Additional Information for Dairy Shed Water Take Applications

Information to help fill out Dairy Shed Water Take application form (Updated May 2013)

1. Question 9: I need more than 70 litres per cow per day in my dairy shed. How can I prove this was what I was taking prior to 15 October 2008? What will Waikato Regional Council accept?

If you can show:

- What your current peak water use requirements are (see below),
- Proof of your current stock numbers,
- Proof of your pre-15 October 2008 stock numbers, and
- That your shed set-up is the same now as it was prior to 15 October 2008 (i.e. it is the same shed and has the same or improved water using devices),

Meter readings need to be taken regularly for a period of time to demonstrate actual water usage. While in unique situations we may request or accept other readings, we suggest you provide:

- Daily readings for at least one week, preferably longer
- At least weekly readings for an additional three weeks, preferably longer

Waikato Regional Council are likely to accept the above as proof of a higher water use than 70 litres per cow per day, as was existing prior to 15 October 2008. When assessing whether to accept this evidence, Waikato Regional Council may also consider:

- Whether the volume applied for is within a normal range expected for the type of shed and water using devices (i.e. any water volumes outside of the normal range will be subject to close scrutiny and may require further proof or monitoring requirements)
- Any additional information the farmer may choose to include, such as milk production figures.

2. Question 10: How can I provide proof of cow numbers prior to 15 October 2008?

Waikato Regional Council will accept any reasonable document providing proof of cow numbers. However these need to be able to be verified from an external party. Common documents that provide this proof include:

- Information from tax records indicating number of milking cows on the property
- Herd testing records for the property
- Sharemilking agreements
- Milk Supplier confirmation of cow numbers

With your application please provide a copy of one or more of these documents, and any explanatory notes required. Please note these must provide evidence of cow numbers from before 15 October 2008 and generally any documentation from the years 2005/06, 2007 & before October 2008 will be accepted. Documents detailing cow numbers for anything other than a short period after October 2008 may be rejected.

If you are providing information that includes any sensitive information (e.g. financial records) that you do not wish to have available in the records held on our file, please block out this information (e.g. a black marker through the financial values) before providing it to us. But make sure you leave in all information about cow numbers and dates.

If you are unable to locate any information about cow numbers, please provide a cover letter to explain your specific situation and why you are unable to locate the information.

3. Question 13: Should I get consent for my stock watering and domestic water as well?

Many farms will take water for both shed use and stock watering from the same source (e.g. well or stream). For most existing stock watering and domestic supply water takes, no consent is required, and rather you are given a special provision under section 14(3)(b) of the RMA. Therefore having a consented take and a "RMA" take from the same source can complicate the way that your water records are kept and audited. There are three options for dealing with this:

- 1. <u>You can obtain a consent for just the shed water and install two meters</u> one at the source (e.g. well head or stream intake) and one on the pipe into the shed. This means very clearly we can see both what you're taking from the environment, and what is being used under your consent.
- 2. <u>You can obtain a consent for just the shed water and install one meter at the source</u> (e.g. well head or stream intake). We then will have to audit your records bearing in mind the additional water that will be taken for stock. Where the total water use (shed + stock) increases over time, we may need to undertake an audit of your system to ensure shed water use is not increasing.
- 3. <u>You can obtain a consent for both the shed water AND stock/domestic watering needs</u>. This will have a volume limit on it, and we will need to investigate any exceedances. Where exceedances can be shown to be for stock watering only, we are likely to treat that non-compliance as minor, as opposed to a non compliance in shed water take which may be treated more seriously.

4. Question 16: When should I split my pre- and post- 2008 water takes into separate applications?

If you have increased your dairy shed water requirements since 15 October 2008, you first need to decide whether to:

- <u>Apply only for the pre-2008 water volume</u>, and therefore follow the simple dairy shed water take process. Following this route you will need to ensure you can operate under the reduced volume of water available to you when the consent is granted.
- <u>Apply for both the pre-2008 water volume ("simple process") AND the additional water</u> volume ("more complex process"). Following this route, you have another decision to make:
 - Split the applications: By doing this, we will initially process the pre 2008 water take volume in the usual "simple process" way. We will then treat your "more complex process" application separately, which may take some time.
 - Process both pre- and post-2008 water takes as one application.
 By doing this, all the water will be assessed under the rules around the "more complex process". For some situations where there is plenty of water available for allocation, this means the process may be very similar to the "simple process".

