# BEFORE A COMMISSIONER APPOINTED BY the SOUTHLAND REGIONAL COUNCIL

**In the matter** of an Application for resource consent by

**PAHIA DAIRIES LIMITED** 

# BRIEF OF EVIDENCE OF SIMON ANDERSON FOR PAHIA DAIRIES LIMITED

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## INTRODUCTION

- 1 My name is Simon James Anderson.
- I am a shareholder and director of Pahia Dairies Limited (**PDL**), as well as being the on farm manager of the property at 171 Ruahine Road West, Pahia.
- I have worked on this farm for 11 years, and I have 14 years in the dairy industry. Prior to that, I managed sheep and beef farms for around 14 years. These were mostly in the hill country with some work on rolling stations, managing between 10,000 and 35,000 stock units. Some of these farms were breeding and fattening farms with a large amount of cropping.
- Over the last 30 years I have managed stock, and feed, in some shape or form. Due to that, I have significant experience in day-to-day management of animal health, as well as the other skills that are required to manage a business of this size.

# Scope of evidence

- This evidence is presented to assist the Commissioner in understanding the farming operation currently carried out by PDL, and what the application, if granted, would change.
- I cover the following matters, but would be happy to take any questions from the Commissioner that relate to our farming practice:
  - 6.1 Introduction to the farm;
  - 6.2 Severe weather, and how we manage that;
  - 6.3 Our on-farm history of fodder beet usage;
  - 6.4 Our animal health practices.

# Introduction to the farm

The farm is a 350ha effective dairy farm, milking 980 cows. We are authorised under consent AUTH-02222602 to milk up to 1,000 cows. The entire property is 511 hectares, however a significant portion of the farm is fenced shrubs and trees (for environmental purposes).

- In addition to the above farm, we own the 95 hectare effective "Browns Block" which has historically (prior to our purchase of it) being used for winter grazing of dairy cows and year-round grazing of replacement dairy stock.
- At the time we purchased Browns Block, we thought we could expand the milking operation across that 95 hectares. We knew that we were within the existing nutrient loss limits, due to the previous use. We were unaware of the rule change (notified in 2016 and a Council Decision made in 2018) which meant that any land not previously used for milking cows could not be used as part of a milking platform.
- We received an abatement notice from ES on the above issue, which has triggered our awareness for the need for resource consent to authorise that activity, as well as allowing for intensive winter grazing.
- To be very clear, this proposal is **not** to increase cow numbers. Rather, cow numbers will stay the same, but this application, if granted, allows for winter grazing and milking to be spread better across the farm, and for us to buy less feed in. We also consider this proposal to have a significant environmental gain. Nicole Mesman sets out in her evidence the nutrient loss improvements, and from a practical perspective it means we can spread our wintering over better more suitable soils.

# **Dry lying**

- The NZALA seems to have concerns in relation to dry-lying areas for cattle that can be summarised as three matters:
  - 12.1 Plans for severe weather:
  - 12.2 Ability to keep land dry; and
  - 12.3 Pugging.
- We have taken steps to minimise pugging as far as possible by changing how we sow the crop. We use a technique called 'strip tilling'. Traditional seed sowing disturbs the entire soil surface to a depth of about 400mm, and seed is put on top. Strip tilling is exactly what it sounds like a strip of land is tilled to about 150mm deep. Seed is then dropped into the tilled line. This has a couple of advantages:
  - 13.1 Our farm is quite wind prone, and by dropping the seed into the tilled strips, we're losing less seed to wind blow; and

