

# APPLICATION FOR RESOURCE CONSENT

## FORM B: MINES AND QUARRIES



### NOTES

Resource use activities must meet all the conditions of any relevant Permitted Activity Rules in the Waikato Regional Plan or a resource consent from the Waikato Regional Council is required. This form will help you apply for a resource consent.

- You must fully complete this activity form and supply all the required information. Provide as much detail as you can where the questions are relevant to your activity. We request that, where possible, you provide electronic copies of any supporting information (for example, on CD). Doing so may reduce administrative costs charged to you.
- You must also supply completed Forms A and C.
- **You must pay the required initial deposit when you submit this consent application.**
- Failure to provide the required information and payment will delay the processing of your application. If you do not provide adequate information then we will not be able to process your application, and will return it to you. If you do not pay the required fees, we may stop processing your application until payment is received.

### FOR OFFICE USE ONLY

File:

Client ID:

Project:

If you need any further help,  
please phone our Resource Use  
staff on 0800 800 401.

### SITE AND LOCATION

1. **If known, please supply relevant map coordinates of the mine or quarry and its ancillary activities as described below, preferably as New Zealand Transverse Mercator 2000 (NZTM2000) references. These locations must also be clearly identified on the location map you have supplied with Form A**

2. **Present land use of:**

- a) the property on which the quarry is located
- b) all adjacent properties

**3. Describe the following physical characteristics of the land in the general area of the quarry/mine:**

a) existing erosion severity (for example, none, severe, minimal)

b) slope angle, minimum

c) soil type(s)

d) description of overburden (for example, clay, sandstone)

e) average depth of topsoil

f) average depth of overburden

**NATURE OF PROPOSAL**

**EXTRACTION OPERATION**

**4. Method of quarrying/mining**

**5. Description of product (for example, blue metal, brown metal, sand)**

**6. Machinery used**

**7. Anticipated life of the mine/quarry (years)**

**8. Production rate - average daily: average yearly**

**9. Maximum opencast extraction capacity**

 tonnes per hour

**10. Maximum processing capacity**

 tonnes per hour

**11. Maximum storage capacity of product on site**

 tonnes

**12. Typical hours of operation**

**13. Average days of operation per year**

**14. Area of quarry floor and benches**

 hectares

## OVERBURDEN PLACEMENT

**15. Describe how the overburden areas, including topsoil stockpiles, are managed to ensure the potential for runoff and erosion is minimised.**

## STORMWATER DISCHARGE

**16. What is the name of the stream, river or lake to which any discharge occurs? (if the waterway is a drain or an un-named stream, then what is the name of the stream, river, lake or wetland that it flows into).**

**17. Maximum discharge rate**

 litres per second

**18. How was this discharge rate estimated?**

**19. Please describe the outfall structures (including dimensions and construction material)**

**20. Describe how stormwater is or will be managed in the:**

a) Mine/quarry/working areas

b) overburden areas

**21. Describe all proposed or existing stormwater treatment facilities.**

## PROCESS WATER DISCHARGE

**22. Specify the volume and rate of any discharges of process water**

Rate	litres per second
Volume	cubic metres per second
Frequency	

**23. Describe the outfall structures (including dimensions and construction material)**

**24. Describe all proposed or existing process water treatment facilities, including details of pond design, dimensions and operation.**

**25. Describe any use of flocculents used to treat either stormwater or process water.**

**26. Describe how sludge accumulated in sediment ponds is managed (how often desludging occurs, approximate volumes, and where it is disposed of.)**

## AIR EMISSIONS

**27. Prevailing wind direction**

**28. Distance of nearest domestic residence from the mine/quarry**

**29. Typical number of vehicle movements in and out of the site daily**

**30. Describe all the processes and activities that may result in the discharge of dust (or other contaminants) into the air.**

## WATER TAKES

**31. What is the source of water?**

- Groundwater (underground or spring fed)
- Surface water (stream or captured rainwater runoff)

