	IN THE WATTER	of the Resource Management Act 1991
	AND	
	IN THE MATTER 8B – GMO Hearing Waikato District Plan.	
JOINT		SIONS BY COMMISSIONERS OF THE WAIKATO DISTRICT COUNCIL
EVIDENCE OF FRANK ROWSON ON BEHALF OF		
GE FREE NEW ZEALAND		
Dated 19 December 2019		

Address:140, Burwood Rd.,

Matamata 3400

INTRODUCTION

- 1. My name is Frank Rowson; I am a retired veterinary surgeon.
- 2. I qualified as veterinary surgeon in 1963 (B.Vet. Med.)
- 3. I have had 70 years involvement in agriculture, working in and around the Waikato region the last 30 years
- 4. Over the last 15+ years I have been working in Waikato as consultant.
- 5. This work has increased my skills in sustainable farming, soil and plant science through relationship and knowledge sharing with many overseas experts, especially those dealing with the effects of genetically engineered/modified (GE) food crops and animal production systems.
- 6. My main area of research has been on the environmental unintended effects of GE animals and GE crops from the increased use of pesticides that are associated with GE crops. Looking at the long term sustainable raison d'etre of those GE crops.
- 7. From 2002 to 2011 I was a member of the **Te Kotuku** Whenua team with Jacqui Amohanga, Marie Pene and Malibu Hamilton appointed by the EPA/ERMA for Ngati Wairere, monitoring AgResearch on their work with GE animals.
- 8. Since the Royal Commission on GE (2000) I have researched and submitted on many genetically engineered/modified (GE) applications to the Environmental Protection Authority (EPA) and local body Councils.
- 9. I have been a member for 20+ years and 10 years as trustee of, Physicians and Scientists for Global Responsibility (PSGR)¹. PSGR provides scientific and medical information and analysis in the service of the public's right to be independently informed on issues concerning both ecosystem and human health.

SCOPE OF EVIDENCE

- 10. My evidence will address the following matters:
 - a. Soil biota health, environmental health.
 - b. Animal Welfare in GE/GM trials

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¹ https://www.psgr.org.nz

- 11. I have been actively involved and observed, over the last 19 years, the trials at Ruakura and Lincoln which have had breaches in their GE field trial experiments.
- 12. I believe these breaches demonstrate that in highly controlled contained trials the ability of experts in the GE field have been unable to control containment of GE material within the confines of the facility.
- 13. I have been concerned over the lack of comprehensive testing for GM organisms in the soil environs and what effect this might have on the natural ecosystems.
- 14. I consider that "It is no use shutting the stable door after the horse has bolted"- in the case of Ruakura GE cows, the door was always partly open, allowing the possible dispersal of GE material through Horizontal Gene Transfer (HGT) into the soil. There were total inadequacies of the physical facility fencing as the open nature of the fencing do not stop birds, rabbits insects transferring, or water escaping, into the environment outside the containment facility.
- 15. Thus the question must be asked- if the controls placed by the EPA on the GE/GM experiment trials of GE cannot be controlled within the facility, how is the Waikato District Council going to control the release of GE in its region?
- 16. I have been told that the insurance companies have stated they will not cover adverse effects from GF.
- 17. I am aware that the major dairy exporter Industries based in the Waikato have strict conditions on GE in their supply chain.
- 18. Any GE contamination from GE crops has the potential to place huge costs on the ratepayers and farmers, particularly in the dairy industry, a mainstay of the region.
- 19. I have followed the experience of many farmers in Southland who suffered huge losses after their animals grazed GE swedes, developed from New Breeding Techniques (NBT).
- 20. I have read the reports documenting many hundreds of cows who ate these Chlorosulfuron resistant swedes were sick and died from "unintended effects".
- 21. I have a major concern with the pressure on authorities and the government to speed up the introduction of untested GMO/GE crops where there is uncertainty as to what unintended effects will arise.
- 22. One of my overseas associates, Mr. Ib Peterson a Danish pig farmer has documented in his report "A Farm study- Showing Health issues, abortions deformities and fertility problems in pigs linked to GE soy and Roundup, ² the serious problems with abortions, deformities and chronic illness he had with his pigs when he fed them GM

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² A Farm Study- Showing Health Issues, Abortions Deformities And Fertility Problems In Pigs Linked To GE Soy And Roundup. (2017) https://www.monsanto-tribunal.org/upload/asset_cache/223719479.pdf?rnd=Fe02Fy

- soy. These problems caused serious economic losses and he suffered extreme stress affecting his livelihood. These problems were significantly lessened when he reverted back to non-GM soy. (Appendix 1)
- 23. I have had confirmed, through the ERMA Annual reports, my deep and serious concerns, as a retired veterinary surgeon, of the genetic modification of the cows, goats and sheep at AgResearch Ruakura facility.
- 24. Goetz Liable from Agresearch partnered with the University of Milan's Lauretta Turin in a research studying the placental transfer of GM fetal blood into the dams blood stream and found it was detectable for up to two years.³ The Study found that

"Fetal cells and DNA have been detected in the maternal circulation during and after pregnancy in a few mammalian species. The incidence of similar microchimerism in cattle could have repercussion for the application of modern biotechnologies such as the transfer of transgenic embryos." (Appendix 2)

- 25. I have concerns as to whether there would be any long term effects on the GM animal as well as any other animal or person it comes into contact with.
- 26. The GE Animals in New Zealand, the first fifteen years⁴ documents the issues I was cognisant of in my years as a monitor of the facility. (Appendix 2)
- 27. In my experience any farmer whose herd suffered from such chronic health effects, abortions, deformities and early death would be very soon bankrupt.
- 28. It is my belief that GE causes unreasonable and unnecessary pain and distress to the animals. Regardless of their pest status no animal should be subject to the inhumane animal welfare issues that genetic modification/ gene editing produces in the animals.
- 29. I would like to state in my experience the issues and research documented in Ib Pedersen's farm study were well after the release of the respective GM crops. GMO/GE is being rushed to market too soon and the risks and long term problems are not being researched and under stood. This is costing farmers and adversely affecting the environment.

RECOMMENDATION

The Hearing Committee to amend the Proposed Waikato District Plan to include the following:

1. A resource management framework for the management of GMOs that is regional specific taking into account environmental, economic and social

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³ Bovine fetal microchimerism in normal and embryo transfer pregnancies and its implications for biotechnology applications in cattle (2006) Turin et al.

⁴ https://www.gefree.org.nz/assets/pdf/GE-Animals-in-New-Zealand.pdf

- well-being considerations.
- 2. Strong precautionary and prohibitive provisions, policies and rules relating to GMO land use implemented.
- 3. Wording that duplicates or is consistent with the Far North District Plan, the Whangarei District Plan and the Auckland Unitary Plan, to ensure a consistent approach across Northland, Auckland and the Waikato and to eliminate cross boundary issues.
- 4. Consents on all actives that involve GMO's should automatically be publicly notified.

Frank Hilton Rowson 20 December 2019

Attachments

Appendix 1: Bovine Microchimerism In Normal And Embryo Transfer Pregnancies and Its Implications For Biotechnology Applications In Cattle (2006)

Appendix 2: GE Animals in New Zealand (2000-2015)