However, for those applications in areas that are fully- or over-allocated, the application will be placed "at the back of the queue" for water. These applications may not be processed for a significant period of time. They may be publically notified when they are processed. There is the potential for these applications to end up in a hearing or at the Environment Court. There is no guaranteed outcome for these processes, particularly in fully- or over-allocated catchments. At worst the applications may be declined in their entirety. There is a chance you will only be granted the pre-2008 water. There is also a chance you will be granted the full volume of water you have requested.

There are pros and cons for each option you consider. If you choose to apply only for pre-2008 water or choose to split your applications, the benefits include that:

- Waikato Regional Council will be able to process your application reasonably quickly and at a lower cost (particularly if you apply during your catchment phase).
- You will also have the certainty of having access to that pre-2008 volume of water, no matter the outcome of any more complex process.

On the downside:

- There will be two separate processes, which may incur a higher cost than one process alone.
- You will be granted two separate consents, though Waikato Regional Council are looking at ways that we might be able to, administratively, streamline these into the one consent.

5. Question 17: Water meters: benefits and requirements

Fitting water flow meters is the only reliable way of measuring water use accurately. Many dairy shed water takes will require a meter to be installed and those that do not require a meter will benefit from using one. They can help you manage your water resource efficiently and minimise costs associated with pumping and sometimes treating water on your property.

The type of meter you choose to install will depend on a number of factors such as water quality, sediment content, pipe setup and whether you want to use electronic recording devices. We recommend you contact a reputable local meter supplier and installer to advise you on the best meter to suit your needs. Waikato Regional Council does not currently have a list of approved meters or installers.

However, if you wish to make sure you're dealing with the right people and getting the right meter, you may wish to ask your supplier:

- If they are an accredited meter installer
- If the manufacturer of the meter they are recommending meets ISO 9001
- If the meter meets ISO 4064 standards.

Your meter will also need to be:

- Tamper-proof
- Calibrated on installation and at periodic intervals throughout its use (likely to be each five years as a minimum)
- Accurate to +/- 5%

A reputable local meter supplier should be able to advise you on all these requirements.

Will I need to install a meter?

Any take with a volume above 50 cubic metres including any stock water taken, will require a suitable meter be installed (such as described above) and a weekly record of water usage is kept. These records will need to be supplied to Waikato Regional Council twice yearly. This will generally mean that any farm with more than 350 cows will need a meter, unless the water taken at that location *only* supplies the dairy shed. In this case a herd of up to 700 cows may not require a meter. We will advise you if a meter will be required.

6. Question 21: When and why should I consult with a neighbouring bore owner?

If your groundwater take is within 100 metres of another bore that you do not own, your water take application will be considered a "discretionary" activity. This means we must consider the effect you have on that nearby bore and the ability of the bore's owner to continue to take water. If you obtain written approval from the bore owner, then we don't need to assess the effect your water take has on that bore, simplifying the process and helping to reduce costs. If the bore owner is also a dairy farmer who requires consent for his bore water take, he will also need to consult with you.

7. Question 25: How to determine your rate of take

Many pumps include a pump rate, however this usually indicates the rate that the pump is capable of without any restriction. Where there is significant head difference or water is being taken from a well, the actual pumping rate is likely to be less than this value.

One easy way to determine what your pump is capable of is to measure the time (t) it takes for you to fill a known volume (v). Your rate (R) can then be calculated as volume divided by time $(R=\frac{\nu}{r})$.

For example, Bill has an empty 10,000 litre tank. It takes 92 minutes to fill up the tank. He calculates that

$$R = \frac{v}{t}$$
$$= \frac{10000 \ litres}{92 \ minutes}$$

R

R = 109 litres per minute

OR to get litres per seconds, divide by 60 therefore:

8. Question 29: What is a Q5 and when do I need to provide one?

A "Q5" is a statistical term used to describe the "one-in-five-year-low-flow" of a stream. That is, the lowest flow in a stream that is likely to occur once every five years. This can also be described as the flow that has a 20% chance of happening each year.

