3 DEFINITIONS

Note: Any words included under this section shall have the meaning as defined here throughout this Plan unless specifically stated otherwise in the text of the Plan. Where the definition of a word is identified as being from the Resource Management Act 1991 (or any other Act), these words have been included in a Glossary.

GENETICALLY MODIFIED ORGANISM FIELD TRIALS (TESTS)

In relation to a genetically modified organism (GMO), the carrying on of outdoor trials, on the effects of the organism under conditions similar to those of the environment into which the organism is likely to be released, but from which the organism, or any heritable material arising from it, could be retrieved or destroyed at the end of the trials.

GENETICALLY MODIFIED ORGANISMS (GMOs)

Unless expressly provided otherwise by regulations, any organism in which any of the genes or other genetic material:

(a) have been modified by in vitro techniques; or

(b) are inherited or otherwise derived, through any number of replications, from any genes or other genetic material which has been modified by in vitro techniques.

For the absence of doubt, this does not apply to genetically modified (GM) products that are not viable (and are thus no longer GMOs), or products that are dominantly non-GM but contain non-viable GM ingredients (such as processed foods).

GENETICALLY MODIFIED ORGANISM RELEASE

To allow the organism to move within New Zealand free of any restrictions other than those imposed in accordance with the Biosecurity Act 1993 or the Conservation Act 1987**4**.

A release may be without conditions under s34 of the Hazardous Substances and New Organisms Act 1996, (HSNO) or subject to conditions under s38A of the HSNO Act.

VETERINARY VACCINE

A biological compound controlled by the Agricultural Compounds and Veterinary Medicines Act that is used to produce or artificially increase immunity to a particular disease and has been tested and approved as safe to use by a process similar to that conducted for approval and use of medical vaccines.

GENETICALLY MODIFIED VETERINARY VACCINE

A veterinary vaccine that is a genetically modified organism as defined in this Plan.

VIABLE GENETICALLY MODIFIED VETERINARY VACCINE

A genetically modified veterinary vaccine that could survive or replicate in the environment or be transmitted from the inoculated recipient"

19 GENETICALLY MODIFIED ORGANISMS

CONTEXT

Genetic modification (GM) refers to a set of techniques that alter genetic makeup by adding, deleting or moving genes (within or between species) to produce new and different organisms. Genetically modified organisms (GMOs) are products of genetic modification. Another term often used to refer to the same technique is genetic engineering (GE).

A wide range of GM products are being researched and developed for commercialisation. While the GMOs commercialised to date are, in general, directed at reducing harvest losses by combating pests and viruses, research into future varieties is attempting to considerably widen the scope of applications. This includes improved growth in plants, improved tolerance to environmental conditions, and creating entirely new products and sectors of economic activity in agriculture, horticulture, plantation forestry, dairying, aquaculture and medicine.

The absolute and relative benefits associated with the development and use of GMOs is continually being redefined as this and other forms of applied biotechnology advance. However there remains scientific uncertainty with respect to potential adverse effects of GMOs on natural resources and ecosystems. The risks could be substantial and certain consequences irreversible. Once released into the environment, most GMOs would be very difficult to eradicate even if the funding were available for this, irrespective of the consequences. If the GMO is related to a food product, the “GE Free” food producer status of a district or region would likely be permanently lost, along with any marketing advantages that status confers.

The relevant legislation which applies to the management of GMOs in New Zealand is the Hazardous Substances and New Organisms Act 1996 (HSNO Act). The HSNO Act establishes the legal framework for assessments by the national regulator, the Environmental Protection Authority (EPA). This Act sets minimum standards (section 36) and provides for the EPA to set additional conditions that are to apply to a particular GMO activity.

While the HSNO Act provides the means to set conditions on the management of GMOs within a specific geographic area or irrespective of location, councils have jurisdiction under sections 30 and 31 of the Resource Management Act 1991 (RMA) to control land and water use activities involving field trials and the release of GMOs, to promote sustainable management under the RMA.

