

Highlights 27 January 2019

Whaingaroa Environmental Defence Incorporated

Malibu Hamilton

1. HUMAN INTO COW AGRESEARCH

I was part of Te Kotuku Whenua (Ngati Wairere Environmental Agency) Agresearch monitoring team from approximately 1988 through to 2011 with Jacqui Amohanga, Marie Pene. Frank Rowson became part of the team from 2002 to 2011.

AgResearch got Erma approval GMF98009 Human to Cow Cattle Part (i) & (ii) 1999 and Part (iii) 2001. There was wide spread public opposition and the Royal Commission on Genetic Modification was undertaken in July 2001.

AgResearch got further approvals GMD02028 Cattle Sept 2002 and by March 2010 human genes into goats, sheep and cows was approved. Certainly, there is substantial evidence of animal welfare issues over those years. Examples were ovaries that grew up to the size of tennis balls rather than the usual size, aborted and deformed fetuses, deformed calves and respiratory conditions among animals bred at Ruakura.

2. SECTION 42A REPORT - CIVIL LIABILITY

The report highlighted that there is potential liability for Council to incur costs if there was a GMO disaster and the district plan had no GMO provisions. Additionally, it raised concern that other councils have discussed potential civil liability issues along with stating that the Auckland Council is so concerned that its Plan has requirements for bonds to be set and cost recovery provisions.

My evidence also mentioned the cross-boundary implications, particularly as Auckland does have strong polices on cost recovery and bonds that assist to protect their ratepayers while WDC would be left unprotected and therefore leave their ratepayers widely exposed to potential substantial costs.

Furthermore, my evidence emphasised that at the last plan change, submitters and ratepayers has expressed the wish to minimise those liabilities and avoid cultural, environmental, social and financial costs to our communities. Once again, we are seeking WDC to plug the gap between the different Councils. We do not consider that costs should be socialised while profits are privatised.

3. CRISPR CAS9- GENE EDITING

My evidence traversed the fact that top scientists and many countries has sought a moratorium on the use of new gene- editing technique that has the potential to alter human DNA and other species permanently. Of real concern is that even the co - pioneer of CRISPR CAS9 Professor Jennifer Doudna is outspoken and actively campaigning for stronger regulation to be put in place to avoid potential irreversible adverse effects and impacts globally.

4. RISK

The opposing further submitters groups are stating that submitters have not given any examples of quantifiable risk, harm or costs and yet cannot and have not clearly demonstrated that genetic modification, GMO” and gene drive techniques are safe and will not have adverse impacts. The absence of science is not the absence of effects.

5. WED SUBMISSION

The WED submission covered several relevant points such as:

- a. based on an opinion from Dr Royden Somerville QC, says, “If an agent making use of GMOs has inadequate financial resources to cover environmental damage resulting from its activities, the burden will tend to fall on local government.”

- b. The Law Commission said, “It is possible that environmental damage caused by GMOs could be dealt with under the RMA. Section 17(1) states that “every person has a duty to avoid, remedy, or mitigate any adverse effect on the environment arising from an activity carried on by or on behalf of that person, whether or not the activity is in accordance with a rule in a plan [or] resource consent...”. That duty is not itself enforceable but in Part XII of the RMA there are powers to issue an abatement.”

- c. GMOs have potentially even more irreversible significant adverse impacts and the level of scientific uncertainty was recognised by the Law Commission. The Law Commission said, “It is difficult to estimate the level of risk posed by GMOs;
 - It is difficult to assess the magnitude of the potential damage that could be caused;
 - GMOs have the **potential to create catastrophic levels of harm**;
 - GMOs have the **potential to cause irreversible damage**;
 - Some of the potential negative effects of GMOs will **likely** manifest in the long term and be diffuse in nature”