# **Resource Consent**



#### Resource Consent RM22-0076-AP

Following the processing of the Application received on the 11 February 2022, the Bay of Plenty Regional Council has granted the applicant(s):

Rainbow Mountain Renewable Energy Limited

Consent(s) to:

RM22-0076-DC.01 Discharge To Air

Expiry 30 October 2024

The consent(s) are subject to the conditions specified on the attached schedule(s) for each activity. Advice notes are also provided as supplementary guidance, and to specify additional information to relevant conditions.

The Resource Consent hereby authorised is granted under the Resource Management Act 1991 does not constitute an authority under any other Act, Regulation or Bylaw.

DATED at Whakatane this 22nd day of December 2022

For and on behalf of The Bay of Plenty Regional Council

Fiona McTavish Chief Executive

Tans

Avoid, remedy or mitigate any adverse effects Sustain its Ensure our potential for health and future generations safety **Protecting and** Provide for our managing our Safeguard its social, economic environment life-supporting and cultural for our capacity well-being community and iwi Thriving together mō te taiao, mō ngā tāngata

Consent Number: RM22-0076-DC.01

## **Bay of Plenty Regional Council**

#### **Resource Consent**

Pursuant to the Resource Management Act 1991, the **Bay of Plenty Regional Council**, by a decision dated 22 December 2022, **hereby grants**:

#### A resource consent:

 A resource consent; under section 15(1)(c) and 15(2A)(b) of the Resource Management Act 1991 and Rules AIR R15(22) of the Bay of Plenty Regional Natural Resources Plan to undertake a discretionary activity being the Discharge of Contaminants to Air.

subject to the following conditions:

## 1 Purpose

1.1 The purpose of this resource consent is to authorise and set conditions for the temporary discharge of contaminants to air from an Anaerobic-Thermal-Reduction (ATR) Pyrolysis Trial.

#### 2 Location

2.1

The activity authorised by this resource consent shall be located:

- (a) At 216 State Highway 38, Waimangu; and
- (b) At or about map reference NZTM 1897434; 5754294; and
- (c) As shown on BOPRC Consent Plan RM22-0076/01.

#### 3 Notification of Works

- 3.1 No less than five working days prior to the commencement of the ATR Pyrolysis Trial the consent holder shall request (in writing) a site meeting with a representative of the Bay of Plenty Regional Council. This request shall include details of who is to be responsible for site management and compliance with consent conditions (see Advice Note 2).
- 3.2 No less than five working days prior to the commencement of the ATR Pyrolysis Trial, the consent holder shall invite a representative of Ngati Tahu-Ngati Whaoa and Tuhourangi Tribal Authority on site. Evidence of this invitation shall be kept and provided to the Bay of Plenty Regional Council within 48 hours of a request (see Advice Note 2).

#### 4 ATR Pyrolysis Trial

- 4.1 The consent holder shall undertake the ATR Pyrolysis Trial in general accordance with the information submitted in the application received by the Bay of Plenty Regional Council on 02/11/2022. Particularly the following principals:
  - 1. That only the sorted plastics sources from ASR material and cleaned single sourced plastics will be processed through the Pyrolysis Plant; and
  - 2. The trial period for the ATR Plant must be completed no later than 6 months (128 working days) following the date of the first ATR Plant Trial run; and
  - 3. That emissions limits for various parameters will be set and met at all times; and
  - 4. That a mix of no-load testing and in-load testing will take place during the trial; and
  - 5. That individual trials will be undertaken on a 24 hour basis; and

- 6. That regular emissions and stack testing of the discharge will take place to confirm compliance with consent conditions and to understand the nature of the discharge; and
- That modelling of the information obtained through stack emissions testing will be undertaken to understand the ground level concentrations of the discharge; and
- 8. That regular offsite FIDOL Assessments will be undertaken to understand the potential sources and intensity of odour throughout the site during the ATR Pyrolysis Trial and all associated activities; and
- 9. That the information provided through the ATR Pyrolysis Trials will be used to inform a consent application for a longer term.

Refer Advice Note 7.

- 4.2 The ATR Pyrolysis Plant shall be located within the site and laid out and designed in accordance with the following plans:
  - 1. BOPRC Consent Plan RM22-0076/01 Site Plan
  - 2. BOPRC Consent Plan RM22-0076/02 ATR Operational Flow Diagram
  - 3. BOPRC Consent Plan RM22-0076/03 ATR Plant Breakdown
  - 4. BOPRC Consent Plan RM22-0076/04 ATR Plant Flow Diagram
  - 5. BOPRC Consent Plan RM22-0076/05 ATR Process Flow Chart

#### 5 ATR Plant Site Management Plan

5.1 No later than 20 working days prior to the commencement of activities authorised by this resource consent, the consent holder must submit a final ATR Plant Site Management Plan (APSMP) to the BOPRC for certification that it has been prepared in accordance with Condition 5.2 of this consent.

The purpose of the APSMP is to detail the management, operation, sampling and monitoring procedures, methodologies and contingency plans necessary to comply with the conditions of this consent.

- The final APSMP shall be in accordance with the draft APSMP provided with the application, and must, as a minimum, include detail on the following:
  - Roles and responsibilities;
  - Final Site layout;
  - Operational management procedures including: Dust and particulate management; and Odour management;
  - · Reporting procedures;
  - Review procedures.
- 5.3 The consent holder shall exercise this consent in accordance with the approved APSMP. Any subsequent changes to the APSMP are to be submitted to the BOPRC for certification. In the event of any conflict or inconsistency between the conditions of this consent and the provisions of the APSMP, then the conditions of this consent shall prevail.
- 5.4 The consent holder must ensure that a copy of the approved APSMP (as required by Condition 5.1 of this consent), including any approved amendments, is kept on-site at all times, that only activities authorised by this consent are being undertaken, and the on-site copy of the approved APSMP shall be updated within 5 working days of any amendments being approved.
- The consent holder shall, upon request by BOPRC, provide a copy of the Emergency Management Plan for the ATR Plant (EMP).

## 6 Air Discharge - General

6.1 There shall be no visible discharge (other than water vapour) that is in the opinion of an Enforcement Officer of the Bay of Plenty Regional Council, noxious, dangerous, objectionable or offensive. 6.2 Except as authorised by conditions of this consent, there shall be no discharges to air of any hazardous air pollutant to the extent that it causes, or is likely to cause, adverse effects to human health, the environment or property at or beyond the boundary of the site.

## 7 Emission Limits and Stack Testing

- 7.1 Emission tests shall be conducted on emission points identified and following methodology listed in the final ATR Plant Sampling and Monitoring Plan (S&MP), to determine compliance with Condition 7.3. These tests shall:
  - 1. Be conducted at least three times across the duration of this consent.
  - 2. Be conducted during process conditions that will give rise to maximum normal emissions.
  - 3. Record and describe in lay terms the process conditions that give rise to the emissions.
  - 4. Comprise not less than three separate samples with results corrected to 0 (zero) degrees Celsius, 1 (one) atmosphere pressure, 11% oxygen and a dry gas basis.
  - Be carried out by an International Accreditation New Zealand-accredited stack testing company using accredited methods.
- 7.2 The results of all tests, including a record of all relevant operating parameters, raw data, calculations, assumptions, and an interpretation of the results, shall be submitted to the Bay of Plenty Regional Council within 10 working days of the sample results being received.
- 7.3 Without limiting the generality of Conditions 7.1 and 7.2, the consent holder shall ensure that the discharge from site does not exceed the limits provided in BOPRC Consent Appendix A of this consent.
  - All emission concentrations shall be corrected to 0 (zero) degrees Celsius, 1 (one) atmosphere pressure, 11% Oxygen and a dry gas basis.
- 7.4 The consent holder shall engage a suitably qualified and experienced practitioner (SQEP), to use the stack testing data from the ATR Pyrolysis Plant, to update the CALPUFF Model, to better understand the effects of the discharge at ground level.
- 7.5 Following the trial of the ATR Pyrolysis Plant, the consent holder shall prepare a technical air quality report prepared by a SQEP using the stack testing data and the information obtained through the modelling exercise, to summarise:
  - 1. Compliance with consent conditions, particularly compliance with the Emissions Limits set in Appendix A; and
  - 2. The effects of the discharge on the environment and nearby sensitive receptors.
- 7.6 (a) At any point during the exercise of this consent, should the discharge from the ATR Plant exceed any of the Emissions Limits for any of the parameters identified in Appendix A, the consent holder shall:
  - 1. Complete the trial in progress and then cease operation of the ATR Pyrolysis Plant until the following steps have been taken; and
  - 2. Advise the Bay of Plenty Regional Council as soon as practicable that there has been an exceedance of the Emissions Limit(s) including details of the parameter(s) exceeded; and
  - 3. Undertake a review of the process, the plant operation, the material being thermally reduced and the management plans to understand and remedy the issues causing or contributing to the exceedances of the consented limits; and
  - 4. Identify measures to be undertaken to ensure Emissions Limits will be complied with in subsequent trials;
  - 5. Submit the updated management plan for certification by the Bay of Plenty Regional Council where required as a result of points (1)-(4) being undertaken; and
  - 6. Advise the Bay of Plenty Regional Council of the outcome of the review process (point 3) and the measures taken to avoid further exceedances (point 4).
  - (b) The purpose of the certification process is to review and provide feedback on the proposed changes to ensure the emissions limits are not exceeded in the future.
  - (c) Further trials shall not commence until the measures identified in 7.6(a)(1) (6) have been undertaken and certification by the Bay of Plenty Regional Council has been received.

## 8 ATR Plant Stack Height

- 8.1 The consent holder shall ensure that the stack height from the ATR Plant is;
  - 1. At least 14metres above ground level; and
  - 2. Has a clearance of at least 3metres above the top of the nearest structure on site; and
  - 3. Has an unimpeded vertical discharge.