Local regulation can address key gaps that have been identified in the national regulatory regime for the management of GMOs, in particular the absence of liability provisions and the lack of a mandatory precautionary approach. Benefits of local level regulation, in addition to the controls set by the EPA, include:

- Ensuring GM operators are financially accountable in the long-term through bonding and financial fitness provisions for the full costs associated with the GMO activity. This includes accidental or unintentional contamination, clean-up, monitoring and remediation.
- Adoption of a precautionary approach to manage potential risks (economic, environmental, social and cultural) associated with the outdoor use of GMOs.
- Protection of local/regional marketing advantages through reducing risks associated with market rejection and loss of income from GM contamination of non-GM crops, and negative effects on marketing, branding and tourism opportunities.
- Addressing cultural concerns of Maori, particularly given that Maori make up a considerably greater proportion of the population in Northland than is represented nationally.

Given a council’s general duties of care for its financial position and that of its constituents, there is a ready justification for councils to enforce mandatory conditions to provide for both financial accountability and avoidance of economic damage. These controls would act in addition to those that may be set by the EPA under the HSNO Act.

19.1 ISSUES

19.1.1 The outdoor use of GMOs can adversely affect the environment, economy, and social and cultural resources and values, and significant costs can result from the release of a GMO.

19.2 ENVIRONMENTAL OUTCOMES EXPECTED

19.2.1 Manage risk and avoid adverse effects on people, communities, tangata whenua, the economy and the environment associated with the outdoor use of GMOs.

19.2.2 Provide the framework for a unified approach to the management of the outdoor use of GMOs in the Far North to address cross-boundary effects.

19.2.3 Ensure accountability by GMO operators for the full costs related to the monitoring of GMO activities, and any migration of GMOs beyond specified areas, including unintentional GM contamination.

19.2.4 Ensure accountability by GMO operators for compensation via performance bonds in the event that the activity under their operation results in adverse effects to third parties or the environment.

19.3 OBJECTIVES

19.3.1 The environment, including people and communities and their social, economic and cultural well being and health and safety, is protected from potential adverse effects associated with the outdoor use, storage, cultivation, harvesting, processing or transportation of GMOs through the adoption of a precautionary approach, including adaptive responses, to manage uncertainty and lack of information.

19.3.2 The sustainable management of the natural and physical resources of the district with respect to the outdoor use of GMOs, a significant resource management issue identified by the community.

19.4 POLICIES

19.4.1 To adopt a precautionary approach by prohibiting the general release of a GMO, and by making outdoor field trialling of a GMO and the use of viable GM veterinary vaccines not supervised by a veterinarian[294/1] a discretionary activity.

19.4.2 To ensure that a resource consent granted for the outdoor field trialling of a GMO is subject to conditions that ensures that the consent holder is financially accountable (to the extent possible) for any adverse effects associated with the activity, including clean-up costs and remediation, including via the use of bonds.

19.4.3 To ensure that a resource consent granted for the outdoor field trialling of a GMO is subject to conditions that serve to avoid, as far as can reasonably be achieved, risk to the environment, the mauri of flora and fauna, and the relationship of mana whenua with flora and fauna[109/4] from the use, storage, cultivation, harvesting, processing or transportation of a GMO.

19.4.4 To ensure that a resource consent granted for the outdoor field trialling of a GMO is subject to a condition requiring that monitoring costs are met by the consent holder.

19.4.5 To require consent holders for a GMO activity to be liable (to the extent possible) for any adverse effects caused beyond the site for which consent has been granted for the activity.

19.4.6 To adopt an adaptive approach to the management of the outdoor use, storage, cultivation, harvesting, processing or transportation of a GMO in the district through periodic reviews of these plan provisions, particularly if new information on the benefits and/or adverse effects of a GMO activity becomes available.

19.5 METHODS OF IMPLEMENTATION

DISTRICT PLAN METHODS

19.5.1 Rules in the Plan to control GMO ~~Field Trails~~ field trials[159/2], some veterinarian vaccines[294/1] and to prohibit the release of GMOs in the Far North.

19.5.2 Where resource consents are required to undertake GMO activities protection of the environment, economy, society and cultural values may be achieved by imposing conditions of consent.

OTHER METHODS

19.5.3 The Council will liaise with other Councils in order to achieve an integrated approach to GMOs in Northland.

19.5.4 The Council will encourage all applicants to actively engage with the public and tangata whenua through early dialogue when developing land use proposals to ensure that adverse effects are avoided, remedied or mitigated.

COMMENTARY

The outdoor use of GMOs has the potential to cause adverse effects on the environment, economy and social and cultural wellbeing. The objectives and policies seek to protect the community and receiving environment from risk associated with any GMO activity.

