

Closing Submission from the Nelson GE Awareness group

The Nelson GE Awareness group come from a purely public perspective, we have been involved in this issue for a over 3 years now, it is important to note that we work for no monetary gain. As a community group we have no funding besides the little we make from bumper stickers, T shirts and the like, our funds often come, of necessity, from our own pockets.

We aim to inform and empower the public and have had a public education and awareness campaign in Nelson for the past few years. An original campaign, begun with funding for 2 years, from the Nelson Environment Centre, aimed to achieve choice by demanding labelling for GE foods. In late 1999, we were assured labelling would be instigated soon following previous assurances by the Ministry of Health (after public consultations in May of that year) On 20th August 1998 Standard A18 was gazetted, effectively making it illegal to sell any food using gene technology unless it had first been approved by ANZFS' We fully believed this standard would lead as it promised to all food being labelled if it employed the use of gene technology, unfortunately what has occurred since has been a travesty.

- We call again for the Ministry of Health to appear before the public in support of their submission to the Royal Commission

Recent surveys of ordinary New Zealanders and visitors to Nelson by GE Awareness groups show that almost all respondents (96%) expect food offered for sale in New Zealand to be safe. The ministry promised us safe food, having assured us that they would be looking after our interests, and allowing meaningful labelling of our food, giving us a choice. It is time the government lived up to its pre election promises. Surveys of ordinary New Zealanders from a telephone poll in 1998 found 94% of people wanted labelling. In 1999, 5713 NZ people, wrote submissions, their opinion was never again sought after that round, ANZFA avoiding a round of public consultation by making a proposal P200. Shortly prior to the new millennium there was another round of comments, this time only from government, community and industry. Our democracy overlooked, (previous submitters were not invited to comment), contributors to the next industry round, the USDA included, tried to sell us their cheap unwanted genetically modified feedstuffs, apparently having more impact on our government and ANZFA than 5713 Nzers. A joint standard with Australia, threatening our sovereignty, via the Joint Food Standards was eventually gazetted on 7th December 2000. 2 weeks later the labelling regime was gazetted becoming law on the 21st December. Christmas always being a good time to clear the desks of any media sensitive approvals, on 20th they also announced in italics under a **Note* under Matters before Council, not under Call for Submissions that a GM compliance code was up for submission. **No** GM Free labellers, also affected by the Code, (negative claims covered separately by the Fair Trading Act) knew about this consultation, they had not been notified presumably since their labelling was no longer covered by the food standards. Nelson GE Free awareness group considers this to have been a breach of the spirit if not the letter of democratic requirements both in terms of the timing (right before Christmas, and because of the decision not to advise GM Free labellers.

The code appeared watered down yet again, industry achieving their aims, this version effectively failed to provide any labels for oils, sugars eg. corn syrup, and corn starches, meats fed on GE feedstuffs, food from food outlets. These were all exempted as was 10g per kilo per GM ingredient. Whole foods (GE) with heritable material in May 2000 became subject to the Montreal Biosafety Treaty when it was put in place. The Treaty has not yet been ratified.

- We would advocate the New Zealand government to encourage all countries to ratify this treaty.
- We would also advocate the government that **no** GE seeds be imported

- We would also advocate the government that **no** GE food be imported, and that they ‘opt out’ from the Food Standards Code via the New Zealand variation. They should also remove foods as a matter of urgency from the Trans Tasman Mutual Recognition Agreement- a free trade agreement between Australia and New Zealand.

This agreement allows Australia to refuse NZ apples with fireblight for biosecurity reasons. GE foods and crops should also be refused for this reason, since there is a proven biosecurity risk, which cannot be proven not to exist, ANZFA refusing to give a guarantee of the safety of GE foods and subsequent biosecurity risks under cross examination? The risks are there both to public health, environment and economy. 99.3% of respondents to surveys believe that the clean green environment is an important part of the attraction of New Zealand as a holiday destination. International pressure, originally exerted by Josiah Beeman, US ambassador, on Neil Kirton in 1997, was more impersonally and effectively applied through trade agreements.

