

## Water Permit - Surface Take

### Condition X: Abstraction details

The take and use of surface water as primary allocation from [name of waterbody] and the retake of primary allocation water from XX at the map reference(s) specified above and the land legally described above for [state purpose e.g. potable/irrigation and irrigation area (if irrigation water) or number of people (if potable water) water to [state type of activity] must be carried out in accordance with the plans and all information submitted with the application, detailed below, and all referenced by the Consent Authority as consent number [insert consent reference number/s].

- a) Application form, and assessment of environmental effects dated [date].
- b) [list plans provided with application: plan title, author, rev, date]
- c) [list other additional information dated XXX.]

If there are any inconsistencies between the above information and the conditions of this consent, the conditions of this consent will prevail.

### Condition X: Authorised quantities and rate of abstraction

- a) The rate and quantity of abstraction as primary allocation from [waterbody or Site X] must not exceed:
  - i. [X] litres per second ([X] cubic metres per hour);
  - ii. [X] cubic metres per month; and
  - iii. [X] cubic metres in each 12-month period, commencing 1 July of any year and ending 30 June of the following year.

And/or

- b) The rate and quantity of abstraction as supplementary allocation from [waterbody or Site X] must not exceed:
  - i. [X] litres per second ([X] cubic metres per hour);
  - ii. [X] cubic metres per month; and
  - iii. [X] cubic metres in each 12-month period, commencing 1 July of any year and ending 30 June of the following year.
- c) The total rate of abstraction (primary and supplementary) must not exceed [X] cubic metres in each 12-month period in (b)(iii) above.

### Condition X: Water for Frost Fighting

- a) The rate and quantity of abstraction as primary allocation from [waterbody or Site X] for all purposes excluding frost fighting must not exceed:
  - i. [X] litres per second ([X] cubic metres per hour);
  - ii. [X] cubic metres per month; and
  - iii. [X] cubic metres in each 12-month period, commencing 1 July of any year and ending 30 June of the following year.
- b) The rate and quantity of abstraction as primary allocation from [waterbody or Site X] for frost fighting must not exceed:
  - i. [X] litres per second ([X] cubic metres per hour);
  - ii. [X] cubic metres per month; and
  - iii. [X] cubic metres in each 12-month period, commencing 1 July of any year and ending 30 June of the following year.
- c) The total quantity of abstraction (under Conditions X(a) and X(b)) must not exceed [X] cubic metres in each 12-month period, commencing 1 July of any year and ending 30 June of the following year.

## Condition X: Installation and operation of **water meter / datalogger / telemetry**

- a) [where a clamp on meter is to be used – alternative condition needed where a flow rig is to be used] The Consent Holder must, before the first exercise of this consent install an easily accessible straight pipe(s), with no fittings or obstructions that may create turbulent flow conditions, of a length at least [insert length – this is typically 15 X pipe diameter], at [insert location].
- b) Prior to the first exercise of this consent, the Consent Holder must install a:
  - i. Water meter(s) that which will measure the rate and the volume of water taken to within an accuracy of [+/- 5% (for piped takes) or +/- 10% (for open channel) over the meter's nominal flow range] at [insert location – this could state at a location(s) that will ensure the total take of water is measured]. The water meter must be capable of output to a datalogger.
  - ii. [If a datalogger is required – DELETE IF NOT REQUIRED] a datalogger(s) that time stamps a pulse from the flow meter at least once every 15 minutes and have the capacity to hold at least twelve months data of water taken.
  - iii. [if telemetry is required – delete otherwise] a telemetry unit which sends all of the data to the Consent Authority.
- c) [if only a meter is required – takes of 5 l/s or less – delete otherwise] The Consent Holder must maintain a record of the total volume of water abstracted each [day/week/year (cubic metres) – note that if weekly records are acceptable ORC approval under regulation 9 is required] over [insert period of time, e.g. over the water year]. A copy of that record must be supplied to the Consent Authority by [31 July] each year and any time upon request.
- d) [if a data logger is required – delete otherwise] Provide records from the datalogger electronically to the Consent Authority at annual intervals by 31 July each year and at any time upon request. Data must be provided electronically giving the date, time and flow rates in [no more than 15-minute increments] of water.
- e) [if telemetry is required – delete otherwise] Provide telemetry data once daily to the Consent Authority. The Consent Holder must ensure data compatibility with the Consent Authority's time-series database and conform with Consent Authority's data standards.
- f) Within 20 working days of the installation of the **water meter / datalogger/ telemetry unit**, any subsequent replacement of the **water meter / datalogger/ telemetry unit** and at five yearly (electromagnetic only)/Annually (clamp on ultrasonic)/ five yearly (built in ultrasonic) Mechanical water meters once a year if over 10 l/s or every two years if under 10 l/s intervals thereafter, and at any time when requested by the Council, the Consent Holder must provide written certification to the Consent Authority signed by a suitably qualified person certifying, and demonstrating by means of a clear diagram, that:
  - i. Each device is installed in accordance with the manufacturer's specifications;
  - ii. Data from the recording device can be readily accessed and/or retrieved in accordance with the conditions above; and
  - iii. that the water meter has been verified as accurate.
- g) The **water meter / datalogger / telemetry unit** must be installed and maintained throughout the duration of the consent in accordance with the manufacturer's instructions.
- h) All practicable measures must be taken to ensure that the water meter and recording device(s) are fully functional at all times.
- i) The Consent Holder must report any malfunction of the **water meter / datalogger/ telemetry unit** to the Consent Authority within 5 working days of observation of the malfunction. The malfunction must be repaired within [10] working days of observation of the malfunction and the Consent Holder must provide proof of the repair, including photographic evidence, to the Consent Authority within 5 working days of the completion of repairs.

