

FEEDBACK ON

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Online consultation for review and comments on the zero-draft International Code of Conduct for the Use and Management of Fertilizers.

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About Fertiliser Association of New Zealand (FANZ)

- 1 FANZ is a trade association representing the New Zealand manufacturers of superphosphate and nitrogen fertilisers. FANZ member companies are Ballance Agri-Nutrients Ltd and Ravensdown Limited. Both these companies are farmer co-operatives with some 45,000 farmer shareholders, and between them supply over 98% of all fertiliser used in New Zealand.
- 2 The cooperative base of the fertiliser industry means the industry is driven by delivering best value to its farmer shareholders. The industry is focussed on fertiliser effectiveness and efficiency enