Regulation of Genetically Modified Organisms Under the Resource Management Act 1991

Prepared by Mark Christensen and Jonathan Nicolle

INTRODUCTION

Genetically modified organisms (GMOs) are controlled under the Hazardous Substances and New Organisms Act 1996 (HSNO). However, a number of local authorities are currently considering inclusion of provisions within policy statements and plans under the Resource Management Act to regulate activities involving genetically modified organisms.

A recent decision of the Environment Court in *NZ Forest Research Institute Ltd v Bay of Plenty Regional Council*[1] considered the Proposed Bay of Plenty Regional Policy Statement (RPS) and the inclusion of a statement referring to a 'precautionary approach' to be taken to genetically modified organisms in the region. The statement was contained in a statement of background issues and was not part of the objectives, policies, rules or methods.

In considering the issue, the Environment Court noted that although the RMA identified the management of hazardous substances as a Council function and incorporated the HSNO definition of hazardous substances, the RMA contained no reference to GMOs. Similarly, the HSNO Act identified that compliance with the RMA and HSNO was required in respect of hazardous substances, but there was no such statement for GMOs. The Court stated that the complete absence of GMOs in the RMA might be thought to be deliberate and lead to the conclusion that the RMA had no place in GMO management. However, as this was not argued before it, and as the parties generally agreed that the RMA does give local authorities jurisdiction over GMOs, the appeal was decided on that basis.

The Court concluded that there could be a statement in the RPS about a precautionary approach to GMO management which was not seen as directive but flagged GMOs as an issue which might require consideration in a future plan change or RPS revision.

Importantly, because the statement did not form part of the objective, policy and rule/method framework of the RPS it was not subject to the section 32 RMA requirement to assess whether the provisions are the most appropriate in achieving sustainable management.

The issue of whether local authorities do in fact have the powers to control GMOs in statutory documents under the RMA and if so whether such rules are likely to be justified in terms of section 32 RMA in, is therefore still to be judicially determined. However, those issues are likely to be tested in:

a. The Proposed Northland Regional Policy Statement – which includes a policy requiring a precautionary approach and directs that regional and district councils should apply the policy in respect of plans and resource consents, but should not attempt to address the liability regime for potential harm from GMOs. Those provisions have been appealed to the Environment Court by Federated Farmers.

b. The Proposed Hastings District Plan – which sets discretionary activity status for field trials and prohibits release of GMOs. Submissions and further submissions have closed.

c. The Auckland Council Unitary Plan – which proposed objectives, policies and rules for GMOs. Submissions closed on 28 February 2014. The Council has used the same section 32 analysis used for the Northland Regional Policy Statement.

This paper considers:

d. The arguments for and against local authorities having such powers;

e. In the event that the Courts find that jurisdiction does exist under the RMA, the tests in section 32 of the RMA for determining whether provisions dealing with GMOs are appropriate.

It concludes that the best legal interpretation is that local authorities do not have jurisdiction to control GMOs under the RMA. However, even if those powers are found by the Courts to exist, it is very unlikely that controls on GMOs in district and regional plans would pass the relevant RMA tests which require provisions to be the most appropriate way to meet the sustainable management purpose of the RMA.

[1] *NZ Forest Research Institute Ltd v Bay of Plenty Regional Council* [2013] NZEnvC 298.

JURISDICTION OF COUNCILS TO REGULATE GMO'S UNDER THE RMA

Previous academic commentary

Whether local authorities have the power to regulate and control GMOs under the RMA has been previously addressed by Dr R J Somerville QC[2] and P F Fuiava[3] who took opposite standpoints.

Somerville's argument

Somerville began by referring to the purposes of both the RMA and the HSNO. He concluded that while both statutes had provisions in common and referred to the protection of the environment and the health and safety of people and communities, the HSNO was more limited in scope. Both enactments related to achieving different statutory purposes.[4]

Somerville correctly identified that the key issue was whether the HSNO, being later in time to the RMA, expressly or impliedly prevented local authorities from developing and implementing plan provisions to manage risks associated with GMOs. Since an implied repeal will only occur in cases where statutes are "so inconsistent with, or repugnant to the other that the two are incapable of standing together"[5], Somerville considered it necessary to compare the extent of overlap of the issues in both statutes:[6]

a. There were no provisions in the HSNO that specifically excluded local authorities from controlling GMOs.

b. The functions of the Environmental Risk Management Authority (ERMA) (now the Environmental Protection Authority (EPA)) were different to the functions of local authorities. The decision making process of the EPA required it to solely consider the environmental effects concerning a specific GMO rather than establishing integrated policies on a district or regional wide basis for managing land uses in order to promote sustainable management under the RMA.

c. As such, he concluded that the functions of the EPA and local authorities will not necessarily produce inconsistent controls. His view was, however, that a local authority would need to take into account the EPA's view of site specific GMO matters and in that regard, tread carefully.

d. Case law recognised that RMA provisions went beyond the provisions of the HSNO.

e. Section 142(3) of the HSNO provides that stronger controls on hazardous materials than those specified under the HSNO may be imposed by the RMA where considered necessary. On that basis, he inferred that there is nothing in the HSNO that prohibits local authorities imposing stronger controls on GMOs either.

f. He also considered that there is nothing in the HSNO to prevent local authorities to include in district or regional plans controls relating to socio-economic or cultural matters that he believed the EPA may not otherwise take into account.

g. The EPA is obliged to co-operate with local authorities where resource consents for land use activities are required under the RMA.

Somerville concluded that there was nothing in the HSNO that impliedly repealed a local authority's ability to exercise its jurisdiction to control GMO-related land uses within a district or regional plan under the RMA.

Fuiava's argument

Fuiava also relied on the principle of implied repeal but, unlike Somerville, believed there was a clear inconsistency between the HSNO and the RMA in respect of GMOs. After comparing the purpose sections of both enactments, he made the following points:

a. There is no mention of GMOs whatsoever in the RMA. The HSNO is a specific statute to deal with GMOs whereas the RMA contained more general provisions. Parliament would not have intended a specific statute to be expressly or impliedly repealed by more general provisions in an enactment passed earlier in time.

b. Pursuant to section 53(4) of the HSNO, the EPA is required to publicly notify local authorities of any applications involving GMOs that the EPA considers may be of interest to them. That means that Parliament had intended the EPA to be the final decision maker in respect of GMOs and it reduced the role of local authorities to that of a mere submitter. If local authorities were to have a role in controlling the use of GMOs, section 53(4) would be superfluous.

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[2] Opinions dated 23 February 2004, 31 March 2005 and 18 January 2013 which have been made publically available.
[3] NZJEL [2004] p295.
[4] Somerville, at 16 – 17.
[5] *Stewart v Grey County Council* [1978] 2 NZLR 577 at [583].
[6] Somerville, at 19 – 21.

c. There are no provisions in the RMA or HSNO specifically allowing local government to exercise some manner of control over land use involving GMOs.

d. Amendments to the HSNO in 2003 did not include specific provisions allowing local government to control land usage involving GMOs.

e. The Royal Commission noted that although control of GMOs by local authorities through the RMA might be possible, it would be fraught with difficulties and could potentially divide communities. Although it did not reach a decision on that possibility, the Commission noted that in its view an appropriate regulatory and institutional framework for the controlled use of GMOs is already provided by the HSNO.

Implied repeal

The doctrine of implied repeal guarantees that the latest expression of Parliament's will prevails. It follows that later Acts repeal earlier inconsistent Acts by implication. However, the Courts also presume Parliament does not intend its statutes to contradict each other but operate within their respective spheres where possible. If it is possible the later Act should be read as not to effect an implied repeal of the earlier Act.

In situations where only parts of two statutes are inconsistent in their application to particular circumstances, the inconsistent provisions in the earlier Act are rendered ineffective to the extent of (pro tanto) the inconsistency.[7]

In *R v Pora*, the Court of Appeal also discussed the principle of *generalia specialibus non derogant*, that is general words in an enactment do not repeal earlier statutes dealing with a special subject, it is inverse*, specialia generalibus derogant*. Chief Justice Elias noted: [8]

> The obverse proposition that special provisions override general ones (specialia generalibus derogant) is less well supported on the authorities and is inherently less useful even as a rule of thumb because [it is] so sensitive to particular context.

In the context of that case, the Court of Appeal did not find the principle of *specialie generalibus derogant* useful. However, it remains a recognised principle of statutory interpretation.

In order to determine whether the HSNO impliedly repeals, or at the very least renders ineffective, the power local authorities have to make rules in plans that would prohibit the use of GMOs, four issues need to be addressed:

a. Whether there are specific provisions in either Act that would repeal more general provisions in the other;

b. The role and function of local authorities in respect of GMO regulation;

c. Whether a rule in a plan prohibiting or restricting the use of GMOs is capable of being read consistently with the EPA's powers in the HSNO; and

d. Any additional policy considerations.

Specific provisions repealing more general provisions

The purpose sections of both RMA and HSNO appear very similar. However, sections 4, and 6 of the HSNO contain specific references to hazardous substances and new organisms. Section 4 and 6 provides:

> 4 **Purpose of Act**
>
> The purpose of this Act is to protect the environment, and the health and safety of people and communities, by preventing or managing the adverse effects of hazardous substances and new organisms.
>
> …
>
> 6 **Matters relevant to purpose of Act**
>
> All persons exercising functions, powers, and duties under this Act shall, to achieve the purpose of this Act, take into account the following matters:
>
> …
>
> (e) the economic and related benefits and costs of using a particular hazardous substance or new organism:
>
> …

[7] *R v Pora* [2001] 2 NZLR 37 at [36] (CA).
[8] *R v Pora* [2001] 2 NZLR 37 at [41] – [43] (CA).

The RMA contains no specific mention of GMOs. By contrast, the purpose sections of the HSNO indicate it was specifically enacted to manage the adverse effects of hazardous substances and new organisms.

The relationship between the two Acts was briefly considered in *Bleakley v Environmental Risk Management Authority* (ERMA)[9]. This case concerned an appeal against the approval by ERMA of an application to field-test genetically modified cattle. One of the concerns raised by the appellants was the potential for general contamination from the disposal of milk from genetically modified cattle. The High Court noted that where questions of environmental effects arise, if those questions involve "heritable materials" (that is genetic material), such questions are to be dealt with under the HSNO. However, if there are wider environmental effects, such as contamination from products not involving new organisms, those matters must be addressed under the RMA:

> Given that the Authority found there was no such danger of escape, there was no obligation in law – and it certainly was not appropriate – for the authority to venture into more orthodox pollution issues. It is true that the Act has an environmental protection purpose, as does the Resource Management Act, however, that prima facie wide purpose is to be read in the context of its subject-matter and specifics. It is to protect the environment against hazardous substances and organisms, and not on a wider scale. The wider scale is the role of others under general legislation in the RMA. Thus, if spraying milk on pastures were to raise a concern that heritable material might escape, that would be a concern for the Authority. If after Authority action, there was no risk of escape of heritable material but there remained a risk of another environmental character – e.g. destruction of aquatic life in streams – that would be a concern to be dealt with under the Resource Management Act. It would not be an Authority matter, despite the breadth of the opening sections of the Act. It is a not unfamiliar judicial problem to reconcile legislation relating to specific activities, and a general legislation in the Resource Management field.[10]

In our view, this demonstrates how the two Acts can be interpreted to work together in a complementary way, without overlapping, thereby giving effect to both.[11]

In his February 2004 opinion, Somerville suggested: [12]

> If for RMA purposes, which may relate to district-wide socio-economic or cultural matters rather than just health and safety matters or potential impacts on biophysical values of the area, further control than needed, there is nothing in the HSNO Act to prevent such controls being included in a District Plan.

However, this does not properly reflect the extent of controls which can be imposed on the development, field testing and release of GMOs by the Environmental Protection Agency under the HSNO Act. In our view, the approach suggested by Somerville leads to the HSNO and RMA being interpreted to have overlapping rather than complementary roles, contrary to the primary statutory interpretation approach directed by the courts.

The role and function of local authorities in respect of GMO regulation

Local authorities are creatures of statute and do not have any inherent jurisdiction. As such, their functions and duties are carefully circumscribed in various statutes and regulations. Acting outside those statutes and duties would be *ultra vires* and illegal. Territorial and regional councils' functions and duties to create district and regional plans are set out in Part 5 of the RMA.

> Sections 30 and 31 of the RMA set out the functions of local authorities. Under section 30 the powers of regional councils include:
>
> **30 Functions of regional councils under this Act**
>
> (1) Every regional council shall have the following functions for the purpose of giving effect to this Act in its region:
>
> (a) The establishment, implementation, and review of objectives, policies, and methods to achieve integrated management of the natural and physical resources of the region:
>
> (b) the preparation of objectives and policies in relation to any actual or potential effects of the use, development, or protection of land which are of regional significance:
>
> (c) The control of the use of land for the purpose of –
>
> …
>
> (v) The prevention or mitigation of any adverse effects of the storage, use, disposal, or transportation of hazardous substances:
>
> Section 31 sets out the powers of territorial authorities, including:

[9] [2001] 3 NZLR 213.
[10] [2001] 3 NZLR 213 at [114].
[11] *Stewart v Grey County Council* [1978] NZZLR 577, 583.
[12] At page 22.

31 Functions of territorial authorities under this Act

(1) Every territorial authority shall have the following functions for the purpose of giving effect to this Act in its district:

(a) The establishment, implementation, and review of objectives, policies, and methods to achieve integrated management of the effects of the use, development, or protection of land and associate natural and physical resources of the district:

(b) the control of any actual or potential effects of the use, development, or protection of land, including for the purpose of –

(i) …

…

(ii) the prevention or mitigation of any adverse effects of the storage, use, disposal, or transportation of hazardous substances; …

…

Section 142 of the HSNO provides:

142 Relationship to other Acts

…

(2) Every person exercising a power or function under the Resource Management Act 1991 relating to the storage, use, disposal, or transportation of any hazardous substance shall comply with the provisions of this Act and [with regulations and notices of transfer made under this Act].

(3) Nothing in subsection (2) of this section shall prevent any person lawfully imposing more stringent requirements on the use, disposal, or transportation of any hazardous substance than may be required by [or under this Act] where such requirements are considered necessary by that person for the purposes of the Resource Management Act 1991.

(4) Nothing in this Act shall apply to any resource consent being –

(a) A land use consent relating to the storage, use, disposal, or transportation of any hazardous substance; or

…

Unlike the reference to hazardous substances, there are no specific references to GMOs in the functions of regional or district councils set out in sections 30 and 31 or in section 142 of the HSNO.

Hazardous substances and GMOs are dealt with under the same Act. Under the principle of *expressio unius est exclusio alterius* (the mention of one is the exclusion of the other), when construing statutes, the specific mention of one thing within the statute means the exclusion of another thing not so mentioned.[13] GMOs are not hazardous substances. Under HSNO, GMOs and hazardous substances are dealt with separately and differently.

When the HSNO was amended in 2003 by the New Organisms and Other Matters Bill, Parliament was lobbied by local authorities to clarify their ability to regulate GMOs through regional or district plans. Local Government New Zealand argued that although there were provisions in the HSNO allowing local authorities to manage the effects of hazardous substances, they were not matched with similar provisions allowing local authorities to influence the use of GMOs in their districts.

The Bill was subject to considerable attention by local government. Local Government New Zealand and a number of local authorities made submissions seeking, at the very least, clarity as to the roles and responsibilities of local government with respect to the regulation of GM. Local Government New Zealand argued that the responsibilities placed on local government under the HSNO for hazardous substances, were not matched by provisions allowing local government to influence decisions over the use of GMOs in their districts.

Parliament's Education and Science Select Committee decided not to amend the Bill as sought by some submissions. The Committee's report stated:[14]

> **Role of local government**
>
> A number of submissions, including that from Local Government New Zealand, wanted the circumstances and interests of local communities to be incorporated into the Authority's decision-making process. We agree that any local authority with a potential interest in an application should have the maximum time available in which to consider the application and make a submission on the basis of the likely impact on the local authority's area.

[13] *Terminals (NZ) Ltd v Comptroller of Customs* [2014] 1 NZLR 121 at [74] (SC).

[14] Education and Science Select Committee, *Report of the Education and Science Select Committee on the NOOM Bill*, September 2003 at 5.

> We recommend the insertion of new clause 29(5) to extend the current discretionary provision from regional councils to all local authorities.
>
> Several submissions expressed concern about the lack of clarity regarding the role of local government in the bill. Some of us believe that this situation is unclear and that the interrelationship between the principal Act, the Resource Management Act 1991, and the Local Government Act 2002 is still unsatisfactory.
>
> Government members believe that this regime is clear. Local government does not have powers under the Resource Management Act 1991 or the Local Government Act 2002 to regulate genetically modified organisms. Such regulation is the role of the Authority under the principal Act. The Authority is a specialist body and responsibility should lie with it and not with local government.

At that time Parliament must have been aware of the mention of hazardous substances but the omission of GMOs in sections 30 and 31 of the RMA and section 142 of the HSNO. In our view, Parliament's decision not to amend those sections to also include references to GMOs must be construed as an intentional decision to confine the regulation and control of GMOs to the EPA and exclude them from the RMA.

In our view, this points strongly to the position that Parliament was signalling that regional and territorial authorities could enact rules in regional or district plans to prevent or mitigate any adverse effects of the storage, use, disposal, or transportation of hazardous substances, but not GMOs.

EPA decisions and GMO rules in plans

An approval by the EPA for the release of GMO would, by its nature, be inconsistent with a rule in a plan that an area be 'GM free'.

Section 25 of HSNO provides:

> 25 Restriction of import, manufacture, development, field testing, or release
>
> (1) No—
>
> …
>
> (b) new organism shall be imported, developed, field tested, or released—
>
> otherwise than in accordance with an approval issued under this Act or in accordance with Parts 11 to 16
>
> …

Only with the approval of the EPA can a new organism be imported, developed, field tested or released. In essence, New Zealand's default status is 'GMO free' unless otherwise modified by a HSNO approval[15].

Under that default position there is no need for provisions in plans seeking to control or manage the use of GMOs. Those controls are already in place under the HSNO and managed by the EPA. Any rules in plans would merely double up the protections already in place.

Local authorities do not need rules in a plan to note their community's desire (or otherwise) to remain GMO free for certain applications. As part of its decision making process the EPA would be required to seek submissions from local authorities under section 54(4) of the HSNO. In their submissions local authorities would have the opportunity to set out their community's opposition of GMOs.

Rules in plans controlling or managing the use of GMOs would only come to be applied once the EPA grants an application to field test or release a GMO in an area covered by that plan. In those instances the EPA's decision and the rule in the plan would be directly inconsistent. Both could not be simultaneously legally enforceable and one must necessarily prevail over the other.

To resolve the impasse, it is our view that the doctrine of implied repeal would need to be applied. Since the provisions allowing local authorities to make plans were passed earlier in time to the EPA's powers in the HSNO, sections 30 and 31 of the RMA would be rendered ineffective to the extent (pro tanto) of the inconsistency. Without the power to make rules in plans controlling or managing GMOs, any rules addressing GMOs would be rendered *ultra vires.*

Policy Considerations

In August 2013, the government released a summary of its proposals to amend the RMA. That document provides the following statements:

> **Hazardous substances and new organisms**
>
> …

[15] This is the case in relation particularly to field testing and release. However, the genetically modified equine influenza vaccine has been conditionally released and to that extent communities are not 'GM free'.

> The removal of the ability for councils to control GMOs will mean council plans cannot be used to control new organisms and GMOs. A national level approach to managing GMOs ensures consistency throughout New Zealand and given the technical complexity of assessing GMO applications ensures that one agency (the EPA) is adequately resourced to provide this service. The EPA has the necessary risk assessment, legal, policy and scientific expertise required to consider GMO applications.
>
> The proposal to restrict RMA controls on GMOs will not weaken the existing regulatory framework under the Hazardous Substances and New Organisms Act 1996, rather it will prevent duplication, confusion and the complication that would arise from controls being imposed on a council by council basis.

This clearly signals the government's policy reasons why the RMA should not be used to control GMOs. However, the document reads as if the proposal is an amendment to the law rather than as a clarification. From this document it appears that the government is of the view that the RMA does or may currently allow councils (as a matter of jurisdiction) to control GMOs.

It is unclear, however, if the government has considered in detail the jurisdictional issues discussed above. Until now it appears that most people have assumed that jurisdiction does exist (hence why the issue was not argued in the Forest Research Institute case). We are not aware of any advice provided to the government on this issue. Moreover, government policy is not necessarily reflective of the legal position in the absence of legal advice or judicial decision on the matter.

Similarly, while the Royal Commission did not directly consider the powers of councils to control GMOs and the issue was not raised in front of the Commission, in its report under the heading "Is compatibility possible?", the Commission discusses the possible strategies available to provide for compatibility between genetic modification and non-genetic modification land uses:[16]