**32. Is the water geothermally heated?**

- Yes
- No

**33. For surface water takes, what is the name of the stream, river or lake from which the water is to be taken? (if the waterway is a drain or an un-named stream, then what is the name of the stream, river, lake or wetland that it flows into).**

**34. Describe in detail the purpose for which the water is to be taken and used.**

**35. Provide further details about the use by selecting from the options below. Where more than one option is required, please order them based on the volume of water required, using 'A,B,C...', where 'A' is given to the highest volume.**

<input type="radio"/> Construction	<input type="radio"/> Cooling
<input type="radio"/> Dewatering/water level control	<input type="radio"/> Drilling and testing (geothermal)
<input type="radio"/> Industry (electricity generation)	<input type="radio"/> Dust suppression
<input type="radio"/> Firefighting	<input type="radio"/> Fish pass
<input type="radio"/> Flood control	<input type="radio"/> Heating (geothermal)
<input type="radio"/> Investigations/research	<input type="radio"/> Irrigation
<input type="radio"/> Pit/lake fillin	<input type="radio"/> Transporting/loading slurry
<input type="radio"/> Water supply (domestic, rural or urban)	<input type="radio"/> Water supply (emergency/backup)
<input type="radio"/> Water supply (industry)	
<input type="radio"/> Other (please specify what):	

**INTENDED USE OF WATER**

**36. Will your use of water breach any of Waikato Regional Council's water management class standards? (Refer Section 3.2.4 of the Waikato Regional Council's Waikato Regional Plan. This is available from Waikato Regional Council's website or offices.)**

Yes       No

Will your use of water cause or contribute toward flooding on neighbouring properties	<input type="radio"/> Yes	<input type="radio"/> No
Will your use of water result in any erosion that will not be quickly remedied?	<input type="radio"/> Yes	<input type="radio"/> No

## WATER USE EFFICIENCY CHECKLIST

**37. Have you clearly established the need for, and efficient use of, water through a Water Management Plan in accordance with the relevant Waikato Regional Council guideline document? If yes, please include the water management plan with this application.**

'Municipal and domestic water supply water-efficiency checklist'	<input type="radio"/> Yes	<input type="radio"/> No
'Agriculture and horticulture water-efficiency checklist'	<input type="radio"/> Yes	<input type="radio"/> No
'Industry water-efficiency checklist'	<input type="radio"/> Yes	<input type="radio"/> No

*Note: These checklists are available from Waikato Regional Council's website or offices.*

**38. What is the maximum volume of water to be taken (Note: 1 cubic metre (m<sup>3</sup>) = 1000 litres, 1 gallon = 4.54 litres). Please state both the take volume and the 'net take' volume of water to be taken, if applicable.**

The 'net take' is the amount of surface water that is no longer available for others to take during times of peak demand as a result of the activity the water is taken for. For example, the net take may be less than the take if there is an associated consented discharge back to the stream where the water is taken from.

		<b>Take rate/volume</b>	<b>Net take rate/volume</b>
Instantaneous rate of take	litres/second		
Each day	m <sup>3</sup> /day		
Each week (where applicable)	m <sup>3</sup> /week		
Each month (where applicable)	m <sup>3</sup> /month		
Each season (where applicable)	m <sup>3</sup> /season		
Total annual volume	m <sup>3</sup> /year		

Provide the information and calculations you used to decide on the rate and volumes of water that you require (for example, MAF advice, irrigation consultant, previous water requirements). Include all details on how the net take has been calculated.

**39. If the 'net take' volume of water has been stated:**

Have you applied for a discharge consent?

Yes

No

For previous consented discharges, what are the previous consent numbers?

**40. The number of hours you intend to take per day:**

Are there regular times when this occurs?

Yes

No

If yes, provide details:

**41. Are there likely to be any changes to your water take requirements in the future?**

Yes

No

If yes, provide details:

**PUMP DETAIL**

**42. Is the pump:**

Existing

Yet to be installed

If existing:

Pump type and model:

Pump capacity:

## WATER METER DETAILS

### 43. Is a water meter installed on the pump?

Yes

No

If no, when do you intend on having a water meter fitted?

--

*Note: If there is not already an existing meter, any consent granted for this activity will require a water meter to be correctly installed.*

If yes:

Is it tamper proof?	<input type="radio"/> Yes	<input type="radio"/> No
Does it have a pulse output?	<input type="radio"/> Yes	<input type="radio"/> No
Does it have a minimum accuracy of +/- 5 per cent under field conditions?	<input type="radio"/> Yes	<input type="radio"/> No
Is there an as-built plan of the installed water meter? (include a copy)	<input type="radio"/> Yes	<input type="radio"/> No
Have daily records been kept from the water meter?	<input type="radio"/> Yes	<input type="radio"/> No
Does Waikato Regional Council currently have all records to date? (if no, include all meter records with this application)	<input type="radio"/> Yes	<input type="radio"/> No
Installation date:		
Date of last calibration (provide calibration certificate with your application):		

Calibration done by:

Company name:	
Contact person:	
Postal address:	
Contact phone number(s):	
Current meter reading:	gallons/litres/cubic metres:
Date of reading:	
Reading date:	

## INTAKE STRUCTURE DETAILS

### 44. Describe the intake structure

### 45. Is the intake screened?

Yes       No

If yes, what is the intake screen mesh aperture size:

 (mm X mm)

### 46. Provide a drawing of the intake structure. Show all dimensions, and include stream shape, location of pump, position of intake pipe in relation to stream bank and bed, location of any storage facility, location of other structures in the stream. If more paper is needed for your diagram, please attach it to this application.

## ALTERNATIVE OPTIONS

**47. Provide details of the alternative options you have considered in addition to the taking and using of water already described. Alternative options may include water harvesting and the storage of water for future use, re-using water, adopting industry best practice measures, upgrading to more water efficient equipment/infrastructure.**

**48. Is it possible to apply these alternative options in part or in combination with your proposed activities to reduce your water requirements?**

Yes

No

If yes, provide details

**49. What alternative options are you willing to consider should your activities result in either of the following situations:**

a) Your proposed net rate of take assessed in combination with all other currently authorised takes exceeds 70 per cent (drinking water supplies) or 100 per cent (all other water take activities) of the water body's allocable flow

b) Your proposed use is likely to adversely effect the environment (such as other land uses, neighbours or water quality)

**50. Is it possible for you to increase the length of time over which water is taken (that is, pump at a lower rate)?**

Yes

No

If yes, provide details

**51. Is it possible for you to alternate your period of pumping with neighbouring users?**

Yes

No

If yes, provide details (note, you will need to consult with your neighbours and get their approval for this).

**52. Do you have any storage facility (such as ponds or tanks) so that water can be taken at a low rate from the water body and then pumped at a higher rate to the areas required? Or alternatively, do you have any storage facility so that water can be taken and stored in winter months when flows are higher?**

Yes

No

If yes, provide details

**53. Describe any other water conservation and minimisation measures that could be taken during water shortage conditions**

**54. What improvements in your water take and/or use infrastructure do you intend to adopt during the term of your consent(s) if it is granted?**

**Include with this application form labelled photographs of the site in its present form which include:**

- any existing structures at the site
- the view of the waterway downstream of the site
- the view of the waterway upstream of the site
- for existing dams: upstream batter, downstream batter and crest
- for diversions: the stream and its banks where it will be affected by the works.