Photographs must be in colour and be no smaller than 200 x 150 millimetres in size and be in [JPEG or specify other acceptable form] form.

*Note: the water meter, [data logger and telemetry unit] should be safely accessible by the Consent Authority and its contractors at all times. The Water Measuring Device Verification Form and Calibration Form are available on the Consent Authority's website.*

#### **Condition X: Fish screen at intake**

Prior to exercising the consent, the Consent Holder must install a fish screen across the instream intake to avoid fish ingress and uptake that complies with the following:

- a) The maximum water velocity into the entry point of the intake structure is no greater than [as recommended by the science team - 0.12 millimetres is standard] metres per second;
- b) The apertures on the intake screen are no greater than 3 millimetres side-of-square or no greater than 2 millimetres bar or slot width [or as recommended by the science team];
- c) [if required] Sweeping velocity is equal or greater than approach velocity;
- d) [if required] Not reduce the cross-sectional area of the stream by greater than 20% or cause scouring or stream bank erosion;

The fish screen must be fully functional at all times. If it is damaged and cannot be repaired or replaced immediately, the intake must be shut down.

#### **Condition X: Maintenance of fish screen at intake**

The fish screen, as required by Condition [condition number], must be maintained in good working order, to ensure that the screen is performing as designed. Records must be kept of all inspections and maintenance and these should be made available to the Consent Authority, on request.

#### **Condition X: Notification and photographs upon completion of fish screen**

The Consent Holder must notify the Consent Authority in writing of the completion of [insert works/activity] no less than 10 working days following the completion of works, and must provide photographs of the area/s where work has been undertaken [specify the photographs required in further detail is needed].

[this condition may be modified to include the provision of as built plans if required]

Photographs must be in colour and be no smaller than 200 x 150 millimetres in size and be in [JPEG or specify other acceptable form] form.

#### **Condition X: Irrigation requirements**

The Consent Holder must ensure that at all times:

- a) There is no leakage from pipes and structures;
- b) The use of water is confined to targeted areas, [USE IF REQUIRED] as illustrated on the attached plan referenced: [INSERT PLAN REF]; and
- c) That the volume of water used for irrigation does not exceed that required for the soil to reach field capacity and avoids the use of water onto non-productive land such as impermeable surfaces and [insert other areas as relevant to the property] [and]
- d) That irrigation to land must not occur when the moisture content of the soils is at or above field capacity; and

- e) [only add specific on-site soil moisture monitoring if required for exceptional reasons if required].

Note: Field Capacity is the amount of water that is able to be held in the soil after excess water has run off.