- We would advocate the New Zealand government advocate for more transparency, accountability, and open consultation by the WTO on the trade in GE crops/foods through World Trade Agreements.
- We would advocate the adoption of the Precautionary Principle as declared in the Rio Declaration in 1992 in respect of GE foods and crops.
- We would advocate detailed and ongoing independent comparable and epidemiological research and genetic testing to look for the unanticipated effects of GE foods through long term feeding studies on animals similar to those being carried out on the public at large.

Since we will be the ones who will pay for any breakdowns in our health, we feel an absence of informative labelling to be unjust, denying our basic human rights. The Min of Health and ANZFA continue to promulgate the corporate line, refusing to legitimise important issues of public health and food safety. The public, contrary to popular opinion, are still extremely concerned, and expectant of a satisfactory outcome to both GE food labelling and the government position regarding GE after the Royal Commission reports their findings. Fewer than one person in ten of the 7% of those refusing to respond to questions about genetic engineering do so on the basis that they that they don't know enough or are not interested in issues. Even the just released NBR-Compaq poll shows 89% of the population to be unwilling to support genetic modification. This is the reason we advocate a complete removal of GE foods from New Zealand and withdrawal from the joint food standards code.

To quote from the hearings ‘We agree there is no market for GM foods’ Hodson LSN 83.5% of all people approached in the Central Business district of Nelson city would like to see New Zealand free of GE foods. This pattern is the same for subgroups broken down according to locals, visitors to Nelson from other parts of New Zealand and from overseas. These figures drop away only slightly to 88.2% for New Zealand being free of transgenic animals and 83.5% and 84% respectively for GM crops and GM trees. 93.8% of respondents would expect GE food and food with a GE content to be fully labelled. The only drop in this situation is that only 74% of respondents expect the food that they presently buy in supermarkets to be free of genetic engineering or modification. 5.9% didn't know or didn't respond (consistent with the the 5% of the NBR-Compaq respondents who were uncertain). Of the remaining 20% who do not expect our supermarket food to be GM free many referred to the unsatisfactory labelling regime at present under way in New Zealand.

The Nelson Group also focused attention on ERMA’s approvals of genetically engineered organisms having realised the dangers of outcrossing, horizontal gene transfer, fluid genomes and prion disease. It was a steep learning curve and remains so to this day. We read research that is only now becoming established as scientific fact. HGT, which was repeatedly dismissed, until, during the recent ERMA hearings for the FRI pine trees (contain ampicillin resistant gene construct and barnase gene construct – terminator) and subsequent to that during the recent events of the RCI was established and accepted as fact. All regulatory agencies claim that the incidence of HGT is very

low, it very rarely happens at all YET. Unfortunately, it's a numbers game, with 2200 genetically engineered products due to go on the market next year, many alive, and containing different gene constructs. The random number of possibilities increases in magnitude similar to the megabites of your hard drive. We will not dwell on it, the magnitude of the danger increasing exponentially with each new invading virus corrupted and with each pathogenic bacteria now adopting antibiotic resistant traits, along with GE introduced free elements of genes in body tissues increasing with every new commercial push. The assurances of safety is based on an understanding of the natural world as it has been in the past, can give no guarantees of adverse health effects. We have many natural risks to our environment, we don't need to foist yet another dangerous malaise in the form of a new and irreversible technology on this already polluted planet. Do not have enough wisdom to use foresight with insight?

During the late 90s, we attended ERMA hearings at our own expense, unlike Maori, no funding was available for any public perspective. We researched the issues thoroughly, and submitted much evidence, since from the beginning it was very apparent that very little evidence of potential risks was forthcoming. What we noticed was shoddily produced documentation from applicants, often with scientific references which when requested could not be produced. We were treated like second class citizens at the hearings our scientific evidence referred to as 'that kind of information', we were marginalised, and our evidence 'overlooked', despite the fact that it often quoted government and other scientific studies from respected bodies from around the world. Our evidence is now, as then, continually disputed, when biotech companies data is often neither peer reviewed, nor published and regularly conceals unknown risks in the detail. The biotech companies had been brought into line by the HSNO Act after an apparent breakdown in the usefulness of the voluntary system once patents on life became widespread.

