 6 months of the commencement of this consent, undertake sampling to confirm pathogen loads in treated wastewater discharged to the Kaituna River.
- 7.4 Effluent analyses pursuant to condition 7.2 and water analyses pursuant to condition 9.2, shall be carried out as set out in the latest edition of "Standard Methods for the Examination of Water and Wastewater" APHA AWWA WPCF, or its replacement.

8 Compliance Limits

- 8.1 The effluent quality discharging into the Kaituna River shall not exceed the following limits:
- 8.1.1 The 5-day carbonaceous biochemical oxygen demand loading shall not exceed 520 kilograms per day.
- 8.1.2 The suspended solids loading shall not exceed 520 kilograms per day.
- 8.1.3 The 13-week running average daily total nitrogen loading shall not exceed 300 kilograms, and the maximum daily total nitrogen loading shall not exceed 460 kilograms.
- 8.1.4 The total ammoniacal-nitrogen concentration shall not exceed 150 grams per cubic metre.
- 8.1.5 The 13-week running average daily total phosphorus loading shall not exceed 50 kilograms, and the daily total phosphorus loading shall not exceed 80 kilograms.
- 8.1.6 The 13-week running median concentration of Enterococci bacteria shall not exceed 5,000 per 100 millilitres. Where a single effluent sample exceeds 20,000 Enterococci per 100 millilitres, testing for Enterococci shall be increased to at least twice per week.
- 8.2 Any water quality results exceeding the limits listed in condition 8.1 shall trigger the following:
 - 1. Investigation into the causes of the exceedance(s); and
 - 2. Corrective action to address the exceedance(s); and
 - 3. Re-testing of the discharge for constituent(s) that caused the exceedance of the limits, following implementation of any corrective action.
 - 4. Actions taken in accordance with this condition shall be documented in the annual report (condition 15).

- 8.3 Should the wastewater quality analysis results continue to exceed the limits specified in condition 8.1, despite the corrective actions undertaken as per condition 8.2, the consent holder shall provide the Regional Council with a Remedial Action Plan (RAP) for certification. The RAP shall include, but not be limited to:
 - 1. Investigation of the cause;
 - 2. Identify remedial action where applicable;
 - 3. Identify any further mitigation measures required;
 - 4. Investigation of the environmental effects on the receiving environment, including human health;
 - 5. An alternative monitoring programme (for the remedial period);
 - 6. Reporting; and
 - 7. Timeframes for all actions, investigations and reporting.
- 8.4 The preparation of a RAP and investigations required by condition 8.3 shall be undertaken by a suitably qualified person(s).
- 8.5 The Regional Council certification of the RAP shall be limited to:
 - 1. The investigation methodology;
 - 2. That best practice is adopted in relation to mitigation and remedial actions proposed;
 - 3. The proposed monitoring frequency;
 - 4. The proposed timeframes for all actions identified; and
 - 5. Reporting.
- 8.6 Should the water quality analysis results remain above the limits specified in condition 8.1, despite the corrective actions undertaken as per the RAP, the consent conditions may be reviewed in accordance with condition 15.

9 Environmental Monitoring

- 9.1 The consent holder shall collect representative water samples from the Kaituna River (i) at the edge of the mixing zone deemed to be 350m downstream of the discharge outfall and (ii) at a point 50m upstream of AFFCO intake.
- 9.2 The water samples, pursuant to condition 9.1, shall be collected between 0800 hours and 1800 hours on a weekly basis from 1 November to 31 March every

- year for the duration of this consent. The water samples shall be analysed for *E. coli* per 100ml and total ammonia.
- 9.3 The consent holder shall contact the Regional Council within 24 hours where *Escherichia coli* counts in the Kaituna River downstream of the discharge point exceed 273 *Escherichia E. coli* per 100mls.
- 9.4 The consent holder may cease analysis for total ammonia pursuant to condition 9.2, where the concentration of total ammonia derived from the AFFCO Rangiuru wastewater in the Kaituna River is below 0.03 milligrams per litre for all water samples tested, upon the completion of sampling from 1 November 2023 to 31 March 2024. Where *E. coli* counts in the Kaituna River exceed 273 *E.coli* per 100ml for any one water sample downstream of the discharge point pursuant to condition 9.2, the consent holder shall undertake daily water sampling pursuant to conditions 9.1 and 9.2 and analyse samples collected for *E.coli* per 100ml.
- 9.5 Where *E. coli* counts in the Kaituna River are less than 273 *E.coli* per 100ml for any one water sample downstream of the discharge point pursuant to condition 9.4, the frequency of water sampling may revert to weekly.
- 9.6 No later than 12 months after commencement of this consent, the consent holder shall prepare and Ecological Monitoring Plan (EMP) that covers impacts of the AFFCO Rangiuru discharge on macroinvertebrate communities, fish communities, macrophyte cover and Matauranga Maori indices in the Kaituna River . The consent holder shall liaise with the Environmental Monitoring Committee required in Condition 10.1 to identify appropriate Matauranga Maori indices. The EMP shall provide an appropriate monitoring methodology, along with identifying the location (upstream and downstream) and the number of monitoring points (accounting for a 350 m mixing zone). The EMP shall be provided to the Regional Council for certification by the Regional Council Ecologist. The certified EMP shall form the basis of all future studies for comparative purposes.
- 9.7 The consent holder shall undertake surveys as described in the EMP within 3 months of certification of the EMP per condition 9.6, as a baseline, then every 5 years thereafter.

