

Application for Resource Consent (PART A)

This application is made under Section 88 of the Resource Management Act 1991



**environment
SOUTHLAND**
Te Taiaro Tonga

The purpose of this Part A form and the relevant Part B form(s) is to provide applications with guidance on information that is required under the Resource Management Act 1991. Please note that these forms are to act as a guide only, and Environment Southland reserves the right to request additional information.

To: Environment Southland
Private Bag 90116
Invercargill 9840

Full name, address and contact details of applicant (in whose name consent is to be issued)

Name: Alliance Group Limited (Alliance)

Address: P O Box 845
Invercargill

Email: FRANCESW@alliance.co.nz

Phone: 03 2156492 0274 369 537 Fax: _____
Preferred Additional

Consultant contact details (if different from above)

Contact name/agent: Mitchell Partnerships Limited Attention: John Kyle / Claire Hunter

Address: P O Box 489
Dunedin

Email: john.kyle@mitchellpartnerships.co.nz claire.hunter@mitchellpartnerships.co.nz

Please tick the box for the consent(s) you are applying for and complete the relevant Part B form(s) where available:

| Land Use | Discharge | Coastal |
|---|--|--|
| <input type="checkbox"/> Bore/well | <input checked="" type="checkbox"/> To air | <input type="checkbox"/> Whitebait stand |
| <input type="checkbox"/> Convert land to dairying | <input checked="" type="checkbox"/> To water | <input type="checkbox"/> Structures/occupation of space |
| <input type="checkbox"/> Effluent pond construction | <input checked="" type="checkbox"/> To land | <input type="checkbox"/> Removal of natural materials |
| <input type="checkbox"/> Tree planting | Water | <input type="checkbox"/> Disturb foreshore/seabed |
| <input type="checkbox"/> Gravel extraction | <input checked="" type="checkbox"/> Take and use surface water | <input type="checkbox"/> Discharge/deposit substances |
| <input type="checkbox"/> Hill country burning | <input type="checkbox"/> Take and use groundwater | <input type="checkbox"/> Commercial surface water activity |
| <input checked="" type="checkbox"/> Riverbed activity (incl streams/creeks and stopbanks) | <input type="checkbox"/> Dam water | <input type="checkbox"/> Reclaim/drain foreshore/seabed |
| <input type="checkbox"/> Bridges and culverts | <input type="checkbox"/> Divert water | <input type="checkbox"/> Marine farming |
| | | <input type="checkbox"/> Other coastal activities |

1 Are there any **current** or **expired** consents relating to this proposal?

Yes No

If yes, please provide consent number(s) and description:

| | |
|--------|--------|
| 92195 | 202347 |
| 95077 | 203358 |
| 200034 | |

2 Are any other consents required from Environment Southland or **other authorities**?

Yes No

If yes, please state the relevant authority and the type of consent(s) required:

Land use consent from Invercargill City Council to store wastewater for short term emergency use. This consent will be sought at a later date if it is still required following the outcome of the ICC District Plan review.

3 For what **purpose** is this consent(s) required: (e.g. discharge of effluent, gravel extraction etc.)

To enable the ongoing operation, use, upgrading and maintenance of Alliance's Lorneville Plant

4 **Location** of proposed activity

Address: 205 State Highway 99, Underwood

Invercargill

Legal Description: Refer to Appendix A of Assessment of Environmental Effects (AEE), including legal river bed of the Makarewa River and the Oreti River.

Map Reference (NZTM 2000): at or about E46: 476:182 E N

5 The name and address of the **owner /occupier**: (if other than the applicant)

Name: _____ Phone: _____

Address: _____

6 **Please attach a map or a coloured aerial photograph, showing at a minimum, the location of the proposed activities.**

Refer to the AEE attached.

7 Assessment of effects on the environment (AEE)

Please complete the applicable Part B form(s) for the proposed activities. For those activities where no Part B form is available, please attach a written statement that assesses the effects that your activities may have on the environment. An assessment of effects **must** include the following information:

- (a) *If it likely that the activity will result in any significant adverse effect on the environment, a description of any possible alternative locations or methods for undertaking the activity:*
- (b) *An assessment of the actual or potential effect on the environment of the activity:*
- (c) *If the activity includes the use of hazardous substances and installations, an assessment of any risks to the environment that are likely to arise from such use:*
- (d) *If the activity includes the discharge of any contaminant, a description of—*
 - (i) *the nature of the discharge and the sensitivity of the receiving environment to adverse effects; and*
 - (ii) *any possible alternative methods of discharge, including discharge into any other receiving environment:*
- (e) *A description of the mitigation measures (safeguards and contingency plans where relevant) to be undertaken to help or prevent or reduce the actual or potential effect:*
- (f) *Identification of the persons affected by the activity, any consultation undertaken, and any response to the views of any persons consulted:*
- (g) *If the scale and significance of the activity's effects are such that monitoring is required, a description of how and by whom the effects will be monitored if the activity is approved:*
- (h) *If the activity will, or is likely to, have adverse effects that are more than minor on the exercise of a protected customary right, a description of possible alternative locations or methods for the exercise of the activity (unless written approval for the activity is given by the protected customary rights group).*

You should also include:

- (a) *An assessment of the activity against any relevant provisions of any relevant objectives, policies, or rules:*
- (b) *Any information specified to be included in the application in accordance with the relevant regional plan:*
- (c) *For an application to replace an existing consent, an assessment of the value of the investment of the existing consent holder:*

An assessment of effects **must** address the following matters:

- (a) *any effect on those in the neighbourhood and, where relevant, the wider community, including any social, economic, or cultural effects:*
- (b) *any physical effect on the locality, including any landscape and visual effects:*
- (c) *any effect on ecosystems, including effects on plants or animals and any physical disturbance of habitats in the vicinity:*
- (d) *any effect on natural and physical resources having aesthetic, recreational, scientific, historical, spiritual, or cultural value, or other special value, for present or future generations:*
- (e) *any discharge of contaminants into the environment, including any unreasonable emission of noise, and options for the treatment and disposal of contaminants:*
- (f) *any risk to the neighbourhood, the wider community, or the environment through natural hazards or the use of hazardous substances or hazardous installations.*

8 Affected Parties

Please attach written approval from parties who may be affected by your activity. *Written Approval of an Affected Party* forms are available on the Environment Southland website. During the processing of your application, Council may determine that additional approvals are required.

Checklist: Have you included the following?

- Payment of the required deposit (*see attached fee schedule*) To be invoiced directly to Alliance
- Written approval from all potentially affected parties (*forms available from the Environment Southland website*)
- Site plan/location map/sketch of the proposed activity Refer to AEE and Appendices
- A copy of the Certificate of Incorporation (*where applicant is a company*) Refer Annexure 1
- Part B form(s) specific to your activity and/or a separate assessment of environmental effects (AEE)

Notes:

- (a) *If your application does not contain the necessary information and the appropriate fee, Environment Southland must return the application.*
- (b) *Council cannot accept electronic lodgement of applications at this time.*

Signature of applicant

I hereby certify that to the best of my knowledge and belief, the information given in this application is true and correct.

I undertake to pay all actual and reasonable application processing costs incurred by Environment Southland.

Name (block capitals) FRANCES WISE

Signed _____ Date 21 December 2015

(Signature of applicant or person authorised to sign on behalf of applicant)

Fee Schedule

The Council's user charges are fixed under Section 36 of the Resource Management Act 1991. Refunds may be given, or additional fees are charged, where appropriate.

| Deposits | |
|---|---------|
| Bores and wells Whitebait stands Transfer of a consent from one person to another Administrative variation | \$100 |
| Certificate of Compliance | \$500 |
| Transfer an activity from one site to another Any other change/variation to an existing consent | \$1,350 |
| All other non-notified applications | \$1,350 |
| Concurrent non-notified consent applications | \$150 |
| Applications that require notification or limited notification | \$2,000 |

Note: The fees shown in Table 1 are deposits to be paid at the time of application. Due to the complexity of these activities, this deposit will not usually cover the full cost of processing the application. Further costs may be incurred relating to staff time, disbursements, legal charges, consultation fees, and hearing commissioner fees.

Concurrent – means for additional permits in respect of the same site, activity, applicant, time of application, and closely related effect as the first application.

Environment Southland accepts payment in the forms of cash, Eftpos, cheque, or electronic transfer. All electronic transfers must include the applicant's name and "consent application" as a reference. Please make electronic payments to: Environment Southland, 01-0961-0018998-00.



COMPANIES OFFICE

Certificate of Incorporation

ALLIANCE GROUP LIMITED

154786

NZBN: 9429040268064

This is to certify that ALLIANCE GROUP LIMITED was incorporated under the Companies Act 1933 on the 2nd day of March 1948 and was reregistered to become a company under the Companies Act 1993 on the 24th day of April 1997.

Mandy McDonald



Registrar of Companies
15th day of December 2015

For further details relating to this company check
<http://www.companies.govt.nz/co/154786>
Certificate generated 15 December 2015 03:07 PM NZDT



SCAN TO VIEW
OUR REGISTRATION DETAILS

Application to Discharge to Land (PART B) (non-dairy activity)



environment
SOUTHLAND

Te Taiao Tonga

This application is made under Section 88 of the Resource Management Act 1991

A complete Part A form needs to be provided with this Part B form. The purpose of this Part B form is to provide applicants with guidance on information that is required under the Resource Management Act 1991. These forms are to act as a guide only and Environment Southland reserves the right to request additional information. **Please also refer to Appendix A of the Regional Water Plan for Southland, 2010.**

To: Environment Southland
Private Bag 90116
Invercargill 9840

1 What is this application for?

- The discharge of contaminants to land where it may enter water
 The discharge of contaminants to land

2 What duration of resource consent is sought? 35 years

3 Please describe the proposed activity:

The discharge of treated wastewater to land via an irrigation system. As part of the existing wastewater treatment process it is proposed that up to 3000m³/day of treated wastewater may be discharged onto farm land owned by Alliance. Around 100ha of land is available for irrigation purposes. Discharge is accomplished via a K-line pod irrigation system and is used periodically as part of the current wastewater treatment disposal process in order to reduce the extent of the discharge of treated effluent to water. This consent is necessary, until such time as the proposed progressive upgrades to the wastewater treatment plant are completed. Refer to the AEE for further detail and location of this activity.

4 Please describe the following elements of the proposed discharge to land:

(a) The chemical content (including heavy metals or toxic substances, nitrates, ammonia and dissolved reactive phosphorous)

Treated wastewater from Alliance's Lorneville Plant which contains suspended solids, BOD, ammoniacal nitrogen, nitrogen, phosphorus and faecal coliforms. Refer to the AEE and Appendix P for a more detailed description.

(b) Number of discharge points K Line irrigation

(c) Location/area of each discharge point Refer to AEE for area the treated wastewater is applied to.

(d) Maximum rate/thickness of application 5mm/hour

(e) If the proposed discharge is continuous or intermittent The wastewater irrigation occurs over a period of approximately 50 days each processing season, and this occurs during the summer and early winter period. Daily applications vary depending on the Plant and the weather conditions.

5 What is the proposed frequency and seasonality of discharge (e.g. hours, days, weeks and months that the discharge will occur). Please describe any variations, where appropriate.

As noted above, the wastewater irrigation occurs over a period of approximately 50 days each season, and this occurs during the summer and early winter period. The discharge of treated wastewater to land via irrigation occurs when the soil and weather conditions are suitable (usually during dry weather and soil conditions), and is utilised in order to reduce the amount of treated effluent entering the Makarewa River. The treated effluent also serves a dual purpose in that it provides a source of fertiliser for the farmland owned by Alliance.

6 Has there been any discharge monitoring carried out in relation to this proposal, or do you have access to any background monitoring? If yes, please describe and attach results.

Yes as part of the existing consent requirements (200034). Refer to the AEE and Appendix P.

7 What is the depth to groundwater beneath the disposal area? Please also discuss seasonal variations in groundwater depth.

Varies - refer to Appendix P.

8 Has a subsoil investigation been carried out? Yes No

Note: All bore holes and test pits should be drilled in the location of the proposed disposal field and/or reserve area and their location marked on the appended site plan. Generally a minimum of three bore holes or test pits are required for soil category assessment. A separate resource consent may be required for your investigative bore(s).

9 Please provide details of the investigation bore(s)/test pits.

| | | |
|--------------------------|-----------------------------------|------------------------|
| <input type="checkbox"/> | Test pit (maximum depth) _____ m | No of test pits _____ |
| <input type="checkbox"/> | Bore hole (maximum depth) _____ m | No of bore holes _____ |
| <input type="checkbox"/> | Other (specify) | |
| <input type="checkbox"/> | N/A | |

Refer to Appendix P for detail of existing bores and soil, groundwater monitoring undertaken to date.

10 Has percolation or soil infiltration testing been carried out and is the test report attached?

No

Yes, please specify method Refer to Appendix P

K value: _____

11 What is the discharge site soil category (based on the dominant soil type in the first 1 m depth)?

| Soil Category | Description | Tick |
|---------------|-----------------------|------|
| 1 | Gravels and sands | |
| 2 | Sandy loams | ✓ |
| 3 | Loams | |
| 4 | Clay loams | |
| 5 | Light clays | |
| 6 | Medium to heavy clays | |

Existing Environment

12 Are any of the following features found within the existing environment of the proposed activity? Describe these features in the space below, along with details of the assessment undertaken to determine the presence of these features.

- (a) Signs of instream life (e.g. fish, eels, bullies, crayfish, native birds, frogs)?
- (b) Areas where food is gathered from watercourses (e.g. watercress, eels, wildfowl)?
- (c) Wetlands, wildlife habitats or bird nesting habitats (e.g. swamp areas)?
- (d) Other activities occurring in the area (e.g. commercial activity, fishing, swimming, boating)?
- (e) Areas of particular aesthetic, cultural or scientific value (e.g. archaeological sites)?
- (f) Other waste discharges, any water takes and/or monitoring sites?

| Yes | No |
|-----|----|
| ✓ | |
| | ✓ |
| | ✓ |
| | ✓ |
| | ✓ |
| ✓ | |

The existing environment is described in detail in the AEE. It is noted that the site is bound by the Makarewa River to the west. The Plant also discharges treated wastewater to the Makarewa River, and there are monitoring sites associated with this.

Please also include a map or site plan (and photographs if necessary) showing the location of roads and property boundaries, water bodies, wetlands and other wildlife habitats, buildings and residential properties, location of discharge points, any registered drinking water takes, and the location of any sensitive sites (e.g. historic places, sites of importance to iwi, public gathering areas etc.) in proximity to the site.

Assessment of Effects

- 13 Please describe any possible long term or short term effects the discharge may have on the quality of the receiving environment and including effects on water bodies, biota (plant and animal life), soil quality, and odour and dust effects.**

Refer to the AEE which is attached.

- 14 Pursuant to Schedule 4 of the Resource Management Act, 1991, there are a number of matters that must be addressed by an assessment of environmental effects. Please discuss what effects the proposed activity will have on the following:**

- (a) any effect on those in the neighbourhood and, where relevant, the wider community, including any social, economic, or cultural effects

Refer to the AEE attached.

(b) any physical effect on the locality, including any landscape and visual effects

Refer to the AEE attached.

(c) any effect on ecosystems, including effects on plants or animals and any physical disturbance of habitats in the vicinity

Refer to the AEE attached.

(d) any effect on natural and physical resources having aesthetic, recreational, scientific, historical, spiritual, or cultural value, or other special value, for present or future generations

Refer to the AEE attached.

(e) any discharge of contaminants into the environment, including any unreasonable emission of noise, and options for the treatment and disposal of contaminants

Refer to the AEE attached.

- (f) any risk to the neighbourhood, the wider community, or the environment through natural hazards or the use of hazardous substances or hazardous installations

N/A.

- 15 Please include a description of the monitoring or mitigation measures (including safeguards and contingency plans where relevant) to be undertaken to help avoid, reduce, remedy or mitigate the actual or potential effects on environmental features and values. For example, if relevant, please include the following:**

- (a) treatment of the contaminants prior to discharge;
- (b) buffer distances from water bodies, sloping land, site boundaries;
- (c) details of any storage to be provided to enable deferred irrigation;
- (d) a description of the monitoring system to be used for checking and recording the quality and quantity of the discharge. Please include how and when the monitoring will occur, and by whom; and
- (e) contingency planning – describe how the equipment controlling the discharge will be operated and maintained to prevent equipment failure, and what measures will be implemented to ensure that the effects of any malfunction are remedied.

Refer to the AEE attached.

16 Please justify the term of consent sought with regard to any effects on the environment.

Refer to the AEE attached.

17 Please include a description of any possible alternative locations or methods for undertaking the activity and why these alternatives have not been selected.

Refer to the AEE attached.

18 Please include evidence of any consultation undertaken for this application. This may include (but not be limited to) consultation with adjoining landowners, other consent holders in the immediate area, iwi (e.g. Te Rūnanga O Ngāi Tahu, Te Ao Marama Inc), government departments/ministries (e.g. DOC), territorial authorities and recreational associations.

Refer to the AEE attached.

Please note that in accordance with Schedule 4 of the RMA, you may also be required to provide an assessment of whether or not the proposed activity is contrary to any of the relevant provisions of the following documents.

- (a) *Regional Policy Statement for Southland, 1997 (and any proposed/subsequent versions)*
- (b) *Regional Water Plan for Southland, 2010 (and any proposed/subsequent versions)*
- (c) *National Policy Statement for Freshwater Management, 2014*
- (d) *National Environmental Standard for Sources of Human Drinking Water, 2007*

Staff are able to advise whether this is required, as it is dependant on the location, scale and complexity of your proposal. We invite you to come in for a pre-application meeting with Environment Southland consents staff to discuss this.

END OF FORM

Application to Discharge to Land (PART B) (non-dairy activity)



environment
SOUTHLAND
Te Taiao Tonga

This application is made under Section 88 of the Resource Management Act 1991

A complete Part A form needs to be provided with this Part B form. The purpose of this Part B form is to provide applicants with guidance on information that is required under the Resource Management Act 1991. These forms are to act as a guide only and Environment Southland reserves the right to request additional information. **Please also refer to Appendix A of the Regional Water Plan for Southland, 2010.**

To: Environment Southland
Private Bag 90116
Invercargill 9840

1 What is this application for?

- The discharge of contaminants to land where it may enter water
 The discharge of contaminants to land

2 What duration of resource consent is sought? 35 years

3 Please describe the proposed activity:

Discharge of biosolids to land and biosolids and stockyard solids to an onsite monofill. The wastewater upgrade that Alliance is proposing (which is described in detail in the AEE) will generate biosolids and the disposal of these biosolids to land is the preferred approach. Under this approach, land would no longer be utilised for wastewater disposal (ie. via irrigation), and discharge of all (higher quality) wastewater would be to the Makarewa River. Biosolids generated by the upgraded treatment system would be dewatered and then disposed of onto land at sustainable nitrogen loading rates to ensure that the nutrients are utilised on the grazed pastoral lands surrounding the Plant.

4 Please describe the following elements of the proposed discharge to land:

(a) The chemical content (including heavy metals or toxic substances, nitrates, ammonia and dissolved reactive phosphorous)

The material would be treated and dewatered. It will contain solids, BOD, ammonioacal nitrogen, nitrogen, phosphorous and faecal coliforms.

(b) Number of discharge points

Spread to the land identified in the AEE, and onsite monofill

(c) Location/area of each discharge point

Spread to the land identified in the AEE, and onsite monofill

(d) Maximum rate/thickness of application

(e) If the proposed discharge is continuous or intermittent

Refer below

5 **What is the proposed frequency and seasonality of discharge (e.g. hours, days, weeks and months that the discharge will occur). Please describe any variations, where appropriate.**

Dewatered biosolids is to be applied to the areas of farmland shown in the AEE, at an annual loading rate of no greater than the plant available nitrogen (PAN) rate of 140kg N/ha/yr or 250kg N/ha/yr. The loading rate of 250 kg total nitrogen per hectare per year (kg N/ha.yr) is approximately 23 tonnes / ha /yr of dewatered biosolids at 18% solids content. It is proposed that this shall be applied in no less than two applications per year. Alliance is proposing to spread the biosolids as evenly as possible, and this will be undertaken using specialized equipment. Spreading will not occur during certain weather conditions. Biosolids may also be discharged to an onsite monofill (refer to the AEE for location details). This shall be used as a contingency disposal site available to receive dewatered solids from the stockyards (disposal of solids from the stockyards to land is already consented 206363) and dewatered biosolids from the Wastewater Treatment Plant.

6 **Has there been any discharge monitoring carried out in relation to this proposal, or do you have access to any background monitoring? If yes, please describe and attach results.**

Yes, refer to the AEE and Appendices P and Q

7 **What is the depth to groundwater beneath the disposal area? Please also discuss seasonal variations in groundwater depth.**

Varies, refer to Appendix P.

8 **Has a subsoil investigation been carried out?** Yes No

Note: All bore holes and test pits should be drilled in the location of the proposed disposal field and/or reserve area and their location marked on the appended site plan. Generally a minimum of three bore holes or test pits are required for soil category assessment. A separate resource consent may be required for your investigative bore(s).

9 **Please provide details of the investigation bore(s)/test pits.**

| | | |
|--|-----------------------------------|------------------------|
| | Test pit (maximum depth) _____ m | No of test pits _____ |
| | Bore hole (maximum depth) _____ m | No of bore holes _____ |
| | Other (specify) _____ | |
| | N/A _____ | |

Refer Appendices P and Q for details.

10 Has percolation or soil infiltration testing been carried out and is the test report attached?

No

Yes, please specify method

Refer Appendix P.

K value: _____

11 What is the discharge site soil category (based on the dominant soil type in the first 1 m depth)?

| Soil Category | Description | Tick |
|---------------|-----------------------|------|
| 1 | Gravels and sands | |
| 2 | Sandy loams | ✓ |
| 3 | Loams | |
| 4 | Clay loams | |
| 5 | Light clays | |
| 6 | Medium to heavy clays | |

Existing Environment

12 Are any of the following features found within the existing environment of the proposed activity? Describe these features in the space below, along with details of the assessment undertaken to determine the presence of these features.

- (a) Signs of instream life (e.g. fish, eels, bullies, crayfish, native birds, frogs)?
- (b) Areas where food is gathered from watercourses (e.g. watercress, eels, wildfowl)?
- (c) Wetlands, wildlife habitats or bird nesting habitats (e.g. swamp areas)?
- (d) Other activities occurring in the area (e.g. commercial activity, fishing, swimming, boating)?
- (e) Areas of particular aesthetic, cultural or scientific value (e.g. archaeological sites)?
- (f) Other waste discharges, any water takes and/or monitoring sites?

| Yes | No |
|-----|----|
| ✓ | |
| | ✓ |
| | ✓ |
| | ✓ |
| ✓ | ✓ |
| ✓ | |

Refer to the AEE for detail. The Plant and its farmland is bounded by the Makarewa River to the west. Alliance currently discharges wastewater via irrigation to the subject land and the effects of this activity are well understood (refer Appendix F). An investigation into the effects of the ponds on surrounding groundwater has also been undertaken (refer Appendix Q). In addition to the discharges to land that are proposed, Alliance is also proposing to discharge treated wastewater to the Makarewa River.

Please also include a map or site plan (and photographs if necessary) showing the location of roads and property boundaries, water bodies, wetlands and other wildlife habitats, buildings and residential properties, location of discharge points, any registered drinking water takes, and the location of any sensitive sites (e.g. historic places, sites of importance to iwi, public gathering areas etc.) in proximity to the site.

Assessment of Effects

- 13 Please describe any possible long term or short term effects the discharge may have on the quality of the receiving environment and including effects on water bodies, biota (plant and animal life), soil quality, and odour and dust effects.**

Refer to the AEE.

- 14 Pursuant to Schedule 4 of the Resource Management Act, 1991, there are a number of matters that must be addressed by an assessment of environmental effects. Please discuss what effects the proposed activity will have on the following:**

- (a) any effect on those in the neighbourhood and, where relevant, the wider community, including any social, economic, or cultural effects

Refer to the AEE.

(b) any physical effect on the locality, including any landscape and visual effects

Refer to the AEE.

(c) any effect on ecosystems, including effects on plants or animals and any physical disturbance of habitats in the vicinity

Refer to the AEE.

(d) any effect on natural and physical resources having aesthetic, recreational, scientific, historical, spiritual, or cultural value, or other special value, for present or future generations

Refer to the AEE.

(e) any discharge of contaminants into the environment, including any unreasonable emission of noise, and options for the treatment and disposal of contaminants

Refer to the AEE.

- (f) any risk to the neighbourhood, the wider community, or the environment through natural hazards or the use of hazardous substances or hazardous installations

N/A.

- 15 **Please include a description of the monitoring or mitigation measures (including safeguards and contingency plans where relevant) to be undertaken to help avoid, reduce, remedy or mitigate the actual or potential effects on environmental features and values. For example, if relevant, please include the following:**

- (a) treatment of the contaminants prior to discharge;
- (b) buffer distances from water bodies, sloping land, site boundaries;
- (c) details of any storage to be provided to enable deferred irrigation;
- (d) a description of the monitoring system to be used for checking and recording the quality and quantity of the discharge. Please include how and when the monitoring will occur, and by whom; and
- (e) contingency planning – describe how the equipment controlling the discharge will be operated and maintained to prevent equipment failure, and what measures will be implemented to ensure that the effects of any malfunction are remedied.

Refer to the AEE.

16 Please justify the term of consent sought with regard to any effects on the environment.

Refer to the AEE.

17 Please include a description of any possible alternative locations or methods for undertaking the activity and why these alternatives have not been selected.

Refer to the AEE.

18 Please include evidence of any consultation undertaken for this application. This may include (but not be limited to) consultation with adjoining landowners, other consent holders in the immediate area, iwi (e.g. Te Rūnanga O Ngāi Tahu, Te Ao Marama Inc), government departments/ministries (e.g. DOC), territorial authorities and recreational associations.

Refer to the AEE.

Please note that in accordance with Schedule 4 of the RMA, you may also be required to provide an assessment of whether or not the proposed activity is contrary to any of the relevant provisions of the following documents.

- (a) Regional Policy Statement for Southland, 1997 (and any proposed/subsequent versions)*
- (b) Regional Water Plan for Southland, 2010 (and any proposed/subsequent versions)*
- (c) National Policy Statement for Freshwater Management, 2014*
- (d) National Environmental Standard for Sources of Human Drinking Water, 2007*

Staff are able to advise whether this is required, as it is dependant on the location, scale and complexity of your proposal. We invite you to come in for a pre-application meeting with Environment Southland consents staff to discuss this.

END OF FORM

Application to Discharge to Land (PART B) (non-dairy activity)



environment
SOUTHLAND
Te Taiao Tonga

This application is made under Section 88 of the Resource Management Act 1991

A complete Part A form needs to be provided with this Part B form. The purpose of this Part B form is to provide applicants with guidance on information that is required under the Resource Management Act 1991. These forms are to act as a guide only and Environment Southland reserves the right to request additional information. Please also refer to Appendix A of the Regional Water Plan for Southland, 2010.

To: Environment Southland
Private Bag 90116
Invercargill 9840

1 What is this application for?

- The discharge of contaminants to land where it may enter water
- The discharge of contaminants to land

2 What duration of resource consent is sought? 35 years

3 Please describe the proposed activity:

Alliance manages the treated wastewater discharge to ensure it complies with its existing consent conditions (202347) and at times of low river flow during summer months, Alliance is able to reduce or occasionally hold the discharge for periods of up to 15 days. During extended periods of extreme drought and very low river flow, resource consent 202347 allows Alliance to discharge treated effluent to land for temporary storage purposes. Alliance has not had to utilise this emergency storage area in the past 13 years of operation, however it is important to have the ability to do so during extreme drought, when farmers may be forced to de-stock their farms and for animal welfare reasons stock must be slaughtered. During such circumstances, the treated wastewater would be discharged from Aerobic Pond 5 to a storage area, where it would be retained until it can be discharged to the Makarewa River later in the processing season. It is intended that this activity will only occur when the conditions in the Makarewa River have limited the discharge to such an extent that the use of the storage area is deemed to be a precautionary measure. The site of the temporary storage area is shown on the attached AEE and has an area of approximately 8.3ha. If filled to a depth of 1.0 metre this represents storage of 83,000m³ and at the peak rates of production of wastewater could store about 5 days of total wastewater production. When discharge is reduced, rather than stopped to avoid adverse effects on the river, it is anticipated that this storage will extend production by approximately 10 days.

4 Please describe the following elements of the proposed discharge to land:

(a) The chemical content (including heavy metals or toxic substances, nitrates, ammonia and dissolved reactive phosphorous)

The wastewater will be treated, but it will contain suspended solids, BOD, ammoniacal nitrogen, nitrogen, phosphorous, faecal coliforms.

(b) Number of discharge points Refer to AEE for a description of the location

(c) Location/area of each discharge point _____

(d) Maximum rate/thickness of application _____

(e) If the proposed discharge is continuous or intermittent _____

- 5 What is the proposed frequency and seasonality of discharge (e.g. hours, days, weeks and months that the discharge will occur). Please describe any variations, where appropriate.

As noted above this consent is only necessary during emergency drought conditions. It is therefore anticipated to be used on a very infrequent basis.

- 6 Has there been any discharge monitoring carried out in relation to this proposal, or do you have access to any background monitoring? If yes, please describe and attach results.

Prior to the existing consent being issued, an investigation into the ability of the land's suitability to hold the treated wastewater for a short term was assessed and found to be suitable for this purpose, without causing significant adverse effects on the underlying soil or groundwater resource.

- 7 What is the depth to groundwater beneath the disposal area? Please also discuss seasonal variations in groundwater depth.

- 8 Has a subsoil investigation been carried out? Yes No not specifically for this consent
Note: All bore holes and test pits should be drilled in the location of the proposed disposal field and/or resource not specifically for this consent marked on the appended site plan. Generally a minimum of three bore holes or test pits are required for soil category assessment. A separate resource consent may be required for your investigative bore(s).

- 9 Please provide details of the investigation bore(s)/test pits.

| | | |
|--|-----------------------------------|------------------------|
| | Test pit (maximum depth) _____ m | No of test pits _____ |
| | Bore hole (maximum depth) _____ m | No of bore holes _____ |
| | Other (specify) | |
| | N/A | |

10 Has percolation or soil infiltration testing been carried out and is the test report attached?

No
 Yes, please specify method

Yes, please specify method

Not for this consent due to the nature of it being for short term,

K value: _____

contingency purposes.

11 What is the discharge site soil category (based on the dominant soil type in the first 1 m depth)?

| Soil Category | Description | Tick |
|---------------|-----------------------|------|
| 1 | Gravels and sands | |
| 2 | Sandy loams | ✓ |
| 3 | Loams | |
| 4 | Clay loams | |
| 5 | Light clays | |
| 6 | Medium to heavy clays | |

Existing Environment

12 Are any of the following features found within the existing environment of the proposed activity? Describe these features in the space below, along with details of the assessment undertaken to determine the presence of these features.

- (a) Signs of instream life (e.g. fish, eels, bullies, crayfish, native birds, frogs)?
- (b) Areas where food is gathered from watercourses (e.g. watercress, eels, wildfowl)?
- (c) Wetlands, wildlife habitats or bird nesting habitats (e.g. swamp areas)?
- (d) Other activities occurring in the area (e.g. commercial activity, fishing, swimming, boating)?
- (e) Areas of particular aesthetic, cultural or scientific value (e.g. archaeological sites)?
- (f) Other waste discharges, any water takes and/or monitoring sites?

| Yes | No |
|-----|----|
| ✓ | |
| | ✓ |
| | ✓ |
| | ✓ |
| | ✓ |
| ✓ | |

The proposed short term contingency area is adjacent to the Makarewa River. Refer to the AEE.

Please also include a map or site plan (and photographs if necessary) showing the location of roads and property boundaries, water bodies, wetlands and other wildlife habitats, buildings and residential properties, location of discharge points, any registered drinking water takes, and the location of any sensitive sites (e.g. historic places, sites of importance to iwi, public gathering areas etc.) in proximity to the site.

Assessment of Effects

- 13 **Please describe any possible long term or short term effects the discharge may have on the quality of the receiving environment and including effects on water bodies, biota (plant and animal life), soil quality, and odour and dust effects.**

Refer to the AEE.

- 14 **Pursuant to Schedule 4 of the Resource Management Act, 1991, there are a number of matters that must be addressed by an assessment of environmental effects. Please discuss what effects the proposed activity will have on the following:**

- (a) any effect on those in the neighbourhood and, where relevant, the wider community, including any social, economic, or cultural effects

Refer to the AEE.

(b) any physical effect on the locality, including any landscape and visual effects

Refer to the AEE.

(c) any effect on ecosystems, including effects on plants or animals and any physical disturbance of habitats in the vicinity

Refer to the AEE.

(d) any effect on natural and physical resources having aesthetic, recreational, scientific, historical, spiritual, or cultural value, or other special value, for present or future generations

Refer to the AEE.

(e) any discharge of contaminants into the environment, including any unreasonable emission of noise, and options for the treatment and disposal of contaminants

Refer to the AEE.

- (f) any risk to the neighbourhood, the wider community, or the environment through natural hazards or the use of hazardous substances or hazardous installations

N/A

- 15 **Please include a description of the monitoring or mitigation measures (including safeguards and contingency plans where relevant) to be undertaken to help avoid, reduce, remedy or mitigate the actual or potential effects on environmental features and values. For example, if relevant, please include the following:**

- (a) treatment of the contaminants prior to discharge;
- (b) buffer distances from water bodies, sloping land, site boundaries;
- (c) details of any storage to be provided to enable deferred irrigation;
- (d) a description of the monitoring system to be used for checking and recording the quality and quantity of the discharge. Please include how and when the monitoring will occur, and by whom; and
- (e) contingency planning – describe how the equipment controlling the discharge will be operated and maintained to prevent equipment failure, and what measures will be implemented to ensure that the effects of any malfunction are remedied.

Refer to the AEE.

- 16 Please justify the term of consent sought with regard to any effects on the environment.

Refer to the AEE.

- 17 Please include a description of any possible alternative locations or methods for undertaking the activity and why these alternatives have not been selected.

Refer to the AEE.

- 18 Please include evidence of any consultation undertaken for this application. This may include (but not be limited to) consultation with adjoining landowners, other consent holders in the immediate area, iwi (e.g. Te Rūnanga O Ngāi Tahu, Te Ao Marama Inc), government departments/ministries (e.g. DOC), territorial authorities and recreational associations.

Please note that in accordance with Schedule 4 of the RMA, you may also be required to provide an assessment of whether or not the proposed activity is contrary to any of the relevant provisions of the following documents.

- (a) *Regional Policy Statement for Southland, 1997 (and any proposed/ subsequent versions)*
- (b) *Regional Water Plan for Southland, 2010 (and any proposed/ subsequent versions)*
- (c) *National Policy Statement for Freshwater Management, 2014*
- (d) *National Environmental Standard for Sources of Human Drinking Water, 2007*

Staff are able to advise whether this is required, as it is dependant on the location, scale and complexity of your proposal. We invite you to come in for a pre-application meeting with Environment Southland consents staff to discuss this.

END OF FORM

Application to Discharge Contaminants to Air (PART B)



This application is made under Section 88 of the Resource Management Act 1991

A complete Part A form needs to be provided with this Part B form. The purpose of this Part B form is to provide applicants with guidance on information that is required under the Resource Management Act 1991. These forms are to act as a guide only and Environment Southland reserves the right to request additional information.

To: Environment Southland
Private Bag 90116
Invercargill 9840

1 What is this application for

- | | |
|-------------------------------------|---|
| <input checked="" type="checkbox"/> | Combustion process |
| <input type="checkbox"/> | Quarries/gravel extraction |
| <input type="checkbox"/> | Wood/pulp/fibreboard processing industries |
| <input type="checkbox"/> | Chemical manufacturing blending processes/electroplating |
| <input type="checkbox"/> | Abrasive blasting |
| <input type="checkbox"/> | Wool scourers and tanneries |
| <input type="checkbox"/> | Concrete manufacturing plants |
| <input type="checkbox"/> | Foundries |
| <input checked="" type="checkbox"/> | Rendering/processing of carcasses |
| <input type="checkbox"/> | Asphalt production |
| <input checked="" type="checkbox"/> | Wastewater treatment plant |
| <input checked="" type="checkbox"/> | Other. Please describe: <u>Odours from other elements of the onsite processing Plant facilities and activities (refer to the AEE)</u> |

2 What duration of resource consent is sought? 35 years

3 Please describe the following elements of the proposed discharge of contaminants to air:

- the process (identify all process stages during which contaminants are released into the air);
- the type and amount of raw materials used in the activity (including type and quality of fuel used);
- the product made from the activity;
- the equipment used in the process;
- the contaminants discharged to the atmosphere;
- concentration of contaminants in the discharge (ppm);
- number of discharge points;

- (h) location of each discharge point;
- (i) height of each discharge point (chimney/vent);
- (j) the discharge chimney/vent fitting, including the diameter of the fitting and any associated treatment infrastructure, such as bag houses; and
- (k) the velocity of discharge.

Discharges to air arise from:

- Discharges from the boiler operations;
- Discharges of odour associated with operations at the Plant including stockyards, rendering and fellmongery processes;
- Discharges of odour associated with the existing wastewater treatment system; and,
- Discharges of odour associated with the upgraded wastewater treatment system and the disposal of biosolids.

Two coal fired boilers provide steam to maintain Plant hot water supplies and for steam requirements in processes such as rendering. Lignite coal is currently sourced from Solid Energy's New Vale Mine. The boilers produce hot exhaust air streams containing combustion products and particulates. The latter arise due to a wide range of processes including fly ash carry over, un-combusted carbon (soot) and from the condensation of un-combusted organic volatiles. The main portion of the exhaust consists of nitrogen (N₂) and residual oxygen (O₂) from the combustion air. The primary products of combustion include carbon dioxide (CO₂), sulphur dioxide (SO₂), nitrogen dioxide (NO₂) and water vapour. There is also a range of products of incomplete combustion (PICs) that mainly include volatile organic compounds (VOCs), carbon monoxide (CO), nitrogen oxide (NO) and nitrous oxide (N₂O).

The individual boiler plants operate at varying rates throughout the day and year, relative to the processing occurring at the Plant.

Odours from the site can originate from on-site processes including blood processing, rendering, fellmongery and soup stock facilities, as well as the stockyards. A description of the potential on-site odours and assessment is undertaken later in this report.

Odours can also arise from the existing wastewater treatment facility. As is described elsewhere in this report, the existing wastewater treatment facility has an initial anaerobic pond stage which removes in excess of 80% of the inlet organic material. This is followed by treatment within mechanically, then naturally, aerated ponds before discharging to the Makarewa River. The anaerobic pond is the main potential source of odour arising from the existing wastewater treatment facility.

Potential odours could also be generated from the proposed upgrade to the wastewater treatment facility referred to above and discussed in detail later in this report. The odour sources could arise from the treatment facility as well as the disposal of biosolids to land and to an on-site monofill.

4 **What is the proposed frequency and seasonality of the discharge (e.g. usual duration of the discharge and days and hours of operation)? Please describe any variations, where appropriate.**

As noted above the boilers and other activities onsite operate throughout the day and year, relative to the Plant processing operations. This is described in more detail in the attached AEE.

5 **Has there been any discharge monitoring carried out in relation to this proposal, or do you have access to any background monitoring? If yes, please describe and attach results as appropriate.**

Yes, refer to the AEE and Appendices E, F, G, R in particular.