We suggested the applicants looked at the risks before applying to field trial organisms, but this was never well received. For an applicant to spend money on valid research to identify risks was out of the question, they came here because 'the land was cheap and the regulations lax' Sunday Times 9.1.00. They wanted to shorten the time their research would take, using NZ as no more than a convenient seed bed, they did not want to concern themselves with scientific research which might stop genes from their patented crops from spreading around the planet. We were shocked when Tony Conner from Crop and Food, in answer to a question referring to out crossing into the NZ potato population, readily agreed that if his genetic constructs outcrossed then he could theoretically own the NZ potato harvest should they go that far. It was also unconscionable that he fed his GE potatoes to people at a conference in Nelson when he was voluntarily obliged to keep them on site. Is this the type of scientist we expect from our Crown Institutes? Is it surprising that the Wild Greens pulled out his crop? This was not the only breach in containment as outlined by ERMA in their recent submission. There were tears in a GMO greenhouse in Palmerston North, and a previous tear in tents surrounding canola, although admittedly the latter was a trial under the previous voluntary IAG agreement. We have found Crown Research Institutes to be amongst the worst offenders with regard to lack of due care and attention. ERMA, in their audit, found 137 cases of unauthorised research plus over 200, which had never been transferred from the old IAG, many of these were at Crown Institutions, many others at Universities. The gung ho attitude to labwork is the main reason why in our submission we are unable to countenance the continuation of this research. We have agreed that stance amongst our group, after due consideration of the potential benefits to society, coming to the conclusion that it is too inherently dangerous to imagine any possible release. Rather than believing in the perceived benefits, we believe research of this type could ultimately result in dangers to far greater numbers of the public. The cross examination of Lincoln University and the audit of MAF show that procedures are often either lacking or not adequately followed to ensure complete safety in contained laboratory use.

- We advocate a ban on the use of genetic engineering in laboratory confinement, more investigation into the workings of DNA and the quantum physics and molecular effects could provide work for genetic engineers.
- We advocate proper procedures be implemented by MAF under the guidance of a person/ persons to be put in charge of all procedures related to GMOs to ensure safety.

4 out of 7 of the original board of ERMA were directly or indirectly involved in the use of GE and could therefore be said to have a conflict of interests. A point raised in my submission to the Mystatin sheep hearing, about regulatory boards in the UK being composed of board members with interests in biotechnology, appeared to be taken personally by Bill Falconer. Barry Scott left ERMA shortly after, as did Bill Falconer. Another member of ERMA also left and recently described the goings on at ERMA as a 'farce'. Certainly, via ERMA the government have again virtually ignored our concerns in respect to GMOs, taking more heed of trade and international obligations than keeping their promises to the population at large. Both regulatory agencies reflect that. In their submissions to the commission it was patently obvious that their function (particularly that of ANZFA) appears to be to authorise approvals and applications allowing contaminated products onto the market and corrupted organisms into our environment, whilst being neither accountable or responsible as a watchdog for public and environmental interests supposedly their primary obligation. Untraceable increases in incidences of cancer will further compromise an ailing health service as a result of GE foods, claims of potential health hazards should be subject to investigation.

In '99 the issues surrounding GE crops and the resultant foods, we felt, were too important to warrant their being dismissed by central government. Since we appeared to be getting nowhere with protecting our community via any pressure on government or regulatory agencies from GE crops/foods, we took our campaign to our local government- the Nelson City Council. After 9 months or so of negotiations on resolutions, etc. in December 1999 council voted 6:5 against becoming a symbolic GE Free zone. Tasman council refused to even consider the wishes of over 3000 people in their region. We now have combined petitions (asking for the area to become a GE Free zone) totalling over 8000, representing people who have signed these petitions, they are still queuing up to sign on a Saturday morning. We intend to take the matter back to council in the immediate future.

