



## **Submission to the Waikato Healthy Rivers/Wai Ora Plan for change**

### **Groundspreading and Fertiliser application**

#### **Objective**

To provide an auditable management tool to support the mitigation of risk to the environment from applications of fertiliser and plant nutrients, accurate recording of applications and identification of sensitive areas within farms (exclusion zones).

#### **Recommendation**

All fertiliser and plant nutrients applied to farms within the catchment of the Healthy River Plan should be applied in a manner that meets the requirements of the Fertiliser Code of Practice – Fertmark, Spreadmark and be supported by the use of GPS technology to capture the areas that fertiliser and nutrients are applied (Proof of Placement).

That technology is required to support the application of fertiliser and plant nutrients to land that is covered by the identified area(s) within the proposed plan. Technology will provide a mitigation tool providing evidence of application with the assigned Land Management units within a farm entity. Technology is the enabler for accurate record keeping to meet the requirements of the approved Farm Plans and a method of collating information to meet compliance under the Healthy River/Wai Ora Plan

Approved Quality Assurance programs of equivalence to above Codes of Practice will be acceptable with the provision of acceptance form the Regulatory Council/Authority and the RMA legislation for sustainability.

#### **Introduction**

The Groundspread industry (the “industry”) provides services to primary production activities and associated rural activities through applying fertilisers by purpose built vehicles. The application of these substances has the potential to cause adverse environmental effects if not adequately managed.

The industry is subject to a number of legislative requirements. The focus of this document is to highlight the key resource management issues under the Resource Management Act 1991 (RMA) associated with the industry and how these must be considered by councils in relation to other relevant legislation, particularly the Hazardous Substances and New Organisms Act (HSNO Act).

Under the RMA, regional councils and territorial authorities both have roles and responsibilities for managing the effects of the industry. Regional councils are primarily responsible for managing the discharges associated with the industry, whereas territorial authorities are primarily responsible for the management of land-based amenity issues. Most industry operators work in a number of different regions so have to comply with a range of plan provisions and controls which can increase the complexity of their operations if plans are not well aligned and managed.

This submission provides a background to the industry, outlines relevant industry best practice standards, and provides guidance on how industry operations can be managed through regional or district plans to address actual and potential adverse effects. This note outlines the nature and type of discharges associated with the industry and recommends a risk assessment/management approach to manage the actual and potential effects of these discharges based on appropriate performance standards. It also provides guidance on managing adverse effects and amenity issues associated with the land-based components of the industry's operations.

#### Purpose of the Guidance Note

The submission sets out the key resource management issues associated with the industry and methods to manage the associated potential adverse effects. The purpose of this guidance note is to:

- Raise the knowledge and understanding of the industry and the nature of its operations among RMA practitioners.
- Outline relevant legislation that applies to the industry in order to raise awareness amongst RMA practitioners as to the scope of controls in regional and district plans.
- Outline relevant industry best practice and Codes of Practice and how these can be used to help manage adverse effects.
- Provide an overview of the matters that councils could consider when developing plan provisions to manage adverse effects and enable the industry to operate in a sustainable manner.

The submission is intended to help councils develop plan provisions and resource consent conditions that will manage potential adverse effects on the environment and deliver positive outcomes from both a council and industry perspective. It promotes a risk based approach to manage discharges associated with the industry's operations, coupled with the ability to demonstrate (verify) if required, how any environmental risks will be, or were, managed. Additional Technical Information relating to the Groundspread Industry is provided on the New Zealand Groundspread Fertiliser Association and the New Zealand Fertiliser Quality website to support this risk management approach and to provide further information on industry best practice.

#### Scope and structure of the Submission

The submission focusses on managing the environmental effects associated with the application of the main products associated with the industry: fertiliser. It outlines the nature of these discharges, relevant risk factors and exposure pathways that may lead to adverse effects. It then sets out options to manage the effects of these discharges. The guidance note is structured as follows:

#### **The Groundspread industry – an overview of the industry within New Zealand.**

The New Zealand Groundspread Fertilisers' Association Inc. is a Trade Organisation formed to promote the interests of companies/individuals involved in the groundspread fertiliser industry. It began in 1956 when it became clear that an umbrella organisation was needed to protect the interests of persons within the industry and to represent the industry with central and local government, government organisations, industry organisations and private concerns.