6 **Has any meteorological data relevant to the site been obtained? If yes, please describe.**

Yes, refer to Appendix E

7 **The following table provides additional specific information requirements for industry groups. Please include information on separate paper if required.**

| | |
|----------------------------|---|
| Combustion processes | <ul style="list-style-type: none">- Describe combustion processes and details of boiler or heat unit.- Heat release rate (kilowatts, megawatts).- Condition of boiler or heat unit, chimney and details of last service. |
| Quarries | <ul style="list-style-type: none">- Describe quarrying process.- Type of rock being mined.- Open cast extraction capacity (tonnes/hour).- Size reduction and screening capacity (tonnes/hour).- Storage capacity (tonnes/hour).- Quarry management plan. |
| Wood processing industries | <ul style="list-style-type: none">- Particulate emission test (to determine dust concentration and mass emission levels discharged from the stack, measured over three runs, with all wood sanding equipment working at same time). |
| Abrasive blasting | <ul style="list-style-type: none">- Describe details of blasting chamber, blasting media used. |

| | |
|-------------------------------|--|
| | - Particulate emission tests (to determine dust concentration and mass emission levels discharged from the vent, measured over three runs). |
| Wool scourers and tanneries | - Describe paint and solvents used (provide MSDS where available). - Paint and solvent usage rates. |
| Concrete manufacturing plants | - Give details of raw material capacity (tonnes/hour). |
| Rendering process | - Describe the high/low temperature and drying of the rendering process. - Describe combustion process (if applicable, i.e., type of combustion process, fuel used, fuel combustion rate, concentration). |

Existing Environment

8 Are any of the following features found within the existing environment of your proposed discharge to air? If so, describe these features in the space below. Please also describe any additional features of the surrounding environment where your proposed discharge will take place (for example existing vegetation, man-made features, wildlife, water features and topographical features).

| | Yes | No |
|---|-------------------------------------|-------------------------------------|
| (a) Residential and/or community areas? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| (b) Production land (e.g. crops, dairy farming)? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| (c) Recreational activities carried out (e.g., sports grounds, parks etc.)? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| (d) Sources of similar or other discharges to air? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| (e) Areas of particular aesthetic, scientific value (e.g. scenic views)? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| (f) Areas of significance to iwi? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| (g) Commercial activities (e.g. office blocks)? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Refer to the description in the attached AEE.

Please also include a map or site plan (and photographs if necessary) showing the site boundary, the location of roads and property boundaries, wetlands and other wildlife habitats, buildings and residential properties, location of processes and discharge points, and the location of any sensitive sites (e.g. historic places, sites of importance to iwi etc.) in proximity to your site.

Assessment of Effects

- 9 Please describe any possible odour, dust, smoke or haze that may result from your proposed discharge to air.

Refer to the AEE.

- 10 Please describe any possible long term or short term effects the discharge may have on the quality of the receiving air, persons living or working in the area and local biota (plant and animal life).

Refer to the AEE.

- 11 If hazardous substances and installations are involved, describe any risks to the environment which are likely to arise from their storage and/or use.

Refer to the AEE.

- 12 Pursuant to Schedule 4 of the Resource Management Act, 1991, there are a number of matters that must be addressed by an assessment of environmental effects. Please discuss what effects the proposed activity will have on the following:

- (a) any effect on those in the neighbourhood and, where relevant, the wider community, including any social, economic, or cultural effects

Refer to the AEE.

(b) any physical effect on the locality, including any landscape and visual effects

Refer to the AEE.

(c) any effect on ecosystems, including effects on plants or animals and any physical disturbance of habitats in the vicinity

Refer to the AEE.

(d) any effect on natural and physical resources having aesthetic, recreational, scientific, historical, spiritual, or cultural value, or other special value, for present or future generations

Refer to the AEE.

(e) any discharge of contaminants into the environment, including any unreasonable emission of noise, and options for the treatment and disposal of contaminants

Refer to the AEE.

- (f) any risk to the neighbourhood, the wider community, or the environment through natural hazards or the use of hazardous substances or hazardous installations

N/A

13 Please include a description of the monitoring or mitigation measures (including safeguards and contingency plans where relevant) to be undertaken to help avoid, reduce, remedy or mitigate the actual or potential effects on environmental features and values. For example, if relevant, please include the following:

- (a) a description of the monitoring system to be used for checking and recording the discharge and its effects. Please include how and when the monitoring will occur, and by whom;
- (b) contingency planning – describe how the equipment controlling the discharge will be operated and maintained to prevent equipment failure, and what measures will be implemented to ensure that the effects of the malfunction are remedied; and
- (c) a description of pollution control equipment or any other mitigation measures.

Refer to the AEE.

- 14 Please justify the scale of discharge and the term of consent sought with regard to any effects on the environment.

Refer to the AEE.

- 15 Please include a description of any possible alternative locations or methods for undertaking the activity and why these alternatives have not been selected.

Refer to the AEE.

- 16 Please include evidence of any consultation undertaken for this application. This may include (but not be limited to) consultation with adjoining landowners, other consent holders in the immediate area, iwi (e.g. Te Rūnanga O Ngāi Tahu, Te Ao Marama Inc), government departments/ministries (e.g. DOC), territorial authorities and recreational associations.

Refer to the AEE.

Please note that in accordance with Schedule 4 of the RMA, you may also be required to provide an assessment of whether or not the proposed activity is contrary to any of the relevant provisions of the following documents.

- (a) *National Environmental Standards for Air Quality, 2004 (amended 2011)*
- (b) *Regional Policy Statement for Southland, 1997 (and any proposed/ subsequent versions)*
- (c) *Regional Air Quality Plan for Southland, 1999 (and any proposed/ subsequent versions)*

Staff are able to advise whether this is required, as it is dependant on the location, scale and complexity of your proposal. We invite you to come in for a pre-application meeting with Environment Southland consents staff to discuss this.

END OF FORM

Application to Discharge to Water (PART B) (non-dairy activity)



This application is made under Section 88 of the Resource Management Act 1991

A complete Part A form needs to be provided with this Part B form. The purpose of this Part B form is to provide applicants with guidance on information that is required under the Resource Management Act 1991. These forms are to act as a guide only and Environment Southland reserves the right to request additional information. **Please also refer to Appendix A of the Regional Water Plan for Southland, 2010.**

To: Environment Southland
Private Bag 90116
Invercargill 9840

1 What is this application for?

- The discharge of water to water
- The discharge of contaminants to water

2 What duration of resource consent is sought? 35 years

3 Please describe the proposed activity. This should include the nature of the discharge and the name of the waterbody (if known):

Discharges to water (via the Boiler Ditch into the Makarewa River) arise from treated wastewater from the Plant operations and domestic sewage from Wallacetown that is also treated by the Plant. Please refer to the AEE for further detail. As detailed in the AEE, a comprehensive upgrade to the existing wastewater treatment system is proposed to be implemented by Year 15 of this consent. Revised limits for the wastewater quality and receiving water are proposed. Please refer to the AEE and proposed conditions for further description and details.

4 Please describe the following elements of the proposed discharge to water:

(a) Maximum rate of discharge litres per second
22,730 cubic metres per day
cubic metres per week
cubic metres per year

(b) Temperature (°C) Refer to the AEE and proposed conditions for details.

(c) pH Refer to the AEE and proposed conditions for details.

(d) Suspended Solids(g/m³) Refer to the AEE and proposed conditions for details.

(e) Biochemical Oxygen Demand (BOD₅) (g/m³) Refer to the AEE and proposed conditions for details.

(f) *E. Coli* (cfu/100 ml) Refer to the AEE and proposed conditions for details.

(g) The chemical content (including heavy metals or toxic substances, oils, nitrates, ammonia and dissolved reactive phosphorous)

The treated wastewater will contain suspended solids, ammoniacial nitrogen, phosphorous and faecal coliforms. Pre and post upgrade limits on the wastewater quality are proposed, refer to the AEE and proposed conditions.

(h) Number of discharge points The treated wastewater discharges via the Boiler Ditch to the Makarewa River.

(i) Location of each discharge point _____

5 What is the proposed frequency and seasonality of discharge (e.g. hours, days, weeks and months that the discharge will occur). Please describe any variations, where appropriate.

The discharge rates and frequency alter relative to the processing requirements of the Plant.

7 contd

Refer to the attached AEE for a detailed description of the existing environment and the effects of the proposed discharge.

Please also include a map or site plan (and photographs if necessary) showing the location of roads and property boundaries, wetlands and other wildlife habitats, buildings and residential properties, location of discharge points, any registered drinking water takes, and the location of any sensitive sites (e.g. historic places, sites of importance to iwi, public gathering areas etc.) in proximity to the site.

Assessment of Effects

- 8 Please describe the current water classification and any possible change in water quality (e.g. water discolouration, rise in water temperature) that may result from the proposed discharge.

Refer to the AEE.

- 9 Please describe any possible long term or short term effects the discharge may have on the quality of the receiving environment and local biota (plant and animal life).

Refer to the AEE.

10 Pursuant to Schedule 4 of the Resource Management Act, 1991, there are a number of matters that must be addressed by an assessment of environmental effects. Please discuss what effects the proposed activity will have on the following:

- (a) any effect on those in the neighbourhood and, where relevant, the wider community, including any social, economic, or cultural effects

Refer to the AEE.

- (b) any physical effect on the locality, including any landscape and visual effects

Refer to the AEE.