**55. What is the name of the nearest waterbody to the activity? (if the waterbody is a drain or an unnamed stream, then what is the name of the stream, river, lake or wetland that it flows into)**

**56. Is the waterway**

Perennial (flows all year round)  
 Ephemeral (flows only intermittently or when there is rain)

**57. What is the nature of the activity?**

Dam  
 Weir  
 Streambed diversion  
 Stopbank or other diversion

If other, please describe:

**58. Describe the structures and works, including the following details (attach separate sheets to application if required)**

- Diagram of works and/or structures with all dimensions and construction materials. Include any engineering plans.
- Description of the nature of any works to be undertaken
- Extent of the works (including length and width of the bed and banks that will be affected by the works)
- Details of how the works will be undertaken (for example, will it involve machinery operating within the stream or on the stream banks)
- Time of year works are to be carried out, and the duration of the works. Provide approximate commencement and completion dates if possible.

**Attach design plans of the dam and a copy of the engineer's certificate if available.**

*Note: If the dam is greater than 3m in height or retains more than 20,000m<sup>3</sup> then a building consent may also be required. Please contact Waikato Regional Council staff if this is the case.*

**59. What is the purpose of the dam?**

**60. Is the dam:**

existing       to be built

**61. Is the dam:**

in stream (the full flow of a stream passes into the dam and over the dam spillway)  
 off stream (part of a stream is diverted into the dam and may be returned back to the stream after the spillway, or surface rainwater run off is captured in the dam then discharged)

**62. Catchment area of dam**

hectares

**63. Design life of the dam**

years

**64. Describe the method of construction/materials used.**

**65. Dam dimensions:**

Crest width	m
Crest length	m
Upstream batter width	m
Upstream batter height	m
Downstream batter width	m
Downstream batter height	m
Overflow pipe height	m
Overflow pipe diameter	m
Dam base width	m
Volume of water retained by the dam	m
Depth dam is to be keyed into the ground	m
Average width of the pond behind the dam	m
Length of pond behind the dam	m
Average depth of the pond	m
Spillway width	m
Spillway depth	m
Spillway inlet height	m
Spillway gradient (slope)	
Spillway surface material (for example rocks or grass)	

**66. Where the dam is sited instream, what measures will be taken to ensure that the water flow is maintained downstream of the dam at all times, particularly during low flow periods?**

**67. What other alternatives have been considered for water retention?**

**68. How will fish get past the dam?**

#### **STREAM DIVERSION**

**69. Describe or attach a sketch of the diversion works.**

**70. Describe the method of construction and works.**

## IN-STREAM STRUCTURES AND WORKS

**71. What is the name of the nearest water body to the activity? (if the water body is a drain or an unnamed stream, then what is the name of the stream, river, lake or wetland that it flows into)**

**72. What is the nature of the structures and/or works?**

Culvert       Bridge       Other (for example bank stabilisation works, retaining works)

**73. Fully describe the structures and works, including the following details (attach separate sheets to application if required)**

- Diagram of works and/or structures with all dimensions and construction materials. Include any engineering plans.
- Description of the nature of any works to be undertaken
- Extent of the works (including length and width of the bed and banks that will be affected by the works)
- Details of how the works will be undertaken (for example, will it involve machinery operating within the stream or on the stream banks)
- Time of year works are to be carried out, and the duration of the works. Provide approximate commencement and completion dates if possible.

## OTHER ACTIVITIES

**74. Describe any other activities not already described above that may be undertaken at the site, for example vegetation removal or clearance.**

**75. Describe any significant changes to the activity proposed over the next five years (for example, production rates, new overburden areas).**

**76. Describe any topsoil/overburden stripping and stockpiling activities proposed over the next five years, including the method of removal, machinery used, volumes/depth of topsoil and overburden to be removed.**

## ASSESSMENT OF ENVIRONMENTAL EFFECTS

**77. Detail any hazardous or toxic chemicals or hydrocarbons (such as fuel) that are related to your activity and may be used or stored on site. Describe how these will be managed to avoid risk to the environment.**

**78. Describe the extent that your activity increases the risk of localised erosion and/or flooding, and how you intend to manage or lessen these effects.**

**79. Describe the extent that your activity may impact upon or modify the current flow regime and water movement patterns of any nearby river or lake, and how you intend to manage or lessen these effects.**

**80. Describe the extent that your activity will or may change the existing natural character of any nearby river or lake, and how you intend to manage or lessen these effects.**

**81. Is your proposal located within or in proximity to a karst (cave system) landscape?**

Yes

No

If yes, provide details on the significance, location and length of the cave system. If the system is nationally or regionally significant please include a survey that identifies entrances, stream resurgences and sinks. Provide an assessment of the cave's ecosystem and the likely long and short term effects of your activity on those ecosystems.