- 13.2 Strip tilling does not require all the soil to be turned over (and so softened) for planting. Often, pugging is a combination of wet weather, heavy cattle and soft soils. By only tilling in narrow strips, the majority of the paddock is undisturbed, meaning that soil is 'harder' come winter, and less prone to pugging in wet weather.
- We have been doing this for 4 seasons now, and the difference in impact on the soil is significant. I also agree with the steps outlined in the response prepared by Nicole Mesman at Lumen, which also help to reduce pugging.
- In particularly wet weather, pugging becomes more likely. We can (and do) move stock off winter feed, and put them into paddocks of baleage or grass where the ground is harder. Some paddocks have natural windbreaks (shelterbelts etc) which are preferred during severe weather, but if required we can build protection (e.g. a wall of haybales to provide shelter).
- We provide lying space by laying straw (if required) in either the crop paddock, or a grass or baleage paddock if conditions are particularly wet. We pick these paddocks to be free draining and harder soil type paddocks. The NZALA seems to imply that animals must be always lying on dry ground. Unless a farm has a wintering barn (which I suspect the NZALA would also take issue with), there is no way to guarantee dry ground when it's raining. That's just common sense. What I do ensure is that straw is laid in areas of higher ground, to make sure animals are kept out of any water that settles on the ground, and out of areas that animals would usually pace (and so straw would be trodden into the ground). Fresh straw is provided when needed (usually every couple of days).
- Pahia soil types are free draining, so when we have heavy rain, with strip tilling the cows are up on dry ground within two days at the most. A major rain event is 50mls in 24 hours and our average rain fall is 25mls a week. So we are used to wet weather, and farm accordingly. From my observations and understanding, during the day the cows are mostly eating so their lie time requirement only needs to be half the 24hours. For them to eat 16kgs of dry matter a day they have to be eating a good 8 to 10 hours. Regardless, we ensure that they have areas available that are as dry as possible for lying, and move them out of the crop paddock if needed to do so.

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#### Fodder beet on our farm

- We have been using fodder beet as winter feed for the last 10 years or so. The NZALA have identified a list of concerns they have with fodder beet on animal health, but we have not experienced any of these issues.
- In particular, none of our animals have ever had humeral factors, which the NZALA has identified as a key concern.
- Generally, we have our animals feed on fodder beet when they're younger, usually up to 3 or 4 years (so two years as young stock, and then one or two years once they're milking). After that, we move them onto something else, generally baleage, for the winter.
- I refer to Georgette Wouda's expertise on these matters, however I'm happy to answer any questions in relation to how we feed fodder beet on farm, if that's useful.

#### **Animal health**

# Mineral balance

- We are aware of the potential health implications of fodder beet, and manage it accordingly.
- PDL works with a nutritionist to ensure the blend of minerals and feed offered is balanced. We take blood tests every year, usually two one in spring one in autumn so that we can check levels are healthy, and tweak the feed and mineral regime if not. NZALA specifically refers to the need for professional nutritional advice, and I can confirm that we do obtain this. However, the Dairy NZ feed checker certainly acts as a starting point for our nutritionist, as it's a really useful tool for ensuring feed is well balanced.
- Minerals are fed through the dosatron (so into water troughs) and mineral mix is fed while milking, so we know they eat it (and the right dosage). Our blood tests show that our animals are getting the required levels of minerals, and so the NZALA concern that the dosatron is "inaccurate and inefficient" is not something we've experienced.

# Lame cattle

NZALA raise concerns about lame cattle, and seem to imply this is related to feed.

Lame cow issues come from the distance they walk in a day and how they are pushed on tracks and on the yards, and the condition of the tracks. We use zinc

mats when they walk out in the spring to harden their feet as a preventive when we have wet conditions. Where possible, we minimise the walking distance to the shed, as that's the best way to reduce lameness in the herd. One way we manage this is by variable milking times to cut down on the distance cows walk and it also keeps body condition on cows. Wintering doesn't cause lameness.

NZALA also say that foot infections can be caused by feeding crop. We averaged 1 animal a week with a foot infection last season which is minimal. This is consistent across the wintering period when animals are on crop, and also the rest of the year when cattle are on pasture. There doesn't seem to be a link between crop and foot infections, from my experience.

## Calving

- NZALA takes issue with our approach to removing cattle off winter feed prior to calving. We have not had a cow calve on crop for many years, we have a good transitioning system now which allows them more time back on pasture prior to calving.
- We take pride in our animals and land. We want our animals and our farm to be looking good and in good condition. Obviously, there is also an economic benefit to us when our animals are in excellent health and condition. This is our eleventh season on the farm, the vast majority of the cows we milk are ones that I've 'picked up' following calving, and my partner Lynne has reared. We put emphasis on good breeding, and believe that our results and animal health speak for themselves.

Simon Anderson Manager Pahia Dairies Limited

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