#### **Condition X: Backflow prevention**

Prior to the first exercise of this consent [or, if possible, specify the particular activity or works to make it clear what first exercise means], the Consent Holder must install a backflow prevention device to ensure water and/or contaminants cannot return to the water source.

#### **Condition X: Frost fighting**

When using water taken under this consent for the purpose of frost fighting, the Consent Holder must keep a record of the following:

- a) The date and duration of each frost fighting event; and
- b) The total volume of water used during each frost fighting event.

This record must be provided to the Consent Authority in writing by 31 July each year.

#### **Condition X: Residual flow**

[Option 1: for smaller residual flows where all that is needed is to maintain continuous connectivity, typically where a residual flow would be less than 20 l/s]

A continuous connected residual flow must be maintained at all times immediately downstream of the point of take at [insert take location NZTM 2000] on [insert creek or stream name] [EITHER] for a distance of [XX metres] or [to: insert downstream extent of residual flow location in NZTM 2000].

OR

[Option 2: for smaller residual flows which require more than just connectivity, but do not require regular reporting via a temperature logger]

A continuous connected residual flow must be maintained at all times immediately downstream of the point of take [insert take location NZTM 2000] on [insert creek or stream name] [EITHER] for a distance of [XX metres] or [to: insert downstream extent of residual flow location in NZTM 2000].

The Consent Holder must install a flow gauge [if required – seek guidance from resource science team: to within an accuracy of +/- 10%] at [insert gauge location to NZTM 2000 and upstream of a critical riffle location which could be referenced on a plan or annotated photograph] and must:

- a) Provide the Consent Authority photographs of the flow gauge within 10 working days following installation;
- b) Maintain a gauge level of [insert level] at all times; and
- c) Provide photographs of the gauge level, recording the date and time of the photographs, [EITHER on the 1<sup>st</sup> of each month of XX to XX and/or upon request of the Consent Authority].

OR

[Option 3: for larger residual flows which require reporting]

A continuous connected residual flow [insert if required - of XX litres per second] must be maintained at all times immediately downstream of the point of take [insert take location NZTM 2000] on [insert creek or stream name] [EITHER] for a distance of [XX metres] or [to: insert downstream extent of residual flow location in NZTM 2000].

The Consent Holder must install a [insert specific requirements] temperature logger with at least 12 months data storage at a critical riffle at [insert gauge location NZTM 2000 and riffle location which could be referenced on a plan or annotated photograph] and must:

- a) Provide the Consent Authority photographs of the [insert specific requirements] temperature logger installed in the riffle within 10 working days following installation;
- b) Maintain a record of the [daily/hourly] temperature and the date and time of these records;
- c) Provide the data in (c) above to the Consent Authority [specify – every 3 months commencing from XX].

#### **Advice Note X: Water for domestic and stock purposes**

Water may be taken at any time for reasonable domestic or stock water purposes where and the taking or use does not, or is not likely to, have an adverse effect on the environment in accordance with Section 14 of the Resource Management Act 1991.

#### **Condition X: Frost fighting Records**

When using water taken under this consent for frost fighting, the Consent Holder must keep a record of the following:

- a) The date and duration of each frost fighting event; and
- b) The total volume of water used during each frost fighting event.

This record must be provided to the Consent Authority in writing by 31 July each year or upon request.

#### **Condition X: Minimum flows**

No abstraction, other than for reasonable domestic and stock drinking water purposes [delete if not used for domestic or stock use], must occur when flows in the [insert Creek/Stream/River] are less than the minimum flow of [X] litres per second at the [X] flow monitoring site located at map reference NZTM 2000:[X]. [insert the following if more than one water user will be taking water under this consent].

When the minimum flow is reached, water must not be used for other uses such as domestic irrigation, car washing or filling spas or swimming pools.

#### **Condition X: Minimum flows – multiple water users**

When the minimum flow in condition [x] is reached the Consent Holder must immediately use communication methods to advise water users exercising this consent that water use must [cease / be restricted to stock and domestic consumption only].

The advice to water users must be by either social media or email or website or a combination of those methods and may include additional means that the Consent Holder chooses.

#### **Advice Note X: Water flow information**

The Consent Holder is responsible for accessing all relevant water flow information including the flow phone or the Consent Authority's website information to comply with the minimum flow(s) set out in Condition [X].

