

Email to Hon David Parker et al, sent 4 January 2021

From: Wendy McGuinness <wmcg@mcguinnessinstitute.org>

Date: Monday, 4 January 2021 at 17:38

To: "david.parker@parliament.govt.nz" <david.parker@parliament.govt.nz>

Cc: Hon Grant Robertson <Grant.Robertson@parliament.govt.nz>, "Megan.Woods@parliament.govt.nz" <Megan.Woods@parliament.govt.nz>, John Blincoe <John.Blincoe@parliament.govt.nz>

Subject: AgResearch's transgenic outdoor experiments - update, OIAs and Request for Reassessment

Kia ora David,

I hope you have had a relaxing summer break.

As Minister for the Environment during a global pandemic, you will be acutely aware of the risks to New Zealand of accidentally creating a novel virus that can move either between animals or between animals and humans. *The Economist* (19 December 2020–1 January 2021) put this risk succinctly: 'covid-19 has served as a warning. The 80m animals slaughtered for food and fur each year are Petri dishes for the viruses and bacteria that evolve into a lethal human pathogen every decade or so. This year the bill came due [COVID-19] and it was astronomical.' (p. 15)

We have now received answers to [our original OIA](#) on AgResearch's transgenic outdoor experiments. For your information, I have attached the correspondence and summarised a few key points for your consideration.

- A. Public money enables these experiments to continue. In addition to accumulated operating costs of NZD \$6.6 million, AgResearch has obtained significant public funds in the form of grants. Since 1999, government has provided grants of \$25 million to AgResearch to undertake these experiments. See answers to Q1 and Q3 (first table), respectively, in AGR correspondence attached.
- B. AgResearch has collaborated with a range of overseas organisations. Sixteen agreements with academic and commercial organisations are confidential, meaning the true risks, costs and benefits will be difficult to unravel. See answer to Q4 (second table) in AGR correspondence attached. We are unsure who is undertaking independent scrutiny over such a significant risk and sizable investment. If the benefits from taking these risks and investing public funds are benefiting overseas organisations (rather than New Zealanders), this is new, important information for those considering the need for a reassessment. If you are aware of an independent body undertaking a review of this work, could you please let us know the name of the organisation?
- C. AgResearch's Board has not focused on managing the risks of these types of experiments. Their lack of care and due diligence is perhaps best illustrated by the following four

examples:

1. The Board has received only two papers on transgenic animals in the last ten years; they are as follows: *Revised Farm Strategy to meet the needs of Future Footprint* (2014) and *Animal Science Roadmap* (June 2017). However neither of these papers, as indicated by their titles, explore and manage the risks of transgenic animals in the outdoors. See answer to Q6 in AGR correspondence attached.
2. AgResearch's correspondence states that the current containment facility manager 'does not have any record or recollection of the board having, with the express purpose, visited or inspected our GM large animal containment facility in Ruakura'. See answer to Q7 in AGR correspondence attached.
3. The Board has not actively pursued any understanding of GM benefits. See answers to Q8 and Q9 in AGR correspondence attached: 'A review of our board papers – as per question 6 – did not yield any reports on the subject of "potential benefits" of transgenic research.'
4. The Board has not engaged with AgResearch's ten-year annual report to the EPA, and in particular Control 12. This is surprising given AgResearch was advised by the EPA of the significance of this ten-year report by email on 29 July 2020 (see Appendix to AgResearch's correspondence).

See answer to Q15 in AGR correspondence attached: Q15: Has there been any correspondence between the AgResearch board (including the Chair) and AgResearch staff about the 10-year report? Response: 'No.' Note: We have gone back to AgResearch to clarify their processes in regard to the preparation of the ten-year annual report (our OIA 2021/03). The ten-year report is now published on the EPA website and fails to address Control 12 (see our discussion in Section F below).

Given these experiments have generated such a high level of public interest (e.g. over this time the country has invested in HSNO legislation, a Royal Commission and there have been a series of public protests and court cases) and significant public funds (e.g. grants of \$25 million); one would expect the Board to be more engaged. Further, it is important to understand that the decision making by ERMA in 2010 effectively licensed AgResearch to undertake a range of risky experiments (effectively moving away from the case-by-case approach outlined in the HSNO legislation and methodology to more of a social license to operate with controls). This is why we believe the reporting and reassessment controls (12 and 13) were included and why we are so surprised by the Board's lack of care.