The application of a precautionary approach to the outdoor use, storage, cultivation, harvesting, processing or transportation of GMOs in the district shall mean that:

- *The release of a GMO is prohibited (this is to avoid the risk that significant adverse environmental effects will arise, including adverse effects on the economy, community and/or tangata whenua resources and values); and*
- *Outdoor field trialling of a GMO (where the proponents of such activities have prior approval of the EPA) shall be a discretionary activity~~.~~, as will certain uses of GM veterinary vaccines.* [294/1]

Pastoral farming, dairying, horticulture and forestry are important land uses in the Far North and are major contributors to the local and regional economy. Therefore there are a range of outdoor GMOs that GMO developers could consider using in the district or region, including GM food crops, trees, animals, and pharma crops. The potential for adverse effects, including accidental contamination, resulting from the outdoor use of GMOs poses a "risk" to the community and environment. By specifying classes of GMOs and applying standards to the outdoor use of GMOs, the risks associated with their use, storage, cultivation, harvesting, processing or transportation can be reduced.

Within the Far North, this will involve managing and limiting the outdoor use of GMOs. Further, performance standards will be used to mitigate any adverse effects associated with contamination of GMOs beyond the subject site, thereby reducing the risks to the community, environment and economy.

Accidental or unintentional migration of GMOs that result in GMO contamination and subsequent clean-up and remediation can be expensive. Council therefore requires a GMO operator to meet all potential costs associated with the activity and will secure long-term financial accountability through appropriate standards and bonding provisions.

The EPA is not obligated to set monitoring requirements as a part of its approval process, and can only require monitoring where it is relevant to assessing environmental risk. Under section 35 of the RMA, a council has a duty to monitor, which can be expensive. Requiring a GMO operator to meet the costs of monitoring, via consent conditions, ensures the costs are meet by the activity operator.

To avoid foreclosure of potential opportunities associated with a GMO development that could benefit the district or region, there is the ability to review a particular GMO activity if it were to become evident during the field trial stage or in light of other new information that a particular GMO activity would be of net benefit to the district or region and that potential risks can be managed to the satisfaction of Council. A council or a GMO proponent can initiate a plan change to change the status of a GMO activity.

19.6 RULES

Activities affected by this Section of the Plan must comply not only with the rules in this Section, but also with the relevant standards applying to the zone in which the activity is located (refer to ***Part 2 - Environment Provisions***), and with other relevant standards in ***Part 3 – District Wide Provisions***.

19.6.1 PERMITTED ACTIVITIES

An activity is a permitted activity if:

(a) it complies with the standards for permitted activities set out in ***Rules 19.6.1.1*** below; and

(b) it complies with the relevant standards for permitted activities in the zone in which it is located, set out in ***Part 2 of the Plan - Environment Provisions***; and

(c) it complies with the other relevant standards for permitted activities set out in ***Part 3 of the Plan - District Wide Provisions***.

19.6.1.1 INDOOR USE AND RESEARCH INVOLVING GENETICALLY MODIFIED ORGANSISMS

GMOs that are not specifically provided for in ***19.6.2 Discretionary Activities*** and ***19.6.3 Prohibited Activities*** below are a permitted activity. These include (but are not limited to):

(a) Research within contained laboratories involving GMOs;

(b) ~~Veterinary Vaccines using GMOs; and~~ The use of non-viable genetically modified veterinary vaccines and viable genetically modified veterinary vaccines with a specific delivery dose supervised by a veterinarian[294]; and

(c) Medical applications involving the manufacture and use of non-viable GM products.

Note: Such activities may require consents and / or permits under other legislation / plans.

19.6.2 DISCRETIONARY ACTIVITIES

An activity is a discretionary activity if:

(a) it does not comply with one or more of the standards for permitted activities as set out under ***Rule 19.6.1.1***; but

(b) it complies with ***all rules of 19.6.2.1 Genetically Modified Organisms Field Trails, 19.6.2.2 Bond Requirements and 19.6.2.3 Monitoring Costs*** below; and

(b) it complies with the relevant standards for permitted, controlled, restricted discretionary or discretionary activities in the zone in which it is located, set out in ***Part 2 of the Plan - Environment Provisions***; and

(c) it complies with the other relevant standards for permitted, controlled, restricted discretionary or discretionary activities set out in ***Part 3 of the Plan - District Wide Provisions***.

The Council may impose conditions of consent on a discretionary activity or it may refuse consent to the application. When considering a discretionary activity application, the Council will have regard to the assessment criteria set out under ***Section ~~19.7.~~ 19.8***

If an activity does not comply with the standards for a discretionary activity, it will be a non-complying activity unless it is a prohibited activity subject ***to Section 19.6.3*** below.

19.6.2.1 GENETICALLY MODIFIED ORGANISMS FIELD TRIALS

Outdoor field trialling of a GMO (where the proponents of such activities have prior approval of the EPA) shall be a discretionary activity.

Applications must provide:

(a) Evidence of approval from the EPA for the specific GMO for which consent is sought.

(b) Details of proposed containment measures for the commencement, duration and completion of the proposed activity.

(c) Details of the species, its characteristics and lifecycle, to which the GMO activities will relate.

(d) Research on adverse effects to the environment, cultural values[PC131-284] and economy associated with the activity should GMOs escape from the activity area, and measures that will be taken to avoid, remedy or mitigate such effects.

(e) Evidence of research undertaken that characterises and tests the GMO, and the certainty associated with the accuracy of that information.

(f) A management plan outlining ongoing research and how monitoring will be undertaken during, and potentially beyond, the duration of consent.

(g) Details of areas in which the activity is to be confined.

(h) Description of contingency and risk management plans and measures.

19.6.2.2 BOND REQUIREMENTS

Council requires the applicant for the resource consent to provide a performance bond (akin to a bank guarantee) in respect of the performance of any one or more conditions of the consent, including conditions relating to monitoring required of the GMO activity (prior to, during and after the activity), and that this be available for payment to redress any adverse environmental effects and any other adverse effects to third parties (including economic effects) that become apparent during or after the expiry of the consent.

The exact time and manner of implementing and discharging the bond shall be decided by, and be executed to the satisfaction of Council.

Matters that will be considered when determining the amount of the bond are:

(a) What adverse effects could occur and the potential significance, scale and nature of those effects, notwithstanding any measures taken to avoid those effects.

(b) The degree to which the operator of the activity has sought to avoid those adverse effects, and the certainty associated with whether the measures taken will avoid those effects.

(c) The level of risk associated with any unexpected adverse effects from the activity.

(d) The likely scale of costs associated with remediating any adverse effects that may occur.

(e) The timescale over which effects are likely to occur or arise.

(f) The extent of monitoring that may be required in order to establish whether an adverse effect has occurred or whether any adverse effect has been appropriately remedied.

19.6.2.3 MONITORING COSTS

A GMO discretionary activity may require monitoring during, and beyond the duration of consent. Monitoring is to be carried out by either the Council or consent holder with appropriate reporting procedures to the relevant regulatory authority.

A monitoring strategy for a GMO discretionary activity can include the following matters:

(a) Inspection schedules for the site, storage areas and equipment (daily, weekly, monthly, events based).

(b) Testing of procedures (e.g. accidental release response).

(c) Training programmes for new staff, updates for existing staff.

(d) Audits of sites and site management systems.

(e) Sample testing of plants and soils in neighbouring properties for the presence of migrated GMOs.

19.6.2.4 VIABLE GENETICALLY MODIFIED VETERINARY VACCINES

The use of viable genetically modified veterinary vaccines not supervised by a veterinarian shall be a discretionary activity.[294/1]

19.6.3 PROHIBITTED ACTIVITIES

19.6.3.1 OUTDOOR RELEASE OF GENETICALLY MODIFIED ORGANISMS

Outdoor release of food-related and non-food-related Genetically Modified Organisms, not otherwise provided for in ***Rules under 19.6.1*** and ***19.6.2 above*** is a prohibited activity.

19.7 NOTIFICATION

All applications for resource consent ~~under rule 19.6.2~~ must be publicly notified.

19.8 ASSESSMENT CRITERIA

The matters set out in s104 and s105, and in Part II of the Act, apply to the consideration of all resource consents for land use activities.

In addition to these matters, the Council shall also apply the relevant assessment matters set out below.

(a) Site design conditions should ensure GMO sites are designed and managed in a manner that avoids or minimises risks of adverse effects from activities carried out on the site. This shall include provisions to prevent the migration of GMOs beyond the area designated for the activity.