- We would advocate that rural areas are allowed autonomy and given statutory rights to prevent the entry of GE organisms for any reason into their biozone.

These are issues of regional security particularly where rural or isolated communities are dependent on distinct and related employment opportunities eg. tourism, organics and primary production to maintain their local community.

See Nelson cluster document submitted 30.1.01

We discuss these issues every Saturday with people from around the country and indeed around the world. Some say the public have no interest, why then did 92,000 people ask for a Royal Commission, why then did 11,000 people take the trouble to write submissions, why are there still people trying to find out what this all means?

People get sick to death of continuously writing letters, making submissions, joining in actions, simply to get their basic human rights, food free of antibiotic resistant bacteria genes, toxic and viral genes and an environment, free of organisms constantly in flux and creating new and unknown but inherently irreversible genetic pollution, which may prevent a decent future for their children and grand children. Why should they fight for their dues in a democratic society? They may not understand all there is to know about this complex subject, but what they do know is that they don't like it, don't want it and don't appear to be able to get a choice in the matter.(see survey) What they

do want is unbiased education and reporting, not biased literature paid for and written by organizations like the Grocery Marketer's Assoc. leaflet supported by the RSNZ, cross examined on GE free NZ's behalf by Steven Druker, where they were unable to endorse unanimously the absence of significant risks. Other information provided by Genepool, a coalition between the MoH and Monsanto (a PR tour in '98) was found to be extremely selective.

Giving evidence for GE Free NZ Steven said it was a disgrace that we are eating foods based on FDA rulings, since these have been shown to be fraudulent, those approved under interim approvals but not safety assessed by ANZFA may still have only been subject to this type of approval.

Another witness for GE Free NZ, Joe Cummins stated that GE foods affected immune systems, as well as children and babies in the womb and may also be the cause of earlier onset of cancer. Surely these are reason enough to initiate detailed research.

It appears the mass media also see fit to put a slanted perspective, a few decent articles that did not promulgate the pro GE line advocated by Life Sciences would be helpful. Again as in the UK, journalists continually report minority views, bring pressure on the mainstream majority to change their views, marginalizing any dissent. No wonder the public appears confused.

Unfortunately, the media, and as a result the public, have been subjected to an advertising campaign throughout the RCI, by pro GE group NZLSN, this was outlined in their business plan, which was passed to me by Nelson City Council, after they were invited to join. We can submit a copy for your examination should you not have been forwarded one by Life Sciences Network.

Also included in the aim to limit information appears to be the Min. of Education, namely the project officer Science. They suggest that a useful introduction to GE we publish for intermediate level, 'debates the ethical, social and moral consequences and this is irresponsible without significant scientific knowledge of genetic engineering first being in place.' In the UK they have gone further linking 100 science teachers with the Teacher Scientist Network at the John Innes Centre, Europe's leading plant biotech inst.

- For this reason we advocate the government undertake a funded public education process, if necessary having the 2 polarised views in the same document so that people can make their own choices with regard to genetic engineering.
- We advocate this would be implemented between the date of the RCI reporting back to the commission and the next election and that the end result of this would be a binding referendum on genetic engineering at the next election.
- We advocate that any such referendum should have simple clear questions to be answered by a yes/no answer and that a decision by the people to proceed with genetic engineering should be accompanied by a mandate to ensure any and all GE applications be proven safe.
- We would advocate a total and immediate ban on all field trials, particularly, the controversial PPL and Agresearch trials with sheep and cattle with human genes, until full safety can be ensured. A 10 year moratorium on all field trials instigated to allow breathing space and a chance to assess world wide the effects already visited on our precious biosphere, until a binding referendum proves the desire of the greater majority of the public to request this.
- We would also advocate that with regard to the above that industry would be expected to carry the burden of proof in this respect, giving conclusive evidence of safety and both publish these findings and pay for this evidence to be peer reviewed. A full economic assessment should also be carried out to assess the impact of each new GE application on the current economy eg. primary production, tourism, organics etc.
- We would advocate that no precedents over issues, such as was suggested in the ERMA presentation, be permitted unless subject to yearly review as a matter of course. Funding has left ERMA inadequately short of independent research resources . Each and every organism

should be assessed in detail, should field trials ever be considered safe enough to continue in the future.