- D. There is one final comment in AgResearch's correspondence that is a concern. AgResearch states: 'There is no increased risk created by having animals of the same species and gender together [e.g. two different types of modified cattle] in this manner in our secure animal containment facility.' See answer to Q18 in AGR correspondence attached. I will follow up with a further OIA to AgResearch, asking for evidence to support this statement, but my understanding of the science is that this is not correct. Using the analogy of the petri dish, it makes the contents of the petri dish more diverse and unstable. This is why the committee

in 2010 added Control 5, which required ‘animals used to control grass in the space between the double perimeter fences are not of the same species as the animals being held within paddocks which are adjacent to the inner fence’ [[ERMA 2010 decision](#)], p. 42]).

E. Control 13: Iwi relationships

It is important to note that the committee relied on AgResearch having a good working relationship with iwi, but this did not eventuate (see AgResearch’s annual reports from 2013 to 2020 in response to its failure to action Control 13). Evidence of the committee’s reliance on this control being actioned is noted in the 2010 ERMA decision:

6.2.29 Nevertheless, the Committee has imposed a control requiring the establishment of an iwi monitoring group to provide sufficient opportunity for ongoing consultation and enable the active monitoring of intangible effects (Control 13). The Committee expects the applicant (with agreement from Ngāti Wairere and Waikato-Tainui) to invite other relevant and interested Māori groups to be involved in this monitoring group so that information about the science can be shared and made available to all those in the region with an interest in the research.

6.2.38 However, the Committee was satisfied that there are sufficient safeguards in place to manage any effect on the role of Māori as kaitiaki and for the purpose of this assessment have considered this effect to be negligible.

6.2.41 The mandated representatives of Ngāti Wairere spoke at the hearing and did not oppose the application. They outlined the positive and useful nature of their relationship with the applicant.

6.2.42 On considering the information provided, and particularly the presentation provided by Ngāti Wairere, the Committee was confident that there are sufficient safeguards in place to manage any effects on the principles of the Treaty of Waitangi (Te Tiriti o Waitangi). [[ERMA 2010 decision](#), underline added, pp. 27-29]

However, these safeguards have never been actioned.

F. Control 11 and Control 12: Reporting and Reassessment

The ten-year annual report prepared by AgResearch (found [here](#)) is disappointing. It is as though the authors failed to understand the intent of the HSNO legislation, in particular the need to aggregate and compare ‘risks, costs, and benefits’ (see clause 34 of the [Hazardous Substances and New Organisms \(Methodology\) Order 1998](#)). They fail to mention the terms ‘benefits’, ‘risks’ or ‘costs’ (other than a reference on page 8 to the risks of ‘Facial Eczema’).

The EPA’s email to AgResearch on 29 July 2020 (mentioned above), was quite clear about what was expected. It even refers to the 2010 decision, which stated:

6.2.95 In addition to the time limit, the Committee has decided to impose two reporting controls to ensure that the Authority is provided with ongoing information about the development.

6.2.96 The first reporting control (Control 11) sets out the requirement for an annual report to be provided to ERMA New Zealand which provides information about any

outdoor development activities undertaken, any unforeseen adverse effects resulting from the genetic modifications, and any initiatives that have been undertaken with the iwi liaison group established under Control 13.

6.2.97 The second reporting control (Control 12) imposes additional requirements for the annual report provided after the tenth year of research. This report must include:

- a summary of the progress made towards the completion of the “proof-of-concept” research;*
- details of any adverse effects of the organisms that have occurred; and*
- information about any beneficial effects of the organisms that have occurred or that are forecast for the remaining ten year period of the research.*

6.2.98 All the annual reports, including the tenth annual report, will be made available to the public. The information in the tenth annual report may be used for the purposes of determining whether there are grounds to reassess the approval under section 62(2). [[ERMA 2010 decision](#), underline added, pp. 35-36]

The annual report and the 2020 ten-year annual report do identify a range of concerns and in particular when controls have not been implemented (such as Control 13). What is simply surprising, is that the 2020 ten-year annual report fails to include information that relates to Control 12 at all, see paragraph 6.2.97 above. In particular it fails to discuss ‘proof-of-concept’ or ‘beneficial effects of the organisms’. It also fails to provide a summary of adverse effects for the previous ten years.

Further, the annual reports, and in particular the 2020 ten-year annual report, acknowledges ongoing negative impacts that together illustrate the nature of the experiments: ‘None of the male lambs survived.’ It also states in regard to sheep foetuses: ‘Overall, this suggests that the kidney niche in SALL-/- males is vacant but intact and can be partially rescued by embryo complementation.’ At the bottom of the page it notes: ‘This animal (#1801) [a cow] has premature mammary development but is otherwise showing no abnormalities.’ These are noteworthy and illustrate these are experiments that do have negative impacts.