(b) Ensure the transportation of GMOs is carried out in a manner that minimises the risk of adverse effects by preventing the escape of GMOs from the transporting vehicles. Appropriate procedures must be in place to ensure that any vehicle visiting the site is thoroughly cleaned and checked prior to leaving the site to avoid unintentional GMO transportation.

(c) Reporting requirements by the consent holder will be stipulated in the consent conditions.

(d) Where necessary, more stringent measures than those required under the provisions of the HSNO Act may be imposed to manage potential risks. A review clause (pursuant to Section 128 of the Act) may be included in any conditions, where deemed necessary, to address any future changes in technology, and the scope of environmental, economic and cultural effects.

(e) The duration of any consent will be aligned with EPA approval terms.

GMO.1
GENETICALLY MODIFIED ORGANISMS

Index

GMO.1.2 Eligibility Rules

1. Research within contained laboratories involving GMOs is a permitted activity.
2. Medical applications involving the manufacture and use of non-viable GM products are permitted activities.
3. ~~Veterinary Vaccines using GMOs~~ The use of non-viable genetically modified veterinary vaccines and viable genetically modified veterinary vaccines with a specific delivery dose supervised by a veterinarian are permitted activities.
4. The use of viable genetically modified veterinary vaccines not supervised by a veterinarian are discretionary activities.
5. Other GMO activities not requiring consent as a discretionary activity or listed as a prohibited activity are permitted activities.
6. Field Trials of GMOs (where the proponents of such activities have prior approval of the EPA) are discretionary activities.
7. Food-related and non food-related GMO Releases are prohibited activities.

Note: permitted activities may require consents and / or permits under other legislation / plans.

GMO.1.3 Notification

All applications for resource consent must be publicly notified.

GMO.1.1 Description & Expectations

The purpose of this chapter is to manage the outdoor use of Genetically Modified Organisms (GMOs). The outdoor use of GMOs can have adverse effects on people, communities, tangata whenua, social and cultural wellbeing, the environment and the economy.

Sources of risk from the outdoor use of GMOs include:

- Socio-cultural risk - concerns of Maori, such as mauri, whakapapa, tikanga, including the integrity of nature, the mixing of genes from unrelated species, and effects on indigenous flora and fauna.
- Environmental risk - including adverse effects on non-target species (e.g. birds and insects), genetically modified (GM) plants becoming invasive and disrupting ecosystems, and altered genes transferring to other organisms.
- Economic risk - the risk that cultivation of GM crops will cause economic damage, in particular through accidental or unintentional migrations of GMOs resulting in GM contamination appearing in non-GM crops and associated market rejection and loss of income, negative effects on marketing and branding opportunities, and costs associated with environmental damage.

There is a lack of information, including scientific uncertainty, concerning the effects of GMOs in the environment and risks of irreversible, adverse effects which could be substantial. In order to manage the effects of outdoor use, storage, cultivation, harvesting, processing or transportation of GMOs, an adaptive precautionary approach to risk management is adopted for the Whangarei District.

The application of a precautionary approach shall mean that the Release of a GMO is prohibited and that Field Trials of a GMO (where the proponents of such activities have prior approval from the Environmental Protection Authority (EPA)) shall be a discretionary activity so as to avoid the risks of potential adverse effects. Some activities, such as research within contained facilities, some veterinary vaccines and certain medical applications are permitted activities. The classification is based upon a hierarchy of risks, from negligible for permitted activities to high risk for prohibited activities. Discretionary activities (Field Trials) are subject to development and performance standards, including a requisite for bonds to cover possible environmental or economic damage and monitoring requirements.

The application of an adaptive risk management approach is to avoid foreclosure of potential opportunities associated with a GMO development that could benefit the district. There is the ability to review a particular GMO activity if it were to become evident during the field trial stage, or in light of other new information, that the particular GMO activity would be of net benefit to the district and that potential risks can be managed to the satisfaction of Council. Council or a GMO developer can initiate a plan change to change the status of an activity.

It is anticipated that the objectives, policies, eligibility rules and general development and performance standards in this chapter will achieve the following results:

1. Adoption of a precautionary approach to manage potential risks (social, cultural, environmental and economic) associated with the outdoor use of GMOs.
2. Ensuring users of GMOs are financially accountable in the long-term through bonding and financial fitness provisions for the full costs associated with the GMO activity. This includes accidental or unintentional contamination, clean-up, monitoring and remediation.
3. Protection of local/regional marketing advantages through reducing risks of adverse effects associated with market rejection and loss of income from GM contamination of non-GM crops, and negative effects on marketing, branding and tourism opportunities.
4. Addressing cultural concerns of Maori, particularly given that Maori make up a considerably greater proportion of the population in Northland than is represented nationally.

GMO.2
GMO Land Use Controls

GMO.2.1 Objectives

1. **The environment, including people and communities and their social, economic and cultural well being and health and safety, is protected from potential adverse effects associated with the outdoor use, storage, cultivation, harvesting, processing or transportation of GMOs through the adoption of a precautionary approach, including adaptive responses, to manage uncertainty and lack of information.**

2. **The sustainable management of the natural and physical resources of the district with respect to the outdoor use of GMOs, a significant resource management issue identified by the community.**

GMO.2.3 Information Requirements

Applications for GMO Field Trials are to provide:

- Evidence of approval from the EPA for the specific GMO for which consent is sought. The duration of any consent granted will be aligned with EPA approval terms.
- Details of proposed containment measures for the commencement, duration and completion of the proposed activity.
- Details of the species, its characteristics and lifecycle, to which the GMO activities will relate.
- Research on adverse effects to the environment, cultural values and economy associated with the activity should GMOs escape from the activity area, and measures that will be taken to avoid, remedy or mitigate such effects.
- Evidence of research undertaken that characterises and tests the GMO, and the certainty associated with the accuracy of that information.
- A management plan outlining on-going research and how monitoring will be undertaken during, and potentially beyond, the duration of consent.
- Details of areas in which the activity is to be confined.
- Description of contingency and risk management plans and measures.

GMO.2.2 Policies

1. Precautionary Principle

To adopt a precautionary approach by prohibiting Release of a GMO, and by making Field Trials of a GMO and the use of viable GM veterinarian vaccines not supervised by a veterinarian a discretionary activity.

2. Financial Accountability

To ensure that a resource consent granted for the Field Trials of a GMO is subject to conditions that ensures that the consent holder is financially accountable (to the extent possible) for any adverse effects associated with the activity, including clean-up costs and remediation, including via the use of bonds.

3. Risk Avoidance

To ensure that a resource consent granted for the Field Trials of a GMO is subject to conditions that serve to avoid, as far as can reasonably be achieved, risk to the environment, the mauri of flora and fauna, and the relationship of mana whenua with flora and fauna from the use, storage, cultivation, harvesting, processing or transportation of a GMO.

4. Monitoring Costs

To ensure that a resource consent granted for the Field Trials of a GMO is subject to a condition requiring that monitoring costs are met by the consent holder.

5. Liability

To require consent holders for a GMO activity to be liable (to the extent possible) for any adverse effects caused beyond the site for which consent has been granted for the activity.

6. Adaptive Approach

To adopt an adaptive approach to the management of the outdoor use, storage, cultivation, harvesting, processing or transportation of a GMO in the district through periodic reviews of these plan provisions, particularly if new information on the benefits and/or adverse effects of a GMO activity becomes available.

GMO.2
GMO Land Use Controls

GMO.2.4 General Development & Performance Standards

Without limiting the discretion reserved to Council on any application for consent, discretionary activities are to comply with the following minimum controls in order to establish in the district. The general development and performance standards are in addition to any controls/conditions that are imposed and monitored by the EPA under the Hazardous Substances and New Organisms (HSNO) Act.

1. **Bond**

Council requires the applicant for the resource consent to provide a performance bond, with an approved trading bank guarantee, in respect of the performance of any one or more conditions of the consent, including conditions relating to monitoring required of the GMO activity (prior to, during and after the activity). This bond is to be available for payment to redress any adverse environmental effects and any other adverse effects to third parties (including economic effects) that become apparent during or after the expiry of the consent. The form of, time and manner of implementing and discharging the bond shall be decided by, and be executed to the satisfaction of Council.

2. **Monitoring Costs**

All costs associated with monitoring required for discretionary activities will be borne by the consent holder. This includes any monitoring that is required to be undertaken beyond the consent duration, as required by a resource consent condition.