- We would further advocate that New Zealand take the opportunity of the new market crying out for organics, by this method it could continue to produce trees without endangering its agreements re carbon emissions. As Dr. Mae-wan Ho reminded us, the locking up of carbon in the form of organic matter in our soils would not only assist our impoverished soils but also help prevent further detrimental effects of global warming, whilst assisting the population by the provision of more nutrients in our food.

We watch with interest the polarisation caused by globalisation, the purported trickle down effect of wealth is not evident, merely a continual erosion in environmental standards as the corporates jostle for position as top dog, owning life, the new gold. Genetic engineers, however, believe that by sticking a few genes in here and there they can create wealth. But they forget how little they know about this science, the fluid genome will always come up with new surprises and some of them will not be pleasant, as we discovered when the mouse pox virus hit the headlines with its new and deadly strain of pathogen.

- For this reason we would advocate a permanent ban on any and all GE applications that could be construed as warfare in any way, shape or form, including terminator technology.
- We would also advocate a ban on patents on life and would request that the Royal Commission recommend to the government that NZ should not recognise any intellectual property rights on life forms. The US PTO's interpretation of US patent law, the US Supreme Court and the precedents it has set, have no bearing, GATT notwithstanding, on New Zealand Patent Law and how the New Zealand people via their government choose to interpret it. "Strong evidence is emerging that these patents are stifling research and innovation." Submission from Dr. Mae Wan Ho.

The world's biggest grain traders (growers of GE crops) are increasingly controlling what the world eats. Archer Daniels Midland (ADM), who recently took over the Canterbury Malting Company, may soon, together, with Goodman Fielder control much of New Zealand's food supply. Let us not overlook that our newly announced economic stability has plenty to do with our 22 billion agricultural exports, 20% of our gross domestic product as other countries succumb to Starlink corn, BSE, foot and mouth and contamination, we still have something good to offer. All of those people who gave their time and thoughts to our video presentation have something good and wholesome produced under sustainable methods to offer the world. A report, today 9.3.01 by TradeNZ also identifies huge new opportunities for NZ in natural health and organic food products.

With regard to genetically engineered pharmaceuticals, we are appalled to see the bickering imposed by rich pharmaceuticals on third world governments concerning their production of cheap AIDS/HIV drugs for the terminally sick. Germline and stem cell experimentation involving human cells and genes should also be banned. Any GE experimentation with human genes runs risks that could negatively impact on both our agriculture and public health

- We advocate a ban on any GE experimentation with human genes, germline and stem cell experimentation. An independent inquiry, into medical GE, and its testing, & the patenting and cloning with human genes, should be set up.
- We advocate assistance for third world countries, not by providing examples of an unproven technology, such as golden rice and untested GE drugs, but by providing sustainable solutions.
- We would advocate that effects of GE drugs (and foods) on our environments, as a result of gene constructs being present in these products, be researched.

- We would advocate that more venture capital instead of being sunk into risky businesses ventures in science be spent on research to assist with sustainable food production.

Increased biodiversity eg. weeds assists with varied diets and less attention by insects on important crops. Simple, healthy and sustainable solutions will help avoid serious famine by spreading the risk of unsustainable GE monoculture. Improving Maori/non Maori diets through education and organics would also cut our dependence on the health system.