10 Environmental Monitoring Committee

- 10.1 The consent holder shall form an Environmental Monitoring Committee (EMC) to liaise and meet for the following purposes in relation to the activities authorized by this consent:
- (a) To consider and report back to the consent holder on the monitoring requirements and outcomes under conditions of this consent and any section 128 RMA review matter as appropriate; and

- (b) To consider and report back on the technical review outcomes under condition14 of this consent; and
- (c) To inform the consent holder and the Regional Council of the effects of the treated wastewater discharge authorized under this consent on the mauri and mauriora of the Kaituna River; and
- (d) To discuss any other relevant matters that may be agreed by the EMC.
- 10.2 The consent holder shall invite the following parties to participate in the EMC:
 - (a) Local Iwi/Hapu representatives (including representatives of Tapuika and Waitaha); and
 - (b) Representatives of BOPRC

11 Reports

- 11.1 The consent holder, shall report to the Regional Council within 10 working days of the end of each calendar month on the results of monitoring pursuant to condition 7.1, setting out the daily quantities of effluent discharged into the Kaituna River.
- 11.2 The consent holder shall report to the Regional Council within 10 working days from receipt of final analyses, the results of effluent and water quality analysis carried out pursuant to conditions 7.2, and 7.3. The results shall be reported as grams per cubic metre, as kilograms per day and as MPN per 100 ml as appropriate.

12 Signage

- 12.1 The consent holder shall within 6 months of the date of commencement of this consent and subject to the landowner's approval, install four signs on the banks of the Kaituna River and shall be maintained for the duration of the consent. One sign shall be erected on each bank, level with the upstream discharge point, and one sign shall be erected on each bank of the Kaituna River, 350 m downstream of the downstream discharge point. The form, content and location of signs shall be identified in a signage plan, which shall be submitted to the Council prior to the erection of any new signs. The signage shall:
- (a) Be visible from the river and riverbanks
- (b) Provide clear identification of the location, nature and timing of the discharge
- (c) State the extent of the mixing zone (i.e. 350 m).

13 Wastewater Treatment Plant Enhancements

- 13.1 The consent holder shall within 12 months of the commencement of this consent, provide to the Regional Council a report setting out the findings of a detailed investigation into:
- (a) the operational efficiency of the wetland component of the wastewater treatment plant including attention to weed control and maintenance, along with recommendations to improve efficiency if necessary,. Particular attention shall be given to the selection of wetland plants as alternatives to existing *Glyceria maxima*.
- (b) Potential benefits, efficacy and costs of installing UV treatment as part of the AFFCO Rangiuru wastewater treatment system.
- (c) Potential benefits, efficacy and costs of installing additional maturation cells as part of the AFFCO Rangiuru wastewater treatment system.

14 Independent Review

- 14.1 The consent holder shall within 3 months of the commencement of this consent, commission an independent review of the efficacy of the AFFCO Rangiuru Wastewater Treatment system. The selection of the reviewer shall be subject to the acceptance of the EMC required in Condition 10.1 of this Consent.
- 14.2 The consent holder shall within 6 months of the commencement of this consent provide to the Regional Council a report setting out the findings of the review required in Condition 14.1.

15 Section 128 Review

The Regional Council may, within six months of receiving the reports pursuant to conditions 8.3, 10.1, 11.1, 11.2, 13.1 and 14.2Error! Reference source not found. and/or any impact, compliance or environmental investigation reports carried out by the Regional Council which shows a reduction in water quality within the Kaituna and/or Maketu Estuary, serve notice on the consent holder under section 128(1)(a)(i) and/or (iii) of the Resource Management Act 1991 of its intention to review the discharge limits and/or the method of wastewater treatment specified in this consent. The purpose of such a review is to maintain the general quality of the Kaituna River and Maketu Estuary.

16 Complaints

- 16.1 The Consent Holder shall log all complaints received. The complaint details logged shall include:
 - 1. The date, time and nature of the complaint;
 - 2. The name, phone number and address of the complainant, unless the complainant elects not to supply these details;

- 3. An assessment of weather conditions at the time (wind direction);
- 4. The likely cause of the complaint and incident duration;
- 5. The outcome of all investigations;
- 6. The possible cause of the incident; and
- 7. The remedial action undertaken.
- 16.2 The Consent Holder shall also log each complaint, which may indicate non-compliance with the conditions of this consent, with the Bay of Plenty Regional Council Pollution Hotline. The details of the complaint and any remedial action undertaken shall be provided to the Regional Council within five (5) working days of receipt of the complaint.
- 16.3 The Complaints Register shall be made available to the Bay of Plenty Regional Council within 48 hours of it being requested.

17 Term of Permit

17.1 This permit shall expire on 30 November 2047.



Advice Notes:

1. 1. During wet weather, the daily volume discharged that is attributable to rainfall shall be calculated as follows:

$$Vr = R \times A / 1000$$

Where:

Vr is the daily volume attributable to rainfall (m³)

R is daily rainfall (mm)

A is the total area of the save-all, ponds and any other catchments that drain to the effluent system (e.g. the truck wash facility) (m^2) .

- 2. A significant rainfall event is considered to be a 5 year return period of 1 hour duration. This equates to a 1 hour event with a rainfall depth of 43mm or greater as measured at the nearest rainfall station, being the Regional Council automatic rainfall station at Te Matai.
- 3. Notification and reports to be sent to the Regional Council, pursuant to conditions 8.3, 10.1, 11.1, 11.2, 13.1 and 14.2Error! Reference source not found. shall be addressed to the Principal Compliance Officer.