

13 November 2023

GE Free New Zealand in Food and Environment WELLINGTON

For Claire Bleakley, President and Jon Muller, Secretary By Email – claire@gefree.org.nz and secretary@gefree.org.nz

Tena koe Claire and Jon,

Official Information Act Requests – ERMA200223

Further to your request of 16 October 2023 to AgResearch for information pertaining to activities under approval ERMA200223, we have gathered together the answers to the questions you have raised and set these out for you below. We also note that the Environmental Protection Agency (EPA) has transferred to AgResearch the majority of the request you made to the EPA on 15 October for substantially the same information. Our responses below are therefore in response to both requests. The questions you raised with the EPA which have been transferred to AgResearch were all included in your request directly to AgResearch, and we have elected to therefore not repeat answers.

First, we thought it prudent to address your preliminary observations in your letter. The report for the year ending 30 June 2023 explains that there is no-longer formal quarterly reporting required by the Animal Ethics Committee and those reports for that period don't exist. We also wanted to highlight that generally the Annual Report supplies the required information for EPA control reporting purposes through pages 3-9, with additional supporting information by way of Committee reports included from page 10 onwards.

You have requested a number of reports, which we also have attached. There are a small number of redactions we have made in the reports on the following basis:

- We have removed names and contact details for individuals referred to in the reports, under section 9(2)(a) of the Official Information Act, in order to protect the privacy of those persons;
- There are some links to other documents contained in some of the reports, which we consider are outside the scope of your request, and which are in any event dead links which we have removed.

Turning to your specific questions, we highlight these with corresponding answers below, which we have predominantly extracted from our corresponding databases. Where we have taken text from your letter, including your specific questions, it is set out in italics, and our responses are marked with "A:" in plain text. We have not generally repeated text from your letter except where it asks a question or is closely related to a question.

Regarding application AE15407 The Ruakura committee on the 19/12/2022 asked for the results of the post mortem on the cow that was found dead (p.16).

Please may we have this information to **June 2023** -

• Please can we have the documentation on the dead cows post mortem report?

A: There was no postmortem conducted, as set out at 1:8 on page 12. There is therefore no postmortem report.

• The number of embryos created,

 $A \cdot c$

• How many embryo's transferred to conventional surrogate recipients at over the year to June 2023?

A: None

• How many embryo's transferred to GM cows over the year to June 2023?

A: None

How many conventional surrogates and GM cows were impregnated?

A: Conventional surrogates were used and reported under application 15467. For GM cows, the answer is none.

How many calves were born?

A: Total animal numbers including calves born are set out in the animal numbers summary on page 6 of the report.

• How many were GM female and male?

A: GM female and male births are set out in the animal numbers summary on page 6 of the report. The calves born were GM animals.

• How many surrogates suffered from health problems, please document all health problems of all cows and their fate?

A: Beyond treatment for normal expected health reasons (vaccinations, Facial eczema protection, drenching etc.), a total of four conventional recipient/surrogate cows were killed as identified in the Animal numbers summary on page 6. Two were humanely killed as their behaviour in the yards made them dangerous (jumping out). Following veterinary inspections; the other two were humanely killed as they had developed Cancer Eye which is a common condition in Hereford Friesian cross cattle.

Regarding application AE 15409... Please can we have the documentation up to **June 2023** on the answers to

A: We thought it prudent to highlight that this part of the report primarily covers work carried out in the previous reporting period (to 30 June 2022), with some overlap into the start of this reporting period (to 18/9/22).

• Report A clarifications on the goats that were conventional not genetically modified recipients and how many were genetically modified recipients?

A: 28 conventional recipients and 14 GM recipients

• The adverse events that occurred in the conventional goat recipients?

A: Post partum complications due to prolonged labour and mastitis

• The number and type of adverse events that occurred in the genetically modified goat recipients?

A: Two total which were infections

• The number of embryos created

A: None

• How many embryo's transferred to conventional surrogate recipients at over the year to June 2023?

A: None

• How many embryo's transferred to GM goats over the year to June 2023?

A: None

• How many conventional surrogates conventional and GM goats were impregnated?

A: None

How many kids were born?

A: None. This is provided in the animal numbers summary on page 7 of the Report.