#### **Condition X: Water allocation committee**

The consent must be exercised as directed by the [NAME] Water Allocation Committee which operates in the [NAME] catchment, in accordance with [detail parameters of WAC and water rationing regime].

### **Condition X: Water rationing**

This consent must be exercised in accordance with the [insert name of rationing regime] rationing regime that applies to the [NAME] catchment.

### **Condition X: Water use efficiency report**

A water use efficiency report must be provided to the Consent Authority by 31 July each year for the period commencing 1 July the previous year and ending 30 June the current year). The report must assess the water use over the previous 12 months in respect of the efficient use of water for the purpose(s) consented. This report must include, but not be limited to: [add/delete as required]

- a) Area, crop type, number of harvests per year, and timing (for [insert harvest type e.g. vegetable cropping]);
- b) Annual summary of water usage (month by month, and related to crops in the ground);
- c) Reasons why use may have varied from the previous year;
- d) Information demonstrating irrigation equipment that has been used and decision-making regarding efficiency of use (e.g. soil moisture data, irrigation scheduling, meter accuracy checks, computer control of irrigation) and any changes planned for the coming year;
- e) Any changes or modifications to irrigation (and water conveyance) infrastructure; and
- f) Water conservation steps taken.

### **Condition X: Retakes**

The Consent Holder must take no more water than what is discharged/diverted as a result of the exercise of Water Permit [insert permit number from which water is originally taken] OR as a result of the exercise of Discharge Permit [if a discharge permit is associated with the retake]. The rate of the retake abstraction must not exceed [insert consented rate of water permit or discharge permit].

### **Condition X: Return of water**

All water [taken/diverted] at the point of abstraction located at map reference NZTM 2000:[X], taking into account evaporative losses and minor losses within the conveyance system [specify], must be returned to [waterbody name] at map reference NZTM 2000:[X].

### **Condition X: Supplementary Allocation Notification**

The Consent Holder must advise the Consent Authority at all times prior to the taking of water as supplementary allocation and at the ceasing of taking water as supplementary allocation by emailing [watermetering@orc.govt.nz](mailto:watermetering@orc.govt.nz) or by contacting Council on 0800 474 082.

### **Condition X: Scheme Management Condition**

- a) Within 12 months of the commencement of this resource consent, the Consent Holder must submit a Scheme Management Plan to the Consent Authority for certification. The objective of the Scheme Management Plan is to ensure the efficiency of water use and conveyance of water is improved over time. The Scheme Management Plan must that include, but not necessarily be limited to, the following:
  - i. A plan identifying the irrigation area at the commencement of this consent with the number of hectares specified;
  - ii. A plan identifying any new areas of irrigation developed after the commencement of this consent with the number of hectares specified;
  - iii. A plan identifying proposed new areas of irrigation still to be developed with the number of hectares specified;
  - iv. A description of the measures that have been implemented to improve efficiency of water use or conveyance of water since the commencement of this consent including any:

- (i) Upgrades to existing open races, including piping; and
  - (ii) Establishment of any water storage infrastructure;
- i. A description of the measures that are planned to be implemented within the next five years to improve efficiency of water use and conveyance of water, including the timeframes proposed for their implementation.
- b) The Consent Holder must review and update the Scheme Management Plan at five yearly intervals. Each updated Plan must be provided to the Consent Authority for certification in the month of June of the year in which the review occurs.

#### **Condition X: Flow Restriction**

- (a) The Consent Holder must install a flow restrictor, or other means **as agreed with the Consent Authority**, at the point of take to ensure that the rate of abstraction does not exceed **##** litres per second.
- (b) The Consent Holder must provide written certification to the Consent Authority signed by a suitably qualified person certifying that the flow restrictor or other means has been installed and will ensure the rate of abstraction does not exceed **the limit authorised by Condition x of this consent**.

#### **Advice Note X: Water Testing for Drinking Water Use**

It is the responsibility of the consent holder to ensure that the water abstracted under this resource consent is of suitable quality for its intended use. Where water is to be used for human consumption, the consent holder should have the water tested prior to use and should discuss the water testing and treatment requirements with a representative of the Ministry of Health and should consider the following Drinking Water Standards.