- (c) any effect on ecosystems, including effects on plants or animals and any physical disturbance of habitats in the vicinity

Refer to the AEE.

- (d) any effect on natural and physical resources having aesthetic, recreational, scientific, historical, spiritual, or cultural value, or other special value, for present or future generations

Refer to the AEE.

- (e) any discharge of contaminants into the environment, including any unreasonable emission of noise, and options for the treatment and disposal of contaminants

Refer to the AEE.

- (f) any risk to the neighbourhood, the wider community, or the environment through natural hazards or the use of hazardous substances or hazardous installations

Refer to the AEE.

- 11 **Please include a description of the monitoring or mitigation measures (including safeguards and contingency plans where relevant) to be undertaken to help avoid, reduce, remedy or mitigate the actual or potential effects on environmental features and values. For example, if relevant, please include the following:**
- (a) a description of the monitoring system to be used for checking and recording the quality and quantity of the discharge. Please include how and when the monitoring will occur, and by whom; and
 - (b) contingency planning – describe how the equipment controlling the discharge will be operated and maintained to prevent equipment failure, and what measures will be implemented to ensure that the effects of any malfunction are remedied.

Refer to the AEE.

- 12 Please justify the term of consent sought with regard to any effects on the environment.

Refer to the AEE.

- 13 Please include a description of any possible alternative locations or methods for undertaking activity and why these alternatives have not been selected.

Refer to the AEE.

- 14 Please include evidence of any consultation undertaken for this application. This may include (but not be limited to) consultation with adjoining landowners, other consent holders in the immediate area, iwi (e.g. Te Rūnanga O Ngāi Tahu, Te Ao Marama Inc.), government departments/ministries (e.g. DOC), territorial authorities and recreational associations.

Refer to the AEE.

Please note that in accordance with Schedule 4 of the RMA, you may also be required to provide an assessment of whether or not the proposed activity is contrary to any of the relevant provisions of the following documents.

- (a) *Regional Policy Statement for Southland, 1997 (and any proposed/ subsequent versions)*
- (b) *Regional Water Plan for Southland, 2010 (and any proposed/ subsequent versions)*
- (c) *National Policy Statement for Freshwater Management, 2014*
- (d) *National Environmental Standard for Sources of Human Drinking Water, 2007*

Staff are able to advise whether this is required, as it is dependant on the location, scale and complexity of your proposal. We invite you to come in for a pre-application meeting with Environment Southland consents staff to discuss this.

END OF FORM

Application for a Water Permit (PART B) - To Take and Use Surface Water



This application is made under Section 88 of the Resource Management Act 1991

A complete Part A form needs to be provided with this Part B form. The purpose of this Part B form is to provide applicants with guidance on information that is required under the Resource Management Act 1991. These forms are to act as a guide only and Environment Southland reserves the right to request additional information. Please also refer to Appendix A of the Regional Water Plan for Southland, 2010.

To: Environment Southland
Private Bag 90116
Invercargill 9840

1 What is this application for?

a new surface water take the renewal of existing consent no: 203358

2 What duration of resource consent is sought? 35 years

3 For what purpose(s) will the water be used?

Stock water and/or dairy shed use Irrigation Community supply Commercial/industrial
 Other

If other, please describe: _____

4 What type of water body(s) do you intend to take water from?

River/stream/creek Spring Pond Lake

Please refer to the Southland Regional Water Plan for definitions of these terms.

5 What is the name of the water body(s) of the proposed take(s)? Note: if the water body is unnamed then please note this and state which water body it flows into.

Oreti River

6 What are the GPS co-ordinates of the point(s) you propose to take water from?

Point 1: NZTM 2000 458 E 204 N

Point 2: NZTM 2000 E N

What type of storage facilities are proposed? Existing reservoirs for both treated and untreated water.
You may need a building permit and/or additional resource consents for the construction of storage facilities.

12 What type of water metering system is installed or proposed to be installed? Environment Southland prefers all takes for 5 L/s or more to be fitted with telemetry to report in line with the Resource Management (Measurement and Reporting of Water Takes) Regulations 2010.

Water meter Data logger Telemetry

13 If the take is from a river, stream, creek or modified watercourse, please answer the following:

(a) What is the natural 7 day mean annual low flow (MALF) of the watercourse? 7,700 l/s
 (b) What is the minimum recorded flow? 2,600 l/s

14 If the take is from a lake or pond, please answer the following:

(a) What is the natural 7 day MALF at the outlet of the lake/pond _____ l/s
 (b) What is the main source of water that fills the lake/pond?

Rainfall Springs Runoff from surrounding land
 Streams/rivers Groundwater Other

15 If you propose to use water for stock and/or dairy shed use – please answer the following:

(a) What type of animal and numbers of stock will be supplied with water for drinking?

| | | | | |
|--------------------------|-------------|---------------|-----------------------|-----------------|
| <input type="checkbox"/> | Sheep | Number: _____ | Water required: _____ | litres/head/day |
| <input type="checkbox"/> | Beef cattle | Number: _____ | Water required: _____ | litres/head/day |
| <input type="checkbox"/> | Dairy cows | Number: _____ | Water required: _____ | litres/head/day |
| <input type="checkbox"/> | Other | Number: _____ | Water required: _____ | litres/head/day |

(b) How much water do you require for your dairy shed? _____ litres/head/day

16 If you propose to use water to irrigate land – please answer the following:

(a) How many hectares of land will be irrigated? _____
 (b) What is the soil type(s) of the land being irrigated? _____
 (c) What will you be irrigating (i.e. crop, pasture etc)? _____

(d) What type of irrigation system will be used? _____

(e) What is the target application rate (mm/day and mm/year)? _____

(f) How have you calculated the amount of water you need? (attach separate pages if required)

17 If you propose to use water for industrial use – please answer the following:

(a) What type of industry will be using the water and how will the water be used?

Meat processing

(b) How have you calculated the amount of water you need? (attach separate pages if required)

Yes, refer to the attached AEE

18 If you propose to use water for commercial/domestic supply – please answer the following:

(a) What type of establishment will use the water?

| | |
|--------------------------|--|
| <input type="checkbox"/> | Households – number of households to be supplied: _____ |
| <input type="checkbox"/> | Camping grounds – maximum number of visitors and staff per year: _____ |
| <input type="checkbox"/> | Schools – maximum number of students and staff per year: _____ |
| <input type="checkbox"/> | Motel units – number and expected occupancy: _____ |
| <input type="checkbox"/> | Other: _____ |

(b) How have you calculated the amount of water you need? (attach separate pages if required)

19 If you propose to use water for any other purpose, please describe the amount of water you will need and how this has been calculated (please attach a separate sheet to this application, if necessary).

20 Please describe any other sources of water available for the property. Describe how much water is available and what it is used for.

Refer to the AEE.

21 Please also describe any measures you are proposing to minimise wastage of water and maximise its efficient use:

Refer to the AEE.

22 Does your proposed water take have any associated discharges? If yes, please describe.

Yes

No

Please note that a discharge into the environment may require a resource consent application to be made specifically for the discharge (please refer to the relevant Part B form).

Existing Environment

23 Are any of the following features found within the existing environment of the proposed activity? Describe these features in the space below, along with details of the assessment undertaken to determine the presence of these features.

| | Yes | No |
|--|-----|----|
| (a) Signs of instream life (e.g. fish, eels, bullies, crayfish, native birds, frogs)? | ✓ | |
| (b) Areas where food is gathered from a water body (e.g. watercress, eels, wildfowl)? | ✓ | |
| (c) Wetlands, wildlife habitats or bird nesting habitats (e.g. swamp areas)? | ✓ | |
| (d) Other activities occurring in the area (e.g. commercial activity, fishing, swimming, boating)? | ✓ | |
| (e) Areas of particular aesthetic, cultural, heritage or scientific value (e.g. archaeological sites)? | ✓ | |
| (f) Waste discharges and/or monitoring sites? | ✓ | |
| (g) Other water takes? | ✓ | |

Refer to the attached AEE.