The aims and objectives of the Association are

- A) To promote, protect and advance the commercial interests of NZGFA members and to assist members on all industry matters relating to the distribution of bulk lime and fertilisers.
- B) To promote legislation or any other measures that may benefit the business of members and to oppose the imposition of any regulation that could impose constraint or costs on to members businesses.
- C) To engender by association, a fraternal feeling amongst Groundspreaders and the manufacturers and distributors of fertiliser and lime.
- D) To promote the interests of bulk fertiliser and lime business`.

The NZGFA is supported by the Fertiliser Quality Council which was set up by farmers for farmers and incorporated in 2001 combining both the Fertmark and Spreadmark initiatives

### **Industry regulations and best practice**

There are a range of relevant industry regulations, codes, and best practice standards that operators comply with.

A risk management approach to address resource management issues associated with the agricultural groundspread industry – a description of a risk management approach and how it could be applied to address the key resource management issues associated with the industry.

There is much technical information and terminology associated with the industry which has the potential to cause confusion. It can also create issues for the industry where inappropriate terminology is used in plan provisions. In this document, preferred definitions have been provided for fertilisers, and a glossary is provided to clarify other key terminology used in this guidance note. Links to the NZGFA website are provided, particularly in terms of relevant legislation and Technical Information relating to the Groundspread Industry.

### **Fertiliser: Codes of Practice**

- **Code of Practice for Nutrient Management.**
- **Fertmark Code of Practice.**
- **The Spreadmark Code of Practice.**

### **Code of Practice For Nutrient Management**

- The Fertiliser Association of New Zealand's (formerly The New Zealand Fertiliser Manufacturers' Research Association) Code of Practice for Nutrient Management (with emphasis on fertiliser use) considers the use of fertiliser within the broader context of nutrient management. With this approach, a nutrient budget is the basis for developing a nutrient management plan. This Code assists in achieving that, placing the planning within the context of a farm management system.

- While it is mainly intended as a guide for nutrient advisers and consultants, this Code is also useful for land managers (farmers and growers) who want to know more about nutrient management planning and the best nutrient management practices for their production system.
- Wise nutrient management planning will enable land managers to demonstrate environmental care as they undertake production activities and aim to run a profitable business. Additionally, this Code will help land managers, consultants, Regional Councils and the public to have confidence in nutrient management practices throughout New Zealand's primary production sector.
- It is not intended to be read from beginning to end. Users can select sections relevant to them, depending on their needs, farming systems and current level of nutrient management planning.
- [Code of Practice For Nutrient Management](#)

### **Fertmark Code of Practice**

The Fertmark programme was established in 1992 to give New Zealand farmers confidence in the quality of fertilisers and associated advertising.

It now includes the requirements of the Agricultural Compounds and Veterinary Medicines Act that fertilisers are supplied in such a way as to minimise risks to food safety and animal welfare.

The Fertmark Code of Practice relates to all fertilisers sold under the Fertmark programme.

Farmers can be confident that fertilisers supplied from Fertmark registered companies meet the claimed nutrient content and, if used properly, do not pose hazards to food safety or animal welfare.

Fertmark provides quality assurance on claimed nutrient content to farmers purchasing fertiliser, with Fertmark certified products displaying a green tick.

To ensure ongoing product consistency, regular product samples are analysed, and procedures and results are subject to external, independent audit.

- The Fertmark Tick means that fertiliser has been independently audited to ensure what's on the label is actually in the bag and the Fertmark Code of Practice relates to all fertilisers made and sold under the Fertmark programme.
- Fertmark now includes the requirements of the Agricultural Compounds and Veterinary Medicines Act which requires fertilisers to be supplied in such a way as to minimise risks to food safety and animal welfare.
- The Fertmark programme was established in 1996 to give New Zealand farmers the confidence in the quality of their fertilisers and associated advertising.
- Farmers can be confident that fertilisers supplied from Fertmark registered companies are reliable and, if used properly, do not pose hazards to food safety or animal welfare.
- Fertmark is an independently assessed fertiliser quality assurance programme.
- Fertmark Fertilisers have ongoing, independent and vigorous auditing.
- If the fertiliser has the Fertmark "tick" farmers know exactly what they are applying to their pastures.

### **Spreadmark Code of Practice**

Fertiliser applied evenly and at the required rate can provide economic benefits to farmers and reduce adverse environmental impacts.

The Spreadmark Code of Practice for the Placement of Fertiliser in New Zealand enables farmers and growers to get the best value for their fertiliser dollar.

Spreadmark is a fertiliser spreading accreditation scheme that registers fertiliser-spreading companies with certified spreading machinery, trained operators and audited quality management systems. It is run in conjunction with Fertmark, the fertiliser quality assurance scheme.

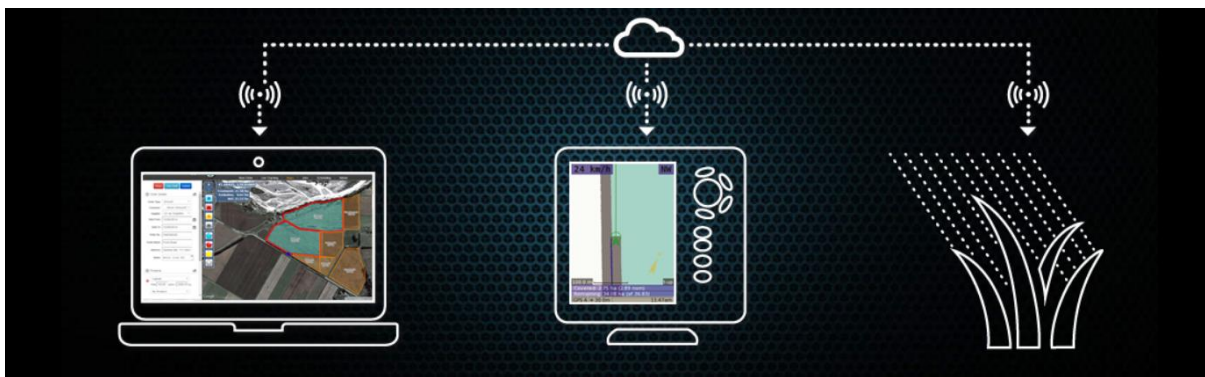
The importance of evenness of spread has been highlighted in a Fertiliser Association funded study undertaken by Lincoln Technology, AgResearch and Agriculture New Zealand which shows that patchy fertiliser distribution can significantly affect paddock productivity.

## **Technology**

Technology is specifically designed for ground-spreading applications such as fertiliser spreading and spraying. Systems are designed with the intelligence to be responsive to all levels of user – from someone who has made a policy of using the computer as little as possible, to our most sophisticated commercial farmers and national contracting enterprises that use technology to drive maximum efficiencies in their businesses.

The technology provides a platform for accurate order placement for fertiliser applications, identification of the required areas for application and to account for the product applied on a nutrient basis allowing for some traceability or “proof of placement” of fertiliser nutrients. In addition to the capture of the fertiliser inputs sensitive areas including waterways and exclusion zones can be identified and be excluded from the areas of fertiliser applications.

Integration of available technologies does provide a challenge for farmers and groundspreading companies. The integration needs to be available across platforms that are commonly used in pastoral farming – such as Farm Management Systems and integration with OverSeer and Nutrient management programmes.



### Key attributes of technology

- Application management (ordering process)
- Proof of Placement
- Nutrient application reconciliation (audit) against Farm Plans
- Identification of sensitive areas (exclusion zones)
- Identification and record of farm hazards

## **Recommendation**

All fertiliser and nutrients applied to farms within the catchment of the Healthy River Plan should be applied in a manner that meets the requirements of the Fertiliser Code of Practice – Fertmark,

Spreadmark and be supported by the use of GPS technology to capture the areas that fertiliser and nutrients are applied to (Proof of Placement).

The standard of Quality Assurance to meet the Healthy River can also be met by demonstrating Quality assurance programs or equivalence that meet the requirements of the Fertiliser Codes of practice.

The requirement of the standard must be met by all participants including Groundspread operators and farmers.

The standard of the Quality Assurance Program will provide the mitigation tools to effectively meet the requirement of the Healthy River Plan and satisfy the requirement of the submitted Farm Plan that is required from all farm entities that are with the Healthy River Plan catchment.

Additional benefits for requiring the inclusion of Quality Assurance systems will provide nutrient statements that support the recommendations of Overseer and the Dairy Company requirements (Fonterra, Miraka, OCD, Tatua...) of Nutrient Management

In essence adopting industry best practice and applying at a farm level provides proven mitigation tools and strategies supported by quality and reconciliation

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