> The concept of regional genetic modification-free zones was raised with the Commission. Such a proposal might be achievable under the Resource Management Act 1991. We discussed this idea extensively but saw difficulty in its implementation. First, it would require widespread acceptance in a given region before it could be put in place without impinging unduly on the rights of those who wished to avail themselves of selected genetic modification technologies. Second, and for the same reasons that we found an "all or nothing" approach to be too inflexible, a blanket bank on applications of genetic modification would be a blunt instrument when genetically modified form of Crop A might be quite compatible with a non-genetically modified form of Crop B.
>
> The Commission also discussed a more selective concept relating to the Resource Management Act provisions for different land uses. Genetically modified and non-genetically modified crops might be permitted or prohibited on a crop-by-crop and region-by-region basis. This would require a genetically modified crop to be designated as a different use from a non-genetically modified crop of the same species. It may also be that over a period of time an aggregation of genetic modification or non-genetic modification uses became characteristic of particular regions and that identifiable regional differences emerged. These distinctions in land use might be written into regional or district plans, just as industrial use is separated from residential use. At the same time, the Commission acknowledges there are considerable practical difficulties with such proposals, which have the potential for dividing communities. Because of these difficulties the Commission is unable to reach a decision but notes the possibilities.
>
> We have preferred the approach set out under recommendation 13.1 as a means of ensuring the preservation of established genetic modification-free industries such as kiwifruit. In a situation where we seek to provide for a diversity of crops, it is inevitable that there will be some restrictions on both genetic modification and non-genetic modification uses in the cause of preserving opportunities.
>
> In recommendation 13.2 we consider that the Minister for the Environment should exercise the call-in powers laid down in HSNO before the first release of any genetically modified crop. We make this recommendation because the first release would be very much a watershed decision. At that point we would no longer be a genetic modification-free nation in terms of crops. Because of the significance attached to this event by many, the Commission recommends that a final overview be exercised at ministerial level.
>
> The Commission's recommendations in this area were:
>
> **Recommendation 13.1 (Benefit assessment)**
>
> That the methodology for implementing section 6(e) of the Hazardous Substances and New Organisms Act 1996 be made more specific to:
>
> - include an assessment of the economic impact the release of any genetically modified crop or organism would have on the proposed national strategy of preserving opportunities in genetically modified and unmodified agricultural systems
> - allow for specified categories of genetically modified crops to be excluded from districts where their presence would be a significant threat to an established non-genetically modified crop use.

[16] Chapter 13, Royal Commission Report (2001).

Recommendation 13.2 (First release):

That before the controlled or open release of the first genetically modified crop, the Minister exercise the call-in powers available under section 68 of the Hazardous Substances and New Organisms Act 1996 in order to assess the likely overall economic and environmental impact on the preserving opportunities strategy.

Recommendation 7.7 (Separation distances)

That the Ministry of Agriculture and Forestry develop an industry code of practice to ensure effective separation distances between genetically modified and unmodified crops (including those grown for seed production), such a code:

- to be established on a crop-by-crop basis.
- to take into account:
  - existing separation distances for seed certification in New Zealand;
  - developments in international certification standards for organic farming;
  - emerging strategies for coexistence between genetically modified and unmodified crops in other countries.
- to identify how the costs of establishment and maintenance of buffer zones are to be borne.

The Commission's general conclusion on the regulatory regime was:

> It is our view that an appropriate regulatory and institutional framework for the controlled use of genetic modification is already provided by the Hazardous Substances and New Organisms Act 1996 (HSNO). Nevertheless throughout the Report we have made recommendations for additional controls to make the existing system more robust.[17]

To summarise the issue of jurisdiction, it is our view that:

a. The RMA and the HSNO potentially provide for overlapping and inconsistent outcomes for GMOs.

b. If possible, both Acts should be interpreted in a manner which allows for both to operate in a consistent manner.

c. The absence of reference to GMOs in the RMA is intentional meaning that the RMA has no jurisdiction over the management of GMOs.

d. When the HSNO was introduced in 1996 it impliedly repealed or restricted the RMA so as to exclude the management of GMOs under the RMA.

e. To date, it appears that it has generally been accepted that there is jurisdiction under the RMA to regulate GMOs. It may be argued by some that the proposed amendment to the RMA in 2013 was designed to amend the legal situation rather than simply to clarify it. We consider that position to be incorrect. It is our conclusion that councils have no jurisdiction under the RMA to control GMOs.

IF LOCAL AUTHORITIES HAVE POWERS TO CONTROL GMOS, SHOULD THEY?

This section of the paper assumes that, contrary to our reasoning above, local authorities do have powers to control GMOs in district and regional plans. The question then becomes whether a substantive analysis of the proposed provisions shows that these can meet the relevant RMA statutory tests. That is; just because councils have the legal power to make rules controlling GMOs that does not necessarily mean that it is appropriate to do so.

Any rules in district or regional plans relating to GMOs are required to meet the same legal tests as rules controlling any other actual or potential effects of activities.

Section 74 of the RMA sets out the matters which must be considered by a council in preparing and changing a plan. Generally, three steps are involved:

a. Ascertaining the relevant facts and the issues arising for the district;

b. A section 32 analysis; and

c. The broader and ultimate issue as to whether on balance the council is satisfied that implementing the proposals would more fully serve the sustainable management of natural and physical resources than not implementing them.

[17] Para 5, Chapter 13.

In the context of possible controls on GMOs the primary substantive legal test which any proposed provisions need to meet are likely to be those in section 32 of the RMA.

The current version of section 32 provides[18]:

> 32 **Requirements for preparing and publishing evaluation reports**
>
> (1) An evaluation report required under this Act must –
>
> (a) examine the extent to which the objectives of the proposal being evaluated are the most appropriate way to achieve the purpose of this Act; and
>
> (b) examine whether the provisions in the proposal are the most appropriate way to achieve the objectives by –
>
> (i) identifying other reasonably practicable options for achieving the objectives; and
>
> (ii) assessing the efficiency and effectiveness of the provisions in achieving the objectives; and
>
> (iii) summarising the reasons for deciding on the provisions; and
>
> (c) contain a level of detail that corresponds to the scale and significance of the environmental, economic, social, and cultural effects that are anticipated from the implementation of the proposal.
>
> (2) An assessment under subsection (1)(b)(ii) must –
>
> (a) identify and assess the benefits and costs of the environmental, economic, social, and cultural effects that are anticipated from the implementation of the provisions, including the opportunities for –
>
> (i) economic growth that are anticipated to be provided or reduced; and
>
> (ii) employment that are anticipated to be provided or reduced; and
>
> (b) if practicable, quantify the benefits and costs referred to in paragraph (a); and
>
> (c) assess the risk of acting or not acting if there is uncertain or insufficient information about the subject matter of the provisions.