3. **Assessment of Applications and Conditions**

Where necessary, more stringent measures than those required under the provisions of the HSNO Act may be imposed to manage potential risks. A review clause (pursuant to Section 128 RMA) may be included in the conditions, where deemed necessary, to address any future changes in technology, and the scope of environmental, economic and cultural effects. An application for a discretionary activity may be granted with or without conditions, or be declined by the Council having regard to the relevance of the following matters:

- **Site Design, Construction and Management**

Site design conditions should ensure GMO sites are designed and managed in a manner that avoids or minimises risks of adverse effects from activities carried out on the site. This shall include provisions to prevent the migration of GMOs beyond the area designated for the activity.

- **Transport**

Ensure the transportation of GMOs is carried out in a manner that minimises the risk of adverse effects by preventing the escape of GMOs from the transporting vehicles. Appropriate procedures must be in place to ensure that any vehicle visiting the site is thoroughly cleaned and checked prior to leaving the site to avoid unintentional GMO distribution.

- **Monitoring**

A GMO discretionary activity may require monitoring during, and beyond the duration of consent. Monitoring is to be carried out by either the Council or consent holder with appropriate reporting procedures to the relevant regulatory authority.

- **Reporting**

Reporting requirements by the consent holder will be stipulated in the consent conditions.

GMO.2.5 Particular Matters

Matters that will be considered when determining the amount of bond required are:

- What adverse effects could occur and the potential significance, scale and nature of those effects, notwithstanding any measures taken to avoid those effects.
- The degree to which the operator of the activity has sought to avoid those adverse effects, and the certainty associated with whether the measures taken will avoid those effects.
- The level of risk associated with any unexpected adverse effects from the activity.
- The likely scale of costs associated with remediating any adverse effects that may occur.
- The timescale over which effects are likely to occur or arise.
- The extent of monitoring that may be required in order to establish whether an adverse effect has occurred or whether any adverse effect has been appropriately remedied.

A monitoring strategy for a GMO discretionary activity can include the following matters:

- Inspection schedules for the site, storage areas and equipment (daily, weekly, monthly, events based).
- Testing of procedures (e.g. accidental release response).
- Training programmes for new staff, updates for existing staff.
- Audits of sites and site management systems.
- Sample testing of plants, soils and water in neighbouring properties or localities for the presence of migrated GMOs.

Definitions

The following definitions shall be inserted into the District Plan in Chapter 4. Meaning of Words -

Field Trials (tests) ** - means, in relation to a genetically modified organism, the carrying on of outdoor trials, on the effects of the organism under conditions similar to those of the environment into which the organism is likely to be released, but from which the organism, or any heritable material arising from it, could be retrieved or destroyed at the end of the trials.

Genetically Modified Organism and GMO** - means, unless expressly provided otherwise by regulations, any organism in which any of the genes or other genetic material:
(a) have been modified by *in vitro* techniques; or
(b) are inherited or otherwise derived, through any number of replications, from any genes or other genetic material which has been modified by *in vitro* techniques.

N.B.For the absence of doubt, this does not apply to GM products that are not viable (and are thus no longer GM organisms), or products that are dominantly non-GM but contain non-viable GM ingredients (such as processed foods).

Release** - means to allow the organism to move within New Zealand free of any restrictions other than those imposed in accordance with the Biosecurity Act 1993 or the Conservation Act 1987.

A Release may be without conditions (s34, HSNO Act) or subject to conditions set out s38A of the HSNO Act.

Environmental Protection Authority and EPA* - means the Environmental Protection Authority established by section 7 of the Environmental Protection Authority Act 2011.

Hazardous Substances and New Organisms Act and HSNO - means the Hazardous Substances and New Organisms Act 1996.

Veterinary Vaccine: means a biological compound controlled by the Agricultural Compounds and Veterinary Medicines Act that is used to produce or artificially increase immunity to a particular disease and has been tested and approved as safe to use by a process similar to that conducted for approval and use of medical vaccines.

Genetically Modified Veterinary Vaccine: means a veterinary vaccine that is a genetically modified organism as defined in this Plan.

Viable Genetically Modified Veterinary Vaccine: means a genetically modified veterinary vaccine that could survive or replicate in the environment or be transmitted from the inoculated recipient.

* Definition taken from the Resource Management Act 1991
**Definition taken from the Hazardous Substances and New Organisms Act 1996