With regard to multinationals like Monsanto, it is not acceptable that merely because they have appeared to inveigle their way into top positions in the US government and regulatory systems, no regulations appear to bound their actions as regards GE. Conveniently denying any knowledge of actions of their companies in other parts of the world regarding GE during cross examination, allowed them not only to expressly avoid questions during cross examination at the Royal Commission, (at no time were they called to account and asked to provide information), but also appeared to put the questioners line of inquiry into dispute, their attitude implying inaccuracy. With particular regard to the question put by GE Free Nelson on the subject of unregulated and deliberate releases of GMOs (potatoes) in Russia, 8 notifications for deliberate release in 18 regions of Russia have been granted. A recent study carried out by the Max Planck Institute has revealed that the planting of GE potatoes results in changes to the bacterial communities in the soil. The long term consequences of these changes and their implications for biodiversity have been conveniently overlooked, particularly as regards the case of Russia. In Tasmania recently, it was found that Monsanto GE trials had also been planted secretly, albeit with full federal government knowledge but without regulations. Their controls had been seriously flawed and now compromise their GE free image, & were carried out in 58 open trial sites. On 4 sites 1000s of regrowth Aventis canola plants were found. With regard to biosecurity, both our own and UK government by allowing for contamination appears to be 'trying to sneak GE crops in through the back door' including Starlink corn. Despite customers being clearly adamant that their requirements are for zero GM in seeds and foods.

'During this uncontrollable era of BSE, it would seem only logical to think twice about using a technology that blatantly violates well established legal boundaries' Ecologist March 2001
It appears the state and the scientific establishment are co-ordinating their efforts to force feed the world GE crops, known to be unsafe and unsustainable, and to offer no proven benefits to either farmers or consumers. Refs: The Open Letter from World Scientists to State of the World Forum and the Farmers Declaration on Genetic Engineering in Agriculture. Interestingly, governments around the world have never found fault with the exaggerated claims made by industry, with regard to the need or benefit of GE crops.

- We advocate the need for proper assessments of the costs, benefits and risks of genetic engineering techniques versus sustainable organic agricultural production to enable proper assessment.
- We submit that patent approvals, substantial equivalence and all approvals of GMOs in our environment become null and void when the fluid genome is taken into account. Comparative approvals with non GE organisms and foods are deemed unsatisfactory. It has already been noted from our limited knowledge of the human genome that smaller differences in the genome than previously estimated can and do have major effects on the organism. The evidence that the use of genetic engineering has resulted in an incidence of instability previously undreamt of, requires us to take note of these significant events and give them the priority and urgency demanded of them. We would submit that this requires us to take immediate and permanent steps to ensure further adverse effects are immediately halted, and adequate preventative measures put in place to ensure GE biosecurity risks are minimised.

- We submit that it is important to take a stand for the benefit of the rest of the world as it did in the nuclear issue ask our government to be bold in its stance against this immoral and irreversible technology whilst it still may.

The Commission has proved an interesting if sometimes controversial debate over the last few months, we hope that the Commission will see fit to consider the options carefully, weighing up the evidence before it and come to decisions, advice and recommendations with which to assist the government. Based on their recommendations, we anticipate the government may more easily make proper decisions that will allow us a future, which we will not come to regret. We would request that our recommendations to the government via the Royal Commission be taken into account.

- We call again for the Ministry of Health to appear before the public in support of their submission to the Royal Commission
- We advocate the New Zealand government to encourage all countries to ratify the Montreal Biosafety Protocol.
- We advocate a ban on the use of GE in laboratory confinement.
- We advocate proper procedures be implemented by MAF under the guidance of a person/ persons to be put in charge of all procedures related to GMOs to ensure safety.
- We advocate that the government import no GE seeds
- We also advocate that the government import no GE food, and ‘opt out’ from the Food Standards Code via the New Zealand variation for the following reason-‘ exceptional health, safety and environmental concerns exist’.
- We advocate foods are removed as a matter of urgency from the Trans Tasman Mutual Recognition Agreement until safety is proven beyond reasonable doubt.
- We advocate detailed and ongoing independent comparable and epidemiological research and genetic testing to look for the unanticipated effects of GE foods through long term feeding studies on animals similar to those being carried out on the public at large.
- We advocate the New Zealand government advocate for more transparency, accountability, and open consultation by the WTO on the trade in GE crops/foods through World Trade Agreements.
- We advocate the proper and visible adoption of the Precautionary Principle declared in the Rio Declaration 1992 in respect of GE foods/crops.
- We advocate that rural areas are allowed autonomy and given statutory rights to prevent the entry of GE organisms for any reason into their biozone.
- We advocate the government undertake a funded public education process, if necessary having the 2 polarised views in the same document so that people can make their own choices with regard to genetic engineering.
- We advocate this educative process should be implemented between the date of the RCI reporting back to the commission and the next election, resulting in a binding referendum on genetic engineering at the next election.
- We advocate that any such referendum should have simple clear questions to be answered by a yes/no answer and any ensuing decision by the people to proceed with genetic engineering should be accompanied by a mandate to ensure any and all GE applications be proven safe.
- We advocate a total and immediate ban on all field trials, particularly, the controversial PPL and Agresearch trials with sheep and cattle with human genes, until full safety can be ensured. A 10 year moratorium on all field trials immediately instigated until a binding referendum proves the desire of the greater majority of the public.