A Q5 is the tool we use to determine how much flow can be taken out of a stream without significant adverse effects on the environment. Each waterway is assigned a percentage of that Q5 low-flow that can be allocated out – the "allocable flow". This varies, but is often 10%, and for example, for these streams, what it means is that, when the one in five year low flow occurs, if all consent holders take all their allocated water, the stream will have 10% taken out and 90% will be left in the stream.

In order to be able to allocate water out of a stream, WRC need to know what the "Q5" of a stream is. This can either be estimated, based on what we know about the stream or nearby streams, or can be measured.

WRC may calculate the Q5 for you as part of our assessment process, or in some situations where we do not have the time or resources; we may need you to obtain one yourself. For this application process, if you do not know the Q5, you do <u>not</u> need to provide one with your initial application. Just be aware that we may be back in touch about needing to provide one, or to check with you that you accept our calculations.

9. Question 30: Does my surface water intake structure comply with regulations?

Your intake structure may be able to be used without the need to get a separate consent (a "permitted activity"). However it does need to meet certain standards. All surface water intake structures need to meet the following basic requirements:

- Must be screened (see further detail below for screen sizes)
- The pipe diameter must not exceed 300mm
- The intake velocity cannot exceed 0.3 m/s
- The intake structure cannot extend for more than 10% of the total stream/river width (up to a maximum of 5 metres)
- If the river is wider than 10 metres, you must have a sign alerting river users of the intakes presence.
- Must be maintained in a structurally sound condition and free of debris
- Any erosion resulting from the intake structure must be fixed
- It must allow for the safe passage of fish upstream and downstream

The minimum size of your intake structure's screen depends on the waterway classification of your stream. You can find this out by calling us on 0800 800 402. The required screen sizes are:

- If your waterway doesn't fall into any of the categories below, it needs a screen that is:
 - 3 mm mesh size diameter at locations less than 100 metres above sea level
 - o 5 mm mesh size diameter at locations greater than 100 metres above sea level
- If your waterway is "Significant Indigenous Fishery and Fish Habitat" it needs a screen that is:
 - 1.5 mm mesh size diameter at locations less than 100 metres above sea level
 - 3 mm mesh size diameter at locations greater than 100 metres above sea level.
- If your waterway is "Significant Trout Fishery and Trout Habitat" it needs a screen that is:
 - o 3 mm mesh size diameter at ALL locations.

If your waterway has more than one classification, you need to use the most restrictive screen size (i.e. the smallest mesh size diameter)

A condition of any surface water take consent granted will include these requirements and if you are audited in the future, you will need to show you meet these requirements.

10. Question 31: If I choose not to provide a Riparian Vegetation Management Plan with my application – what are the consequences?

If you are taking your water from a surface waterway and need to rely on the "grandparented" dairy shed water rules for your pre-October 2008 water volumes, you need to provide a Riparian Vegetation Management Plan ("Riparian Plan"), and we have a template available to help you do this. There are some exceptions where a plan may not be required:

- Where you do not need to rely on "grandparented" dairy shed water take rules to obtain a consent for a water take.
- Where the waterway from which you take water is not located on property you own (including any neighbouring property over which you have an easement, Waikato Regional Council stopbanks or esplanade strips).
- Where the waterway is within a drainage district managed by Waikato Regional Council or a territorial authority, a consent is required for the actual planting. It may be considered inappropriate for fencing or planting of these areas. Call us or your local drainage area manager to discuss this on 0800 800 402.

If you choose not to provide a Riparian Plan, your application will be considered under the other rules within the Waikato Regional Plan, and no special consideration will be given to the existing nature of your water take. In catchments where there is water available to allocate, a consent may be granted even if you do not provide the Riparian Plan. However, if you are in a fully or overallocated catchment, failure to provide a Riparian Plan is likely to mean your application will follow a much more complex route, as it will not be "grandparented".

If you do not provide a Riparian Plan with your application, we will assess your application to see if any other rules are available to provide you with a consent to take water. If no other rules are able to be used, we will advise you that a Riparian Plan is necessary, or failing your provision of such, that the result will likely be a more complex consent process.