Section 32 of the RMA therefore requires an assessment of the costs, benefits etc. of the proposed district plan provisions **over and above the provisions of HSNO**. Section 32 does not require an assessment of the risks, costs, benefits of GMOs. Rather, the analysis is about the effectiveness, efficiency and appropriateness of the proposed provisions. It needs to show why the resource management issues involved with GMO-related land uses cannot be addressed by leaving any risk assessment and management act decisions to ERMA pursuant to the HSNO Act. So, the analysis of whether or not district plan provisions are effective, efficient or appropriate must begin with a proper understanding of the scope of the controls provided for by HSNO. Ultimately, the question becomes what costs and benefits etc. would the district or regional plan provisions provide that are not provided under the HSNO Act?

It has been suggested that:

> If for RMA purposes, which may relate to district-wide socio-economic or cultural matters rather than just health and safety matters or potential impacts on biophysical values of the area, further control than needed, there is nothing in the HSNO Act to prevent such controls being included in a District Plan.[19]

In our view, this statement does not properly reflect the extent of controls which can be imposed on the development, field testing and release of GMOs by the Environmental Protection Agency (EPA) under the HSNO Act. This is demonstrated by the following analysis of the matters which are within the scope of HSNO and are to be considered by the EPA in the following section.

The scope of HSNO controls

The HSNO is not restricted to health and safety matters or biophysical values as it has been suggested. Rather, it is extensive in its ability to assess and control the actual and potential effects of GMOs.

The HSNO is 'effects-based' in much the same way as the RMA. The purpose of the HSNO is:

> To protect the environment, and the health and safety of people and communities, by preventing or managing the adverse effects of hazardous substances and new organisms.

The preventative approach is reflected throughout the Act:[20]

[18] Section 32 was amended in 2013.

[19] Somerville 2004 opinion.

[20] For example HSNO Act, s 7 requires decision makers to proceed with caution.

The Act requires decision makers (including the EPA) to exercise their functions, powers, and duties to achieve the purpose of the Act.[21] The emphasis of the Act is to protect the environment, the health and safety of people and communities by preventing and managing adverse effects of new organisms. The purpose is clearly stated in s 4, and various matters and principles, relevant to that overarching purpose, are then specified in Part 2.

To achieve the purpose of the HSNO Act, all persons exercising functions, powers, and duties under the Act must recognise and provide for:[22]

a. the safeguarding of the life-supporting capacity of air, water, soil, and ecosystems; and

b. the maintenance and enhancement of the capacity of people and communities to provide for their own *economic, social, and cultural wellbeing* and for the reasonably foreseeable needs of future generations.

The EPA has stated it will have regard to case law established under the RMA with respect to a number of concepts, including the reasonably foreseeable needs of future generations and the meaning of intrinsic values of ecosystems.[23]

Decision makers must recognise and provide for the reasonably foreseeable needs of future generations when exercising their powers under the Act[24]. In our view that would include research into GMOs that adds to scientific knowledge which is capable of leading to downstream economic and health advantages.[25]

The incorporation of this provision should not be limited to the consideration of adverse effects. It implies that any effects which might enhance the capacity of future generations to provide for their own economic, social and cultural wellbeing are also relevant.[25]It is appropriate to consider the "reasonably foreseeable needs" requirement of the Act as "a caution to ensure that, at the very least, one generation does not significantly reduce the options available to future generations".[26]

In achieving the purpose of the Act all persons exercising functions, powers, and duties shall take into account the following matters:[27]

a. The sustainability of all native and valued introduced flora and fauna;

b. The intrinsic value of ecosystems;

c. Public health;[28]

d. The relationship of *Maori and their culture and traditions* with their ancestral lands, water, sites, wahi tapu, valued flora and fauna, and other taonga;

e. The *economic and related benefits and costs* of using a particular hazardous substance or new organism; and

f. New Zealand's international obligations.

Sustainability is not defined in the HSNO Act, but is a concept used in other legislation. Indicators of sustainability may include biodiversity measures (such as loss of species) complemented by considerations related to the long-term viability of an ecosystem and its constituent parts.[29]

Intrinsic values are defined,[30]in relation to ecosystems, to mean those aspects of ecosystems and their constituent parts which have value in their own right, including their biological and genetic diversity; and the essential characteristics that determine an ecosystem's integrity, form, functioning, and resilience. In assessing applications, the Authority takes into account the intrinsic value of ecosystems by considering whether the organisms is likely to destabilise the natural evolution of ecosystems which are valued for their own sake.[31]

The EPA is required to recognise and take into account risks, benefits, and other impacts associated with a GMO in an application.[32] When evaluating the risks, costs and benefits associated with a GMO, the EPA must take into account those risks, costs and benefits associated with the application, whether they are monetary or

[21] HSNO Act, ss 5, 6.

[22] HSNO Act, s 5

[23] Environmental Protection Authority *Interpretations and Explanations of Key Concepts*, Wellington, October 2011, at 2.4 and 2.5.

[24] HSNO Act, s 5(b).

[25] Environmental Protection Authority *Interpretations and Explanations of Key Concepts*, Wellington, October 2011, at 2.4.