- We advocate that industry would be expected to carry the burden of proof of safety and resulting liability should safety be breached, were trials be permitted to continue on the mandate of the people. A full economic assessment should also be carried out to assess the impact of GE applications on the economy at the time eg. with regard to tourism/organics/agriculture.
- We advocate that no precedents over issues, such as was suggested in the ERMA presentation, be permitted unless subject to yearly review as a matter of course. Every organism should be assessed in detail.
- We advocate that New Zealand take the opportunity of the new market for organics. As Dr. Mae-wan Ho reminded us, the locking up of carbon as organic matter assists impoverished soils and prevents further global warming, and assisting the provision of more nutrients in our food.
- We advocate a permanent ban on any and all GE applications construed as warfare in any way, shape or form, including terminator technology.
- We advocate a ban and NZ rejection of intellectual property rights on life forms. The US PTO's interpretation of US patent law, the US Supreme Court and the precedents it has set, have no bearing, GATT notwithstanding, on New Zealand Patent Law and how the New Zealand people via their government choose to interpret it.
- We advocate assistance for third world countries, by providing sustainable solutions to world hunger.
- We advocate that effects of GE drugs (and foods) on our environments, as a result of gene constructs being present in these products, be researched.
- We advocate a ban on any GE experimentation with human genes, germline and stem cell experimentation. An independent inquiry, into medical GE, and its testing, & the patenting and cloning with human genes, should be set up.
- We advocate that more venture capital, instead of being utilised for risky scientific ventures, be found to research sustainable food production.
- We fully support and advocate that the RCI advise the government under urgency to make the recommendations identified in the legal submission from Pat Clark on behalf of GE free NZ.
- We advocate the need for proper assessments of the costs, benefits and risks of genetic engineering techniques versus sustainable organic agricultural production to enable proper assessment.
- We submit that patent approvals, substantial equivalence and all approvals of GMOs in our environment become null and void when the fluid genome is taken into account. Comparative approvals with non GE organisms and foods are deemed unsatisfactory. It has already been noted from our limited knowledge of the human genome that smaller differences in the genome than previously estimated can and do have major effects on the organism. The evidence that the use of genetic engineering has resulted in an incidence of instability previously undreamt of, requires us to take note of these significant events and give them the priority and urgency demanded of them. We would submit that this requires us to take immediate and permanent steps to ensure further adverse effects are immediately halted, and adequate preventative measures put in place to ensure GE biosecurity risks are minimised.
- We submit that it is important to take a stand for the benefit of the rest of the world as it did in the nuclear issue ask our government to be bold in its stance against this immoral and irreversible technology whilst it still may.
- Lastly we submit that the New Zealand government has an ethical and moral duty to protect New Zealand, its diverse environments and the health and welfare of all its citizens, all its

flora and fauna and we call on the government to do so to in light of the findings of the Royal Commission, the most extensive survey of views and scientific evidence ever undertaken in any country throughout the world.

We thank the Commission and request they will report to the government on the strategic options and fully address and make recommendations about which option they would advise to support the New Zealand people in their endeavours for a healthy and sustainable future.