**6A Geothermal take, use and discharge**

We recommend you discuss your application with a Consents Planner before you apply. The first hour is free and will save you time and money in the long run. After the first hour, we will charge you for the service. We’ll let you know before we start charging.

**Call the Consents Duty Planner on 0800 884 880 with consents questions. For more information email** **consents.queries@boprc.govt.nz** **or visit** [**www.boprc.govt.nz**](http://www.boprc.govt.nz)

**See Notes to Applicant (last pages of form) before filling in this application form.**

Geothermal take and discharges outside of the Rotorua geothermal area are subject to rules in the **Regional Natural Resources Plan**. Geothermal take and discharges within the Rotorua geothermal area are subject to the **Rotorua Geothermal Regional Plan**. These plans are on our website <http://www.boprc.govt.nz/knowledge-centre/plans/>.

Rules and plan/s that apply to the activity:

**Activity status** of your consent application:

[ ]  Controlled

[ ]  Restricted discretionary

[ ]  Discretionary

**National Environmental Standards for Freshwater 2020**

Is the activity within 100m of a natural wetland? [ ]  Yes [ ]  No

I apply for resource consent under section 88 of the Resource Management Act 1991 (RMA).

**PART 1**

1. **Applicant/s name** *(name/s to be on the consent)*

Surname:

First names:

**OR**

Trust & trustee names (*if application on behalf of a trust)*

Trust name:

Trustees’ names:

Trustees’ contact details:

**OR**

Company name:

Contact person:

NZ Companies Register number:

1. **Consultant details** *(or other person authorised to apply on behalf of applicant)*

Company name:

Contact person:

Postal address:

Telephone *(select preferred contact number)*

[ ]  Business       [ ]  Cell

Email

Send all **correspondence** relating to this application(s), including **invoices**, to:

[ ]  Applicant [ ]  Consultant

Send **correspondence** and **invoices** once consent is granted, to:

[ ]  Applicant [ ]  Consultant

Purchase Order Number for invoices (if required):

1. **District and consent term**
2. **District** the activity is located in:

[ ]  Whakatāne District [ ]  Ōpōtiki District

[ ]  Rotorua District [ ]  Kawerau District

[ ]  Western Bay of Plenty District [ ]  Tauranga District

[ ]  Taupō District

1. Application to replace an **existing or expired consent**(s): [ ]  Yes [ ]  No

If yes, consent number(s):

1. Consent **duration** sought:

      years       months

Start date:

Completion date *(if applicable)*:

1. Resource consent(s) also required from a **district council**: [ ]  Yes [ ]  No

Type of consent required:

Has it been applied for? [ ]  Yes [ ]  No

Has it been granted? *(If yes, please attach)* [ ] Yes [ ]  No

1. **Activity location/s**

Site address/es:

Legal description/s *(from Certificate of Title, valuation notice or rate demand)*:

Map reference/s NZTM:

**PART 2**

**Notes for applicants**

* Geothermal water is warmer than 30 degrees Celsius. If the water you intend to take is less than 30 degrees Celsius, fill out form 5B (to take groundwater) instead.
* This form includes the take and discharge of geothermal water.

**Rotorua Geothermal System**

* **New** consents to take and discharge from a bore or downhole heat exchangers are not allowed within **1.5 kilometres of the Pohutu Geyser** (Rotorua). Call the Consents Duty Planner on 0800 884 880 for more information.
* Surface features include, but are not limited to, mud pools, sinters, hot springs, hot pools, rogue bores, tomos, geysers, geothermally-influenced freshwater systems, and steam vents. Surface features may or may not be of natural origin.
* If the geothermal system is not entirely contained within the property boundaries *(i.e. if the production or disposal location is on someone else’s property)*, please state this clearly.
* **All users** of the geothermal system must be clearly identified.

**Tauranga Geothermal System**

* For an overview of the Tauranga Geothermal Resource, click [here](https://www.boprc.govt.nz/environment/geothermal/tauranga).
* Transferring allocation of geothermal water and/or heat is a discretionary activity; it is not supported within the Tauranga Geothermal System, other than from person to person on the same site.
1. **Description of activity** *(select all that apply)*

[ ]  Take geothermal water from a bore

[ ]  Take heat from geothermal water

[ ]  Take heat from surrounding material *(downhole heat exchangers)*

[ ]  Take geothermal water from a surface feature:

[ ]  Discharge via deep reinjection *(to the same aquifer from which the water was sourced)*

[ ]  Discharge via shallow reinjection *(a shallow bore)*

[ ]  Discharge to land *(using soakage trenches or soak holes)*

[ ]  Discharge to water *(stream, river, coast, etc.)*

[ ]  Other:

1. **Site plan**

Provide a detailed, scaled and contoured site plan showing the site and surrounding area, including:

* Location of the existing or proposed bore.
* Location of the discharge site(s) in relation to streets.
* All properties that are connected to the system.
* Property boundaries.
* Location and path of all pipes taking hot water/geothermal fluid to dwelling, pools, etc. and pipes taking waste hot water/geothermal fluid to the discharge area.
* Other bores on the same and adjoining properties.
* Location of monitoring.

You can use our mapping system ([***www.boprc.govt.nz***](http://www.boprc.govt.nz) **keywords ‘regional mapping’**). The maps include property boundary and contour layers. You can search by property, view and print topographic maps and aerial photographs.

1. **Type of use**
2. **Geothermal use/s:**

|  |  |  |
| --- | --- | --- |
| [ ]  | Domestic or private household use | Number of houses:       |
| [ ]  | Industrial use | Type:      |
| [ ]  | Commercial use (e.g. motel, office) | Type/number of units:       |
| [ ]  | Marae |  |
| [ ]  | Other:       |  |

1. **Use details:**

|  |  |  |
| --- | --- | --- |
| [ ]  | Space heating | Area:       |
| [ ]  | Thermal pool(s) | Number and volume:      |
| [ ]  | Heat exchangers | Number:       |
| [ ]  | Drying room | Number:       |
| [ ]  | Water heating | Number:       |
| [ ]  | Glasshouse | Number and area:       |
| [ ]  | Cookbox | Number:       |
| [ ]  | Irrigation | Crop and area:       |
| [ ]  | Frost protection | Crop and area:       |
| [ ]  | Other:       |  |

1. **Geothermal energy use**

*Use recent readings from the geothermal system.*

1. **Temperature**

Temperature at inflow *(point of production)*       °C

Date temperature taken:

Temperature at outflow *(point of discharge)*       °C

Date temperature taken:

1. **Volume and rate of take**

For take and discharge:

**Volume:**       m3 per day and       m3 per year

**Rate:**       L per second

**OR**

For downhole heat exchanger       L per second

**OR**

Explain why neither above situation applies, and how geothermal usage is measured for your situation.

*Have these measurements taken by a suitably qualified and experienced professional to ensure that accurate readings are taken. These measurements form the basis of the legal agreement authorising geothermal use between Bay of Plenty Regional Council and the applicant.*

**Efficiency of use**

1. Describe how you calculated the rate of take and discharge:
2. Bore has a meter (for bores in the Tauranga Geothermal System): [ ]  Yes [ ]  No

Water meter records are attached: [ ]  Yes [ ]  No

Water meter records have already been provided to BOPRC: [ ]  Yes [ ]  No

1. How often do you take and use geothermal water?

*(hours per day, days per year, seasonal variations etc.)*

1. How do you measure how much geothermal water you take?
2. How do you ensure your take/use is the most efficient it can be?
3. **Geothermal takes for horticultural use** (irrigation, frost protection, etc.): please also complete and attach Form 5B (Take Groundwater).

Have you considered other sources of water for horticultural use (surface water or cold groundwater)? Why are these alternative water sources not proposed to be used?

1. **Bore**

*This section only applies to* ***downhole heat exchangers*** *and* ***bore abstraction.***

1. **Bore(s) is:**

[ ]  Existing bore(s)

[ ]  Proposed/new bore(s) *(bore permit number(s))*

Bore(s) location *(address)*

1. **Type of production bore:**

[ ]  Downhole heat exchanger [ ]  Airlift

[ ]  Free flowing [ ]  Pumped

[ ]  Other *(specify)*

1. **Existing production bore(s):**

Bore number/s:

Bore depth:       m Casing depth:       m

Choking/throttling device: [ ]  Yes [ ]  No

Choking/throttling device diameter: mm

*Attach chemical composition analysis from production bore*

1. **Discharge**

*This section only applies to* ***discharges of geothermal fluid.***

1. Discharge temperature:       degrees Celsius
2. Are any chemicals added to the water before discharge? [ ]  Yes [ ]  No

Chemicals added:

1. **Method of fluid disposal:**

[ ]  Proposed deep reinjection bore *(consent number)*

**Volume:**       m3 per day **Rate:**       L per second

[ ]  Existing deep reinjection bore *(bore number(s))*

**Volume:**       m3 per day **Rate:**       L per second

[ ]  Proposed shallow reinjection bore *(consent number)*

**Volume:**       m3 per day **Rate:**       L per second

[ ]  Existing shallow reinjection bore *(bore number(s))*

**Volume:**       m3 per day **Rate:**       L per second

[ ]  Discharge to land soakage *(e.g. soakhole)*

**Volume:**       m3 per day **Rate:**       L per second

[ ]  District council reticulation *(sewer or stormwater)*

**Volume:**       m3 per day **Rate:**       L per second

*If you discharge to a district council system (sewer or stormwater), district council written approval is required with this application.*

[ ]  Other method of fluid disposal (e.g. into stream, surface feature):

**Volume:**       m3 per day **Rate:**       L per second

Location of disposal site *(address/map)*:

1. **If discharging into a water body/stream/surface feature:**

Name of water body:

Discharge structure and erosion protection *(include photos)*:

Erosion protection around discharge structure *(include photos)*:

Filtration or treatment method prior to discharge:

1. **Reinjection**

*Existing reinjection bores only.*

Bore depth:       metres Casing depth:       metres

*(Include consideration of best practice reinjection)*

1. **Discharge: assessment of alternatives**

Alternative options considered for the discharge, and/or reasons why these are not proposed *(required by section 105(1)(c) of the RMA)*:

*[Continue as necessary]*

1. **Site description**

Describe the abstraction and discharge areas: geothermal surface features, wetlands, waterbodies, ecology, recorded archaeological sites. Include photos.

*[Continue as necessary]*

1. **Assessment of environmental effects (AEE)**

Describe any effects (actual or potential) the take and discharge could have on the geothermal resource, the environment, cultural features, historic features, recreation features, scientific features, bores within 1 km, water quality, erosion and sedimentation, any other features on your site.

*Read ‘Issues’ in the ‘GR Geothermal Resources’ chapter of the Regional Natural Resources Plan or section 10 of the Rotorua Geothermal Regional Plan (if Rotorua Geothermal Field).*

*[Continue as necessary]*

1. **Mitigation measures**

Describe measures to avoid, remedy or mitigate the effects described in your AEE:

Describe efficiency measures to avoid wasting the resource *(e.g. pipe insulation, thermostats, pool covers, secondary heat exchangers, cascading energy use, not pumping when house is not occupied)*:

Describe measures to mitigate water quality effects – refer to chemical composition analysis *(e.g. if geothermal fluid discharged to a waterbody or reinjected)*:

Describe measures to control the bore and prevent bore blowout:

*Consult* [*Rotorua District Council Geothermal Safety Bylaw 2016*](https://www.rotorualakescouncil.nz/our-council/PoliciesandBylaws/Bylaws/Documents/Geothermal_Bylaw_2016.pdf) *for specific requirements.*

1. **Cultural effects assessment**

*The* [*Regional Policy Statement*](https://www.boprc.govt.nz/your-council/plans-and-policies/policies/regional-policy-statement) *is clear that only tāngata whenua can identify their relationship with an area. It is good practice to consult with tāngata whenua about your application so that you can provide a fully informed assessment of* [*cultural effects*](https://www.boprc.govt.nz/media/796657/cultural-effects_mobile-links.pdf)*.*

*We can provide a list of iwi and hapū with an interest in the site. Iwi and hapū management plans are on our website* [*www.boprc.govt.nz*](http://www.boprc.govt.nz) *(key words ‘iwi management plans’). We can provide details about identified archaeological sites and Statutory Acknowledgements.*

*Call the Consents Duty Planner on 0800 884 880 for more information.*

Provide an **assessment of cultural effects** associated with the proposal:

*[Continue as necessary]*

1. **Assessment against relevant objectives & policies of the relevant plan/s**

*Provide an assessment of the proposal against the relevant objectives and policies of the relevant regional plan, on our website:* <http://www.boprc.govt.nz/knowledge-centre/plans/>.