How will you avoid, remedy or mitigate effects on the cave's flow regime and climate and any downstream caves?

**82. Are there any existing in-stream or lake structures in proximity to the activity?**

Yes

No

If yes, provide details of the structures and the measures you will put in place to avoid any effects on them.

**83. Describe the extent to which your activity may restrict access to any nearby water body**

**84. Describe the extent to which your activity may affect river bed and bank stability**

How will you avoid or lessen these effects?

**85. Provide details of the distance of your activity from any adjacent, neighbouring or downstream properties, and describe the extent to which these properties may be affected by your proposal.**

**86. Identify and describe any of the following significant areas or aspects nearby or within the surrounding environment (approximately 500 metre radius), and detail how you intend to avoid or lessen any actual or potential effects from your activity:**

a) Native plants and/or native animal life

b) Fish and/or stream life habitats or breeding grounds

c) Wetlands (any permanently or intermittently wet area, shallow water or water margin area that supports any plant or animal life)
d) Geothermal features
e) Public amenity and/or recreational activity areas (such as gardens, parks, walkways and sports grounds, swimming, fishing or boating spots)
f) Areas or aspects important to tangata whenua (such as lands, sites, waahi tapu, kaimoana and food gathering sites)
g) Areas of cultural or historic value, such as archaeological sites
h) Places of public assembly (land or buildings where people may assemble for meetings, accommodation, worship, recreation or education)
i) Other areas or aspects

An Erosion and Sediment Control (ESC) Plan identifies the measures you will put in place to minimise erosion and sediment loss from the site. It contains two parts, a written methodology and a site plan. The written methodology contains information on various aspects of the project and proposed erosion and sediment controls. The site plan provides a visual understanding of what the site looks like and includes details such as the location of erosion and sediment control devices and other relevant features. You can find out more about preparing an ESC Plan by visiting our website at [www.waikatoregion.govt.nz/earthworks](http://www.waikatoregion.govt.nz/earthworks).

**87. Have you included an Erosion and Sediment Control Plan? (Note: All earthworks projects will require an Erosion and Sediment Control Plan. If you do not supply this when you submit your application there will likely be processing delays.)**

Yes

No

If you have not included an Erosion and Sediment Control Plan, describe how you intend to control water and sediment runoff from the site.

**88. Does your activity have any potential to create airborne matter, such as dust or smoke?**

Yes

No

If yes, describe the measures you will put in place to control air discharges.

**89. Provide copies of any additional information you may have about the effects of your activity on the receiving environment, such as photographs or recent compliance reports. If possible, we would prefer this information to be submitted in an electronic format, such as CD.**

## CONSIDERATION OF ALTERNATIVES

**90. Describe any alternative locations or methods for the proposal. Provide details on whether these have been**

## CONSIDERATION OF ALTERNATIVES

**91. Described any proposed site rehabilitation once mining/quarrying has been completed.**

**92. Describe the monitoring and maintenance programmes that will be put in place to make sure that the activity complies with conditions of any and all resource consents granted. Include who will undertake the work and how often, what aspects of the activity the monitoring/maintenance is likely to address, how access will be gained, where maintenance materials will be stored and how they will be transported to the site.**

**93. Include a site management plan with your application.**

This plan details the procedures that will be implemented to ensure the operation complies with the conditions of the resource consent. Although it may not be required, it will speed up the application process if you also supply a draft plan. This plan should detail proposed procedures for managing stormwater, process water and airborne discharges, and who will be responsible for those systems. You must also provide complaint response procedures, including contact telephone numbers for operations staff who will be responsible for responding to complaints.

**94. Include site rehabilitation plans, including rehabilitation methods, a progressive schedule of rehabilitation and end use land management.**

## CONSULTATION

Unless the Waikato Regional Council has indicated otherwise, you should identify and consult with any parties that may be potentially affected by or interested in your water take activity.

- This generally involves at least your adjacent, upstream and downstream neighbours.
- It may also include local district councils, iwi and interest groups such as local recreational and care groups.
- If you are in doubt about who you should be talking to, then call the Waikato Regional Council's staff.

Make sure you provide everyone with sufficient information so that they can fully understand what it is you want to do and how they may be affected by it. This could include a copy of this application form once it is completed and/or any plans or maps. Make sure you make yourself available to explain the application, answer any questions and discuss options for resolving any concerns.

### 95. Identify the parties that may be affected by or interested in your activity and consent application

<b>Party details/relationship</b> <i>(such as neighbour, local iwi, interest group)</i>		
<b>Contact person</b>		
<b>Postal address</b>		
<b>Phone number/s</b>	Home:	Business:
	Mobile:	

<b>Party details/relationship</b> <i>(such as neighbour, local iwi, interest group)</i>		
<b>Contact person</b>		
<b>Postal address</b>		
<b>Phone number/s</b>	Home:	Business:
	Mobile:	

<b>Party details/relationship</b> <i>(such as neighbour, local iwi, interest group)</i>		
<b>Contact person</b>		
<b>Postal address</b>		
<b>Phone number/s</b>	Home:	Business:
	Mobile:	

**Other affected or interested parties****96. Provide details of your consultation**

Provide details about the consultation you have undertaken, or explain why consultation was not considered necessary. If possible you should provide written comment or approval from those you have identified. A consultation form is provided at the end of this form that will help you with this. Photocopy off a separate form for each party identified. Otherwise, make sure you let us know:

- who you consulted with
- how we can contact these people
- their relationship to you (for example, neighbour, local iwi, interest group)
- any concerns they may have about your activity, and how you intend to avoid or mitigate (lessen) these effects.

**FINAL CHECKLIST****97. Have you? (please tick)**

- Filled in all parts of this form (Form B) that are relevant to your activity, provided all the information required, and completed and attached any other related activity forms.
- Completed and attached Forms A and C.
- Applied for any district council consents that are also required for your proposal.
- Consulted with all interested and affected parties, and included their comments and/or written approval (if possible).
- Included or paid the required deposit fee for this application.

# CONSULTATION FORM

**PHOTOCOPY THIS FORM FOR EACH PERSON OR GROUP TO BE CONSULTED**

<b>Applicant</b>	
<b>Description of proposal</b>	

**Person/group consulted in regard to this proposal**

<b>Name of contact person</b>	
<b>Name of group</b>	
<b>Postal address</b>	
<b>Street address</b>	
<b>Email address</b>	
<b>Contact number/s</b>	phone:

**Consulted party's views on the proposal (to be completed by person/group consulted)**

If you would like the Waikato Regional Council to know your views on the applicant's proposal, and/or if you consider you may be adversely affected, please indicate your views below (attach additional pages if necessary). Consider the following: How do you consider you will be affected? How would you like the applicant's proposal to be modified to take account of your views? What other comments do you have on the proposal that you would like the Waikato Regional Council to consider in making a decision on these resource consent applications?

**Applicant's response to views of consulted parties (to be completed by applicant)**

Please indicate how your proposal can be modified to take account of the views of the party you have consulted with (or why the proposal may not be able to be modified to take account of those views).

**Consulted party's response to the proposal (to be completed by person/group consulted)** *Please tick one only*

I/We give my/our approval for the proposal       I/We do not give my/our approval for the proposal

I/We are not affected by this proposal

**Signed** \_\_\_\_\_ **Date** \_\_\_\_\_