[26] Environmental Protection Authority Interpretations and Explanations of Key Concepts, Wellington, October 2011, at 2.4. This concept should not be confused with the concept of intergenerational equity: The idea that the present generation should not use resources or degrade the environment so as to leave future generations in a worse position than the present generation.

[27] HSNO Act, s 6.

[28] Public health means the health of all of the people of New Zealand or a community or section of such people. Section 2 of the HSNO Act refers to s 6(1) of the New Zealand Public Health and Disability Act 2000.

[29] Environmental Protection Authority Interpretations and Explanations of Key Concepts, Wellington, October 2011, at 2.9.

[30] HSNO Act, s 2.

[31] Environmental Protection Authority Interpretations and Explanations of Key Concepts, Wellington, October 2011, at 2.5.

[32] Hazardous Substances and New Organisms (Methodology) Order 1998 (SR 1998/217), Schedule, cls 9, 10.

non-monetary, their magnitude or expected value, the uncertainty bounds on the expected value and the distributional effects of the costs and benefits over time, space, and groups in the community.[33]

The EPA's approach to risk is described with respect to five key risk concepts.[34] These are:

- *unacceptable risks* -- that is, those risks which the EPA will not accept irrespective of any benefits that might accrue, after taking account of the scope for risk management;
- *risks which may or may not be tolerable* -- that is, those risks which may be accepted if they are justified by outweighing benefits, after taking account of the potential for management to reduce the magnitude or likelihood of any adverse effects;
- *negligible risks* -- that is, those risks which are of such little significance in terms of their likelihood and consequence that they do not require active management and/or do not need to be justified by counter-balancing benefits, after the application of risk management;
- *attitude to risk* -- that is, how the EPA will value uncertain outcomes vis-à-vis certain outcomes, for different risk type and characteristics; and
- *degree of caution* -- that is, how conservative the EPA will be in the assumption it uses in its analysis and determinations.

The EPA's approach to risk is influenced by the type and severity of the possible adverse effects flowing from an application and risk characteristics. The Methodology Order requires that:[35]

When considering applications, the EPA must have regard to the extent to which the following risk characteristics exist:

- exposure to the risk is involuntary;
- the risk will persist over time;
- the risk is subject to uncontrollable spread and is likely to extend its effects beyond the immediate location of incidence;
- the potential adverse effects are irreversible; and
- the risk is not known or understood by the general public and there is little experience or understanding of possible measures for managing the potential adverse effects.

The EPA has stated[36] that it will be more cautious and risk averse according to the extent to which the risk characteristics set out above exist. Conversely the EPA will be less risk averse and less cautious where the opposite characteristics apply, for example, where exposure is voluntary, the risk is temporary, the adverse effects are reversible and so on. The EPA will also be more cautious and risk averse with respect to some specific types of risk which include but are not limited to, risks to human health or wellbeing, including the human foetus, risks to the survival of native species, or their habitats.

All costs and benefits are potentially relevant so long as they can be related to the purpose of the Act in section 5. Regulation 13(c) of the Methodology Order requires the EPA to take into account the "distributional effects of the costs and benefits over time, space and groups in the community". In assessing how costs and benefits are spread relevant considerations include:

- the extent to which costs and benefits fall together or not. Thus, if for example, the benefits all accrue to one group but the costs (or risks) are all borne by another, that is likely to influence the decision; and
- the extent to which benefits and costs are widely shared or sharply focused. Thus, if the benefits largely accrue to the applicant rather than to the wider community, that may influence decision making as well.[37]

Decision makers are also required to take into account New Zealand's international obligations. There are a number of international agreements, non-binding instruments, standards and guidelines that may be relevant to applications for GMOs.[38]

Decision makers must take into account the need for caution. Section 7 states:

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[33] Hazardous Substances and New Organisms (Methodology) Order 1998 (SR 1998/217), Schedule, cls 13, 14.

[34] Environmental Risk Management Authority *Annotated Methodology for the Consideration of Applications for Hazardous Substances And New Organisms under the HSNO Act 1996* (August 1998) at 20.

[35] Hazardous Substances and New Organisms (Methodology) Order 1998 (SR 1998/217), Schedule, cl 33.

[36] *Mothers Against Genetic Engineering v Minister for the Environment* HC Auckland CIV 2003-404-673, 7 July 2003 at 21.

[37] Environmental Protection Authority Interpretations and Explanations of Key Concepts, Wellington, October 2011, at 2.1.

[38] Examples of international agreements to which New Zealand is a party include the Convention on Biological Diversity 1992, the Vienna Convention for the Protection of the Ozone Layer and the International Convention for the Protection of New Varieties of Plants 1961; and recently New Zealand ratified the Cartagena Protocol on Biosafety 2000.

> All persons exercising functions, powers, and duties under this Act ... shall take into account the need for caution in managing adverse effects where there is scientific and technical uncertainty about those effects.

The requirement under section 7 obliges the EPA to take a precautionary approach only where there is scientific and technical uncertainty as to those effects. The exercise of caution is not required where there is social or ethical uncertainty.[39]

In *Bleakley*[40] the High Court did not gain assistance from the suggested incorporation of the international concept of the precautionary principle[41], stating *Hansard* references to section 7 tended to prove that Parliament deliberately avoided a direct interpretation of the uncertain precautionary principle of environmental law by inserting "approach" rather than "principle".[42]

Section 7 is not directed to the identification, assessment or balancing of adverse effects which are covered by Part 5 of the Act. Nor is it directed to the prevention of adverse effects. It is concerned with exercising caution in managing any known or possible adverse effects in situations of scientific and technical uncertainty.[43]

The requirement to take into account the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, wahi tapu, valued flora and fauna, and other taonga is almost identical in wording to section 6(e) of the RMA.[44] "Other taonga" includes cultural and spiritual taonga, in accordance with usual concepts and with the Treaty.[45] Section 8 of the Act states:

> All persons exercising powers and functions under this Act shall take into account the principles of the Treaty of Waitangi (Te Tiriti o Waitangi).