*[Continue as necessary]*

1. **Affected persons**

*For your application to be considered for* ***non-notification*** *you must gain written approval from all persons who may be affected by the proposal. We can help you identify people/organisations likely to be affected. Affected persons may include neighbouring land owners and occupiers, organisations such as the Department of Conservation, Land Information New Zealand (LINZ), Eastern Region Fish and Game Council, iwi, hapū and/or community groups.*

*Have the affected person fill out the ‘Affected Person’s Written Approval’ form (on our website:* [***www.boprc.govt.nz***](http://www.boprc.govt.nz) ***keywords ‘resource consent forms’****) and attach to this application.*

**People who may be affected by your proposal**

*If you have discussed your proposal with any of these people/groups, record their comments and your response, and attach to this application.*

Name

Address

[ ]  Written approval attached

Name

Address

[x]  Written approval attached

 *[Continue as necessary]*

1. **Extending timeframes**

*The RMA specifies timeframes for processing resource consent applications. Timeframes can be extended with the applicant’s agreement.*

May we extend the consent processing timeframe?

[ ]  Yes, if I can use my existing consent until this application is processed *(renewal only).*

[ ]  Yes, if the extension is to discuss and try to agree on consent conditions.

[ ]  Yes, if the application is processed before

[ ]  No.

1. **Deposit**

A **$2,700** deposit (including GST) is required with this application. It can be paid online, by cash, or eftpos at a Regional Council reception desk. Our bank won’t accept cheques after 1 May 2021.

* Bay of Plenty Regional Council’s bank account number is **06 0489 0094734 00.** Use the applicant’s name as the reference. We’ll give you a GST invoice marked “PAID” when you’ve paid.
* The application will not be accepted until the deposit is paid. We’re happy to hold the forms, but won’t start processing until we receive payment.
* **Additional charges are usually incurred**, depending on the resource we use in processing your application *(e.g. staff time, technical reviews, complexity of application)*. Staff can give a cost estimate; see the fee schedule attached.

**Checklist**

Name of **staff member** you discussed your application with:

Pre-application code RM     -     -PĀ

[ ]  Attach pre-application correspondence/advice

**The following information must be included in your application:**

[ ]  Complete all details in this application form

[ ]  Chemical composition analysis: pH, conductivity, total dissolved solids, alkalinity, calcium, magnesium, hardness, sodium, potassium, nitrate, chloride, sulphate, boron, iron, manganese, copper, zinc, arsenic, lead, turbidity

[ ]  Assessment of environment effects (AEE), as set out in Schedule 4 of the RMA

[ ]  Assessment of cultural effects

[ ]  Assessment of the activity against the relevant objectives and policies in the relevant regional plan/s

[ ]  Written approval from all affected parties and/or summary of consultation carried out

[ ]  Site plan, photos

[ ]  Sign and date the application form

[ ]  Pay the deposit

[ ]  Other relevant information *(e.g. Certificate of Title, details from the Companies Register)*

**Unchecked boxes may result in your application being returned under s88 of the RMA.**

**Send your application to RegulatoryAdmin@boprc.govt.nz**

**Information privacy**

The RMA requires this information to process the application.

Bay of Plenty Regional Council (“BOPRC”) will use the information provided with your application to process your application and to assist in managing the region’s natural and physical resources. Information in this application is regarded as **official information** and available to the public on request in accordance with the Local Government Official Information and Meetings Act 1987. In addition, you agree that the information in your activity application (Forms 1A to 7B) (and any documentation provided in support) will be published and made available on our website. **It is important that you let us know if your application includes trade secrets, commercially sensitive information, and/or any other information that you would like to remain confidential.**

This application will likely contain personal information within the meaning of the Privacy Act 2020. You agree that any personal information provided with this application will be held and used by BOPRC in accordance with our Privacy Statement (available at [www.boprc.govt.nz](http://www.boprc.govt.nz)) and the Privacy Act 2020.”