• How many were GM female and male?

A: None. This is provided in the animal numbers summary on page 7 of the Report.

• How many surrogates suffered from health problems, please document all health problems of all goats and kids and their fate?

A: Beyond treatment for normal expected health reasons (vaccinations, feet trimming, drenching etc.), 14 Conventional Recipient / Surrogate goats were humanely killed as identified in the Animal numbers summary on page 7 of the Report. Following veterinary inspections; the reasons were as follows: one for becoming blind; two diagnosed as developing black mastitis; 11 as they had developed hoof issues which were no longer treatable and they were unsuitable for further use.

Regarding AE 15409 on the goats resubmit 31/01/2023 (p. 16)...

Please can we have the documentation on the answers to relates to animals born in 2021

• How many of the AI run recipient goats were GM?

A: 3

• How many AI run recipient goats were conventional/non-GM recipients.

A: 25

What other transgenic embryo experiments are they impregnated with?

A: None

How many of the 5 female kids born were GM?

A: None were born in the 2022 - 2023 period, but two were in the previous period as progeny of GM goats.

How many of the 11 male kids born were GM?

A: None were born in the 2022 – 2023 period, but one was in the previous period as progeny of a GM goat.

Regarding AE application 15467, climate smart cattle. The Ruakura committee asked on the 26/1/2023 (p.20) -

Please summarise other manipulations (other than implantation with data logger) that occurred to calves as per modification 3076 and 3156 – and if they did not occur, please outline why this did not happen.

Please elaborate on the calves born – 12 were slick edited that survived until getting a data logger, what were the others?

Section 1.4, Please reference AE 309, 336 & 340 within this section. As section 6.11 of the statistics refers to an additional dead animal, please also explain within the Report A who that is and what happened to it (or create an adverse event if it fits that criteria). (p.20)

A: We thought it important to highlight that the comments you have referred to above pertain to a draft version of the report provided to the Committee. The answers were provided in the final accepted report to the Committee, which is included in the Report to the EPA.

Please can we have the documentation up to **June 2023** on the answers to

• What were the transgenic trait or gene edits for the calves 3076 and 3156 –if they did not occur, please outline why this did not happen.

A: 3076 and 3156 refer to the modifications themselves. They relate to cattle edited for a naturally occurring sequence variant in the prolactin receptor gene

The number of embryos created

A: 894

• How many embryo's transferred to conventional surrogate recipients at over the year to June 2023?

A: 60

• How many embryo's transferred to GM cows over the year to June 2023?

A: None

How many conventional surrogates and GM cows were impregnated?

A: 11 conventional surrogates and nil GM cows.

How many conventional cows were impregnated more than once?

A: None

Were any surrogate cows used again to carry different trait modifications?

A: Yes

• If so, what were the constructs?

A: Trait modifications were based on variations of endogenous genes not constructs

How many calves were born?

A: This is provided in Animal numbers summary Pg6 of the report

• How many were GM female and male?

A: This is provided in Animal numbers summary Pg6 of the report

• How many surrogates suffered from health problems, please document all health problems of all cows and their fate?

A: Four - these are the same animals referred to in our response to the same question on AE15407 on page 2 of this letter.

12 calves born were slick edited this includes 5 conventional control animals

• How many calves were GM female

A: 2

• How many calves were GM male?

A: 5

15 calves born were PMEL this includes 5 conventional control animals

• Please could you explain PMEL, the PMEL trait and what is the expression outcome?

A: PMEL refers to premelanosome protein, the trait is for a semi-dominant coat colour dilution, providing lightening of the coat colour.

How many calves were GM female

A: 6

How many calves were GM male?

A: 4

• Section 1.4, Please reference AE 309, 336 & 340 within this section.

A: This appears to be a Committee request and was answered in the report at 1:4 on page 19

• As section 6.11 of the statistics refers to an additional dead animal, please also explain within the Report A who that is and what happened to it (or create an adverse event if it fits that criteria). (p.20)

A: This appears to be AEC request and was answered in the ethics report at (1:4 and 1:6) Pg19

• We are unable to find the report on 15088 please can this be provided?

A: A copy of this report is attached

Regarding AE application 15523 goats for female only off spring...

Please may we have this information to June 2023 -

• The reply to the use of a third buck and the semen collection outcomes and whether the semen has been frozen or used to produce embryos

A: The reply is answered within the report 1:2 and 1:4 at page 24. Semen was frozen and stored.

Was the third bucks semen viable?

A: The semen was not evaluated

• The number of embryos created,

A: None

• How many embryo's transferred to conventional and GM surrogate recipients at over the year to June 2023?

A: None

• How many conventional surrogates conventional and GM goats were impregnated?

A: None

How many kids were born?

A: None

• How many were GM female and male?

A: None for 2023

• How many surrogates suffered from health problems, please document all health problems of all goats and kids and their fate?

A: All animals had varying degrees of lameness and foot lesions due to wet weather and were euthanised.

Regarding AE application 15567 sheep report is from 04/03/2022-31/12/2022.

The supporting information does not record the number of sheep (p.8) who received ET yet the table (p. 7) records 15 lambs born (9 female 6 male)

A: This is because mating information was included in previous annual report

Please may we have this information to June 2023 -

• How many of the 9 female lambs born were GM?

A: All are considered GM as they were progeny of a GM ram

How many of the 6 male lambs were GM?

A: All are considered GM as they were progeny of a GM ram

• How many of the 15 GM lambs survived to weaning?

A: 14 were alive at weaning

If they dies what was the cause?

A: The lamb was humanely killed under veterinary advice, the notes were 'Lungs only working max 50% was abdominal breathing. Heat stress so was euthanised on welfare grounds'

• We would like the adverse events reports 320, 349, 350, 352, 353, 354 on the ewes and lambs?

A: Copies of these reports are attached

The number of embryos created,

A: 48

• How many embryo's transferred to conventional surrogate recipients at over the year to June 2023?

A: None

• How many lambs were born?

A: Only the 15 as above

How many were GM female and male?

A: As outlined above

• How many surrogates suffered from health problems, please document all health problems of all sheep and lambs and their fate?

A: Beyond treatment for normal expected health reasons (vacinations, Feet triming, drenching etc.), nine conventional recipient/surrogate ewes were humanely killed and 1 was found dead as identified in the animal numbers summary on page 7 of the report. Following veterinary inspections; one was doing poorly and found to have very worn teeth; one was found dead and no reason was identified; eight were electively humanely killed by veterinarian to provide best possible outcome for lambs at term. In relation to lambs, one ewe lamb was humanely killed by veterinarian at 15 days of age with breathing difficulties; and one male lamb was found dead at 4 months of age with no reason identified.

 Please provide the report on the genetic analysis of the IVP <>cloned chimaera on the brain, liver, kidney tissues?

A: No genetic analysis of brain, liver, or kidney tissues was performed.

Please explain the terminology of "chimaera"?

A: A chimaera is composed of at least two genetically distinct cell lineages.

What different species of DNA did it have?

A: Cells with an unmodified NANOS2 gene and cells with disruption of the NANOS2 gene

• Is the IVP conducted by AgResearch in its on-site laboratories?

A: Yes

Are the laboratories in Ruakura or another NZ AgResearch Site?

A: Ruakura

• If not, is the IVP development outsourced to a private company in NZ or overseas?

A: N/A

• Please can you advise how long the rams who tested positive for Johne's disease were kept alive?

A: Three of the rams for roughly 9 months in a separate paddock.

• Were they vaccinated for Johne's disease?

A: No

• Did they run with the flock of sheep?

A: Not after being identified as positive

• If so, please explain why were they allowed to intermix with the Johne's disease.

A: N/A. We note Johnes is commonly identified in animals in New Zealand.

• May we have the report to MPI regarding the conditions they placed on the animals with Johne's disease?

A: No report was required or requested by MPI

We note the part of your request pertaining to the EPA oversight has been transferred to the EPA, as set out in our letter of 20 October 2023 and is therefore not addressed here. The EPA will respond to you directly on this part.

Please if you wish to discuss any aspect of your request and our response, please feel free to contact me.

You have the right to seek an investigation and review by the Ombudsman of our response. Information about how to make a complaint is available at www.ombudsman.parliament.nz or freephone 0800 802 602.

Yours sincerely,

Nick Barraclough

Team Leader - Legal