#### 9 Dust Control

9.1 The consent holder shall adopt a proactive strategy for dust / particulate control, specifically by managing dust in accordance with the Site Management Plan - Operation of Anaerobic-Thermal-Reduction (Pyrolysis) Processing Plant.

## 10 Odour

- The consent holder shall undertake regular field observations using the FIDOL assessment process, when the ATR Pyrolysis Trials are taking place and when oil loading from the site is being carried out.
  - 2. The FIDOL assessment should be undertaken by an appropriately trained staff member who has been trained by a Suitably Qualified and Experienced Practitioner (SQEP);
  - 3. The purpose of the FIDOL assessment process, is to understand whether odour is being generated from the ATR Pyrolysis Trial and the oil loading out process and what measures can be undertaken to manage and reduce the occurrence and intensity of odour where it is offensive and objectionable beyond the boundary of the site.

Refer Advice Note 5.

- 10.2 The consent holder shall undertake FIDOL assessments in accordance with the Ministry for the Environment's Good Practice Guide for Assessing and Managing Odour, dated 2016 (or any subsequent version). The process is identified in Appendix 3 of this guidance document.
- 10.3 Despite condition 10.1 and 10.2, the consent holder shall ensure that there is no odour, that is in the opinion of an enforcement officer, offensive or objectionable beyond the boundary of the site generated as a result of any of the activities associated with the ATR Pyrolysis Plant Trial.

Refer Advice Note 6.

- 10.4 (1) The consent holder shall keep a record of;
  - 1. All FIDOL Assessments undertaken and
  - 2. Measures taken to reduce the frequency, intensity, the duration, offensiveness and/or location of the odour
  - (2) A record of this information shall be kept for the duration of the consent and shall be provided to the Bay of Plenty Regional Council within 48 hours of it being requested.
- 10.5 (1) Where complaints are received by the consent holder, the consent holder shall keep a record of;
  - 1. The nature of the complaint;
  - 2. Complainant Details (where these are available);
  - 3. Time and date of complaint;
  - 4. What was occurring on site at the time of complaint;
  - 5. Measures taken to investigate the complaint and remedy the issue(s) raised.
  - (2) The consent holder shall send a copy of each complaint received to the Bay of Plenty Regional Council within 24 hours of the complaint being received; and
  - (3) A record of all complaints received shall be kept for the duration of the consent and made available to the Bay of Plenty Regional Council within 48 hours of being requested.

## 11 Signage

- 11.1 Before the start of works under this consent, the consent holder shall erect a prominent sign adjacent to the entrance of site and maintain it throughout the period of the works. The sign shall clearly display the following information:
  - The consent holder;
  - 2. The main site contractor:
  - 3. A 24 hour contact telephone number for the consent holder or appointed agent;
  - 4. A clear explanation that the contact telephone number is for the purpose of receiving complaints and information from the public about dust or odour nuisance resulting from the exercise of this consent.
  - 5. The contact number for the Bay of Plenty Regional Council's Pollution Hotline being 0800 884 883.

## 12 Resource Management Charges

12.1 The consent holder shall pay the Bay of Plenty Regional Council any administrative charges, which are fixed in accordance with section 36 of the Resource Management Act 1991.

#### 13 Term of Consent

13.1 This consent shall expire on 30 October 2024.

#### 14 The Consent

14.1 This consent is granted under the Resource Management Act 1991 and is not an authority under any other act, regulation or bylaw.

#### **Advice Notes**

- 1 (a) It is understood that RLC will certify the EMP. The certified EMP from RLC should be provided to the BOPRC.
  - (b) Hours of operation are not stipulated in this consent, but it is understood that the hours of operation will be outlined in the Rotorua Lakes Council land use consent.
- Send reporting, notification and submission of plans required by conditions of this consent (in writing) to the Regulatory Compliance Manager, Bay of Plenty Regional Council, PO Box 364, Whakatāne or email xxxxxxx@xxxxx.xxx Please include the consent number RM22-0076-DC-01.
- 3 Non-compliance with consent conditions may result in enforcement action against the consent holder and/or their contractors.
- The consent holder is advised that where there are any breaches of the limits outlined in the consent conditions, this may result in enforcement action, despite the review process outlined in condition 7.6 being undertaken by the applicant.
- 5 FIDOL stands for Frequency, Intensity, Duration, Offensiveness and Location.
- A Suitably Qualified and Experienced Practitioner (SQEP) must appropriately train staff in the FIDOL process in order to fully satisfy this condition. A range of individuals should undertake the FIDOL assessment to cover differing personal perceptions of odour. The exception to this would be if a person with a calibrated nose was used for these FIDOL assessments.
- ASR material has been described in the AEE as a mix of plastics, glass, rubber and wood generated from the shredding of automobiles, domestic appliances, construction materials and light machinery. No load testing is defined in the AEE as running the plant in the absence of the ASR material. In-load testing is defined in the AEE as running the plant with the ASR material inside. FIDOL Frequency, Intensity, Duration, Offensiveness, Location. Hours of operation will be provided for in the land use consent.

Report Date: 22 December 2022 Report ID: BRCCONRP042 Page: 6 of 6