Furthermore, the wider context of the ten-year report is important. This is the first time a report has been required as a control to ensure the EPA takes the time to assess where we sit today and to seek a reassessment if appropriate (see EPA correspondence, 20200827). The EPA notes in the aforementioned correspondence: ‘The EPA will review the Ten Year Report, which will include discussion of the benefits of the research, as part of its consideration of whether there may be grounds for reassessment of the approval.’ We wonder how the EPA can assess benefits if AgResearch’s report does not even mention these. The 2010 decision was approved due to the benefits being rated *medium* and the controls being actioned and diligently managed: ‘This approval is subject to stringent controls.’ [p. 1]

7.1.2 The Committee considered all of the adverse and beneficial effects, and also the additional matters set out in sections 44 and 45. The Committee assessed each of the potential adverse effects (risks and costs). In making this assessment the Committee considered both the impact of containment and the additional controls, and the effects of the GMOs if they were to escape from containment. The Committee also considered the adverse effects in aggregate in order to assess any

cumulative effects. Overall, the Committee concluded that the adverse effects are negligible, taking into account the controls in place.

7.1.3 The Committee concluded that the primary benefit accruing from the development is an increase in scientific knowledge and the capacity for innovation in New Zealand. Based on the government investment in this research over the next five years, and the applicant's track record, the level of this benefit has been assessed as medium.

7.1.4 Therefore, taking into account all the effects of the organisms, the Committee concluded that the medium beneficial effects of having the organisms in containment outweigh the negligible adverse effects of the organisms.

7.1.5 Clause 26 [of the [HSNO Methodology](#)] provides that the Committee may approve an application where an organism poses negligible risks to the environment and human health and safety, if it is evident that the benefits associated with that organism outweigh the costs. [[ERMA 2010 decision](#), underline added, pp. 36-37]

The controls resulted in the committee making an assessment that in 2010 the risks were *negligible* and the *benefits* were medium. We believe a reassessment may find in 2020 the risks are medium and the benefits negligible. That is why we believe a reassessment is both necessary and timely.

As the responsible Minister, I believe it is time for you to intervene. I understand there are a number of options at your disposal.

Option 1: Request a reassessment under section 62 of the Act. I believe a public hearing is appropriate. This is important because the EPA, as stated in its correspondence, is not up to date with recent developments and a public hearing will enable experts across a range of fields to join the dialogue. This is our preferred option.

Option 2: Require AgResearch to prepare a report to Hon Grant Robertson (Minister of Finance), Hon Dr Megan Woods (Minister of Research, Science and Innovation) and yourself on the risks, costs and benefits of the outdoor experiments in question. This would in effect enable you to 'call in' the decision and complete a proper inquiry.

Option 3: Require the EPA to prepare a report to you that assesses the risks, costs and benefits of the outdoor experiments in question.

Option 4: Suggest to Hon Dr Megan Woods (Minister of Research, Science and Innovation) that the AgResearch board should consider writing a more appropriate ten-year annual report that aligns with the general purpose of Controls 11 and 12.

I have copied Hon Grant Robertson and Hon Dr Megan Woods into this correspondence in order that they are made aware of the issues raised in this letter and the opportunities to ensure future decisions are based on accurate, complete and timely information.

At a time when New Zealanders appreciate the full impacts on our people and our economy of a pandemic, it is timely to reconsider and manage any possible risks to our agricultural-based economy and the health of our people. COVID-19, the terrorist attack on Christchurch Mosques, and the Whakaari eruption showed New Zealanders how vulnerable we are to low-probability, high-magnitude events.

Thank you for taking the time to understand this complex issue and for considering our request. I would appreciate the opportunity to meet you in person to discuss the above at your earliest convenience.

Best wishes,

Wendy McGuinness
Chief Executive

Attachments

(See copies at <https://www.mcguinnessinstitute.org/publications/correspondence-oias>)

2020 08 27 EPA
2020 08 03 EPA
2020 08 31 MPI
2020 09 11 AGR
2020 10 02 MPI

Table

Table 1: Length of Annual Reports to date

Note: This implies that the 2020 report contains more information than other years, but from our analysis there is not new types of information included in this report, when compared with previous annual reports.

Year of AgResearch's Annual Report	Number of Pages
2010	2
2011	24
2012	23
2013	19
2014	24
2015	14
2016	17
2017	31
2018	30
2019	Missing from EPA website
2020 ten-year review including Control 12	35

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