The principles as they apply in the HSNO context include, but are not limited to, the need to:

- establish relationships which are in the nature of partnership having regard to the other requirements of the Act;
- act reasonably, honourably and in good faith;
- make informed decisions on matters affecting the interests of Maori;
- actively protect Maori interests as far as is reasonably practicable; and
- avoid actions which would prevent redress of Treaty claims.[46]

In order to recognise and respect the Crown's responsibility to take appropriate account of the Treaty of Waitangi, the Environmental Protection Authority Act 2011 requires the establishment of a Maori Advisory Committee[47] and requires that the EPA and any person acting on its behalf comply with the requirements of the relevant Act (in the case of new organisms, the HSNO Act) in relation to the Treaty, when exercising functions under that Act[48].

The information needed to make good decisions under the HSNO Act goes beyond what might be considered "technical" or "scientific". The Authority has recognised that it is also important to understand the ethical issues and implications of applications: essentially, the values and beliefs that people hold about the consequences of decisions about new organisms and hazardous substances, the facts that should be taken into account, and the way that decisions are made[49].

In April 2004 ERMA established an Ethics Advisory Panel to provide expert advice and assistance on ethical matters relating to hazardous substances and new organisms.

The Panel provides advice to the EPA in three general areas:

- The panel will provide advice in scoping the HSNO legislation and ethical "landscape", and assisting in developing a more explicit framework for considering ethical and cultural aspects of HSNO applications.

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[39] *Bleakley v Environmental Risk Management Authority* [2001] 3 NZLR 213 at 250. How the Authority is to deal with uncertainty is set out in the Hazardous Substances and New Organisms (Methodology) Order 1998 (SR 1998/217), Schedule, cls 29-32.
[40] *Bleakley v Environmental Risk Management Authority* [2001] 3 NZLR 213.
[41] The international precautionary principle is described in Principle 15 of the Rio Declaration on Environment and Development which states "In order to protect the environment, the precautionary approach should be widely applied ... Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation."
[42] *Bleakley v Environmental Risk Management Authority* [2001] 3 NZLR 213 at 250.
[43] *Mothers Against Genetic Engineering Inc v Minister for the Environment* HC Auckland CIV 2003-404-673, 7 July 2003.
[44] RMA, s 6(e) does not make reference to valued flora and fauna.
[45] *Bleakley v Environmental Risk Management Authority* [2001] 3 NZLR 213 at 234, 284.
[46] Contained in the previous Environmental Risk Management Authority *Incorporating Maori Perspectives in Part V Decision Making* New Zealand Policy Series: Protocol 1, November 2004, ER-PR-01-02 11/04. Based on a recommendation of the Royal Commission, the Authority's policy is that IBSCs include at least one Maori member, appointed on the nomination of the hapu or iwi with mana whenua in the locality of the IBSC : Environmental Risk Management Authority *Policy relating to New Organisms* Policy Document ER-PO-NO-02 02/05 at 32. The Authority's policy is that the obligation to consult rests primarily with an applicant, even though the Act requires the Authority to take account of ss 6(d) and 8. In practice, this is similar to the approach to consultation adopted by local authorities under the RMA: see Protocol 1 at 6. Note that a revised protocol addressing Māori perspectives is currently being prepared by the Environmental Protection Agency.
[47] EPA Act, s 18.
[48] EPA Act, s 4.
[49] See "Background Document -- Consideration of Ethical Issues in HSNO Act Processes" (April 2004).

- The panel may also be asked to provide advice on the handling of ethical aspects of particular applications.
- The panel will at times be asked to consider generic ethical issues and provide ad hoc advice on the nature and handling of generic ethical issues arising under HSNO decision making.

The Panel's work led to the release in December 2005 of the Ethics Framework protocol[50]. The Framework contains two fundamental or general ethical principles: "respect for persons" (past, present and future generations) and "respect for the natural environment". Underneath the two fundamental principles is a set of derived principles: autonomy, cooperation, cultural identity, human rights and dignity, justice and equality, wellbeing, animal welfare and sustainability. The procedural standards relate to the derived principles. They require all persons working under the framework to: act with honesty and integrity, ensure transparency and openness, adopt scientific and rational methods, take account of community and expert consultation and adopt a fair decision-making process. The Framework also describes the way in which these principles and standards are included in EPA processes and procedures, and how they are relevant to different participants in the process.

Conclusion

In summary, in relation to the appropriateness of possible RMA provisions, it is our view that:

1. If local authorities do have jurisdiction under the RMA, any proposed provisions must meet the statutory tests in the RMA, and in particular section 32 which requires an assessment of whether the provisions are the most appropriate way to achieve the purpose of the Act, having assessed their efficiency and effectiveness.

b. The introduction of provisions in district and regional plans dealing with GMOs are likely to fail to meet the requirements of section 32 because there is an independent statutory regime under the HSNO which comprehensively controls the development, field testing and release of GMOs.

[50] *Ethics Framework* -- Protocol 5, ER-PR-05-1 08/10. This document is not a current protocol of the Environmental Protection Agency.