**1 I have authority to sign on behalf of the party/ies named as applicants for this consent.**

**2 I have read, and understand, all information in this application form, including the requirement to pay additional costs.**

**3 All information provided is true and correct. I understand that inaccurate information could result in my resource consent being cancelled.**

Signature Date

**NOTES TO THE APPLICANT**

**READ THIS BEFORE FILLING OUT THE APPLICATION FORM**

Call the Consents Duty Planner on 0800 884 880 with consents questions.

1 **We will not start processing your application until the $2,700 deposit is paid** unless prior arrangement is made. Processing costs are likely to be more than the deposit; we’ll invoice you for the balance.

2 You may be required to pay a **resource management charge** associated with holding a consent (s36 of the RMA). Accounts are payable by the 20th of the month following date of invoice. Where costs are more than $2000 above the deposit, we may ask you to make interim payments towards the final total cost.

3 The **coastal marine area** is the area from the outer limit of the territorial sea (12 nautical miles) to the line of mean high-water springs. For activities at river mouths, contact the Consents Duty Planner for clarification.

4 Let us know if your application includes **trade secrets** and/or **commercially or culturally sensitive material**. Section 42 of the RMA enables protection of sensitive information.

5 Schedule 4 of the RMAsets out the **information you must provide**. If insufficient information is provided, we may put the application on hold or return it as incomplete.

6 **Identify every consent required** for the proposal. We may put the application on hold until you apply for all resource consents required (s91 of the RMA).

7 If we request **further information** (s92 of the RMA), the application will be put on hold and processing will not restart until all information is received.

8 An application does not need to be publicly notified if the environmental **effects are minor and written approval has been obtained** from everyone adversely affected by the granting of the consent (s95D and s95B of the RMA). Written approval forms are on our website: <https://www.boprc.govt.nz/do-it-online/consent-forms/> under ‘Other forms’.

9 We may **review any consent** at any time if the application contains inaccuracies that materially influence the decision made (s128(1)(c) of the RMA).

**How to prepare an assessment of environmental effects**

**Key points of Schedule 4 of the RMA**

The amount of information in your assessment of environmental effects (AEE) should correspond to the scale and significance of the proposal’s environmental effects. Your AEE must include a:

* Description of the proposal, including the site and locality, a site plan and plans of your proposal.
* Description of the environmental effects, including the significance and nature of the effects. Address specific environmental effects and refer to issues identified in the relevant regional plan/s.
* Discussion of effects that may need to be controlled or monitored, how the control or monitoring will be carried out, and by whom.
* Description of alternatives to avoid, remedy or mitigate environmental effects.
* Assessment of risks to the environment from hazardous substances and/or discharge of contaminants.
* Assessment of the activity against the relevant objectives and policies in the relevant regional plan/s.
* Record of consultation: names and comments of people you discussed the proposal with.

You are likely to need specialist advice for more complex applications. Call the Consents Duty Planner on 0800 884 880 for more information.

**It is not adequate to state that there are no environmental effects.**

If your AEE is not sufficient, we may:

* not accept your application
* turn down your application
* impose many conditions on your resource consent
* ask for more information, delaying the time to process your application, or
* commission someone else to review the application at your cost.

**For more information** see the Ministry for the Environment’s *Good Practice Guide on How to Prepare an AEE* and its brochure on making resource consent applications, at [**www.mfe.govt.nz/publications/rma**](http://www.mfe.govt.nz/publications/rma)

**Hourly charges for staff and consultants**

|  |  |
| --- | --- |
| **Group** | **Hourly charge (including GST)** |
| Administration | $120 |
| Officers/PlannersSenior Officers/ PlannersEngineers/Scientist/Regulatory Project Officers (RPO)/ Environmental Data Officer/Laboratory Technicians Compliance Monitoring Officer (externally contracted)Maritime Officer | $170 |
| Team Leaders/Senior RPO/Works Engineer/Senior MaritimeSenior Engineer/Senior Scientist/HarbourmasterPou Ngaio (Technical/Cultural RMA Specialist) | $190 |
| Managers/Regional Harbourmaster | $280 |
| Consultants/Contractors | As charged by consultant/contractor |
| Regional Council staff mileage | Current applicable IRD rate |

The full **Charges Policy** is on our website:

[**http://www.boprc.govt.nz/knowledge-centre/policies/section-36-charges-policy/**](http://www.boprc.govt.nz/knowledge-centre/policies/section-36-charges-policy/)