Please also include a map or aerial photograph showing the following details:

- the location(s) of the existing points of take
- the location(s) of the proposed points of take
- the location of water measuring device(s) or system(s)
- the total property area boundary
- the area(s) to be irrigated (if relevant)
- the area(s) of community supply (if relevant)
- distances to any discharge activities
- other surface water bodies and wetlands nearby and the distance from the point of take(s) to them
- the coastline and the distance to it (if relevant)
- the location of any dairy sheds

Assessment of Effects

24 Will the take and use of surface water have any effects on the following:

- (a) Water quality, including temperature
- (b) Water availability and reliability to other users
- (c) River and stream flows, and wetland/lake/pond water levels

| Yes | No |
|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> |

*For those answered **No** above, please describe why there will be no effects. For those answered **Yes**, please describe how these effects may occur.*

Refer to the attached AEE.

25 Pursuant to Schedule 4 of the Resource Management Act, 1991, there are a number of matters that must be addressed by an assessment of environmental effects. Please discuss what effects the proposed activity will have on the following:

- (a) any effect on those in the neighbourhood and, where relevant, the wider community, including any social, economic, or cultural effects

Refer to the attached AEE.

- (b) any physical effect on the locality, including any landscape and visual effects

Refer to the attached AEE.

- (c) any effect on ecosystems, including effects on plants or animals and any physical disturbance of habitats in the vicinity

Refer to the attached AEE.

- (d) any effect on natural and physical resources having aesthetic, recreational, scientific, historical, spiritual, or cultural value, or other special value, for present or future generations

Refer to the attached AEE.

- (e) any discharge of contaminants into the environment, including any unreasonable emission of noise, and options for the treatment and disposal of contaminants

Refer to the attached AEE.

- (f) any risk to the neighbourhood, the wider community, or the environment through natural hazards or the use of hazardous substances or hazardous installations

N/A

- 26 Please include a description of the monitoring or mitigation measures (including safeguards and contingency plans where relevant) to be undertaken to help avoid, reduce, remedy or mitigate the actual or potential effects on environmental features and values. This must include:

- fish screening on the intake structure;
- measures for when minimum flow restrictions are in place;
- management of the take in accordance with flow sharing restrictions.

Refer to the attached AEE.

- 27 Please include a description of any possible alternative locations or methods for undertaking the activity and why these alternatives have not been selected.

Refer to the attached AEE.

- 28 Please include evidence of any consultation undertaken for this application. This may include (but not be limited to) consultation with adjoining landowners, other consent holders in the immediate area, iwi (e.g. Te Rūnanga O Ngāi Tahu, Te Ao Marama Inc.), government departments/ministries (e.g. DOC), territorial authorities and recreational associations.

Refer to the attached AEE.

Please note that in accordance with Schedule 4 of the RMA, you may also be required to provide an assessment of whether or not the proposed activity is contrary to any of the relevant provisions of the following documents.

- (a) *Regional Policy Statement for Southland, 1997 (and any proposed/ subsequent versions)*
- (b) *Regional Water Plan for Southland, 2010 (and any proposed/ subsequent versions)*
- (c) *National Policy Statement for Freshwater Management, 2014*
- (d) *National Environmental Standard for Sources of Human Drinking Water, 2007*

Staff are able to advise whether this is required, as it is dependant on the location, scale and complexity of your proposal. We invite you to come in for a pre-application meeting with Environment Southland consents staff to discuss this.

END OF FORM

Application for Land Use Consent for works in the beds or margins of watercourses or lakes (PART B)



environment
SOUTHLAND
Te Taiao Tonga

This application is made under Section 88 of the Resource Management Act 1991

A complete Part A form needs to be provided with this Part B form. The purpose of this Part B form is to provide applicants with guidance on information that is required under the Resource Management Act 1991. These forms are to act as a guide only and Environment Southland reserves the right to request additional information. Please also refer to Appendix A of the Regional Water Plan for Southland, 2010.

To: Environment Southland
Private Bag 90116
Invercargill 9840

1 What is this application for?

- Constructing a culvert
- Constructing a bridge or other crossing
- Use, reconstruct, alter, extend, remove or demolish any structure
- Disturbing the bed of a lake/watercourse e.g. works for diverting water
- Tree planting within 20 metres of a watercourse
- Deposit any substance e.g. rock, stockpiling
- Reclaiming or draining the bed of a lake/watercourse
- Removal or disturbance of vegetation e.g. willow clearing
- Floodbank works
- Other activities. Please specify _____

2 What duration of resource consent is sought? _____ 35 _____ years

3 What is the name of the water body within which these works will take place?

_____ Oreti River _____

4 Please describe how the works will be carried out. For structures, you must include engineering diagrams showing the dimensions of the structure, the position of the structure and the positions of associated groynes, gabions, and abutments etc.

The works are associated with the need to undertake periodic maintenance and clearance of debris in order to ensure Alliance's water intake structure and channel is clear.

Refer to the attached AEE.

Please include relevant photographs of the proposed location, looking both upstream and downstream of the site. Please also include a map and/or site plan showing the above mentioned features and the following:

- roads, property boundaries and neighbouring properties, along with the names of adjacent landowners;
- buildings or any other structures;
- location of proposed works;
- rivers, streams, creeks, drains.

8 In addition to the above description of the existing environment, please provide details on the following:

- river form at the proposed location of works (e.g. braided, meandering or incised)?
- is gravel aggrading or degrading?
- are there any signs of riverbank erosion?
- has the river changed course since any other works have been carried out on this stretch of the river?

Please provide cross sections and any other supportive evidence as required.

Refer to the attached AEE.

Assessment of Effects

- 9 **How will the proposed works/structures alter river flows during flood or low flow events?**

Refer to the attached AEE.

- 10 **How will the proposed works affect river form? How will the proposed works affect the overall river catchment? Please consider the downstream effects of the proposed works on the river form and behaviour.** For example, will the proposed works increase the risk of subsidence, erosion, inundation, aggradation and/or degradation effects? Please describe the effects and provide quantitative supportive evidence.

Refer to the attached AEE.

- 11 **Are there any structures in/over/next to the water body in the vicinity of the proposed works? If yes, will the works have any effect on these structures? Please provide specific details.**

Refer to the attached AEE.

- 12 **Pursuant to Schedule 4 of the Resource Management Act, 1991, there are a number of matters that must be addressed by an assessment of environmental effects. Please discuss what effects the proposed activity will have on the following:**

- (a) any effect on those in the neighbourhood and, where relevant, the wider community, including any social, economic, or cultural effects

Refer to the attached AEE.

- (b) any physical effect on the locality, including any landscape and visual effects

Refer to the attached AEE.

- (c) any effect on ecosystems, including effects on plants or animals and any physical disturbance of habitats in the vicinity

Refer to the attached AEE.

- (d) any effect on natural and physical resources having aesthetic, recreational, scientific, historical, spiritual, or cultural value, or other special value, for present or future generations

Refer to the attached AEE.

- (e) any discharge of contaminants into the environment, including any unreasonable emission of noise, and options for the treatment and disposal of contaminants

Refer to the attached AEE.

- (f) any risk to the neighbourhood, the wider community, or the environment through natural hazards or the use of hazardous substances or hazardous installations

N/A

- 13 Please include a description of the monitoring or mitigation measures (including safeguards and contingency plans where relevant) to be undertaken to help avoid, reduce, remedy or mitigate the actual or potential effects on environmental features and values.

Refer to the attached AEE.

- 14 Please describe how you will minimise the release of silt, sediment, concrete and other contaminants into water.

Refer to the attached AEE.

- 15 Please include a description of any possible alternative locations or methods for undertaking the activity and why these alternatives have not been selected.

Refer to the attached AEE.

- 16 Please include evidence of any consultation undertaken for this application. This may include (but not be limited to) consultation with adjoining landowners, other consent holders in the immediate area, iwi (e.g. Te Rūnanga O Ngāi Tahu, Te Ao Marama Inc.), government departments/ministries (e.g. DOC), territorial authorities and recreational associations.

Please note that in accordance with Schedule 4 of the RMA, you may also be required to provide an assessment of whether or not the proposed activity is contrary to any of the relevant provisions of the following documents.

- (a) Regional Policy Statement for Southland, 1997 (and any proposed/ subsequent versions)*
- (b) Regional Water Plan for Southland, 2010 (and any proposed/ subsequent versions)*
- (c) National Policy Statement for Freshwater Management, 2014*
- (d) National Environmental Standard for Sources of Human Drinking Water, 2007*

Staff are able to advise whether this is required, as it is dependant on the location, scale and complexity of your proposal. We invite you to come in for a pre-application meeting with Environment Southland consents staff to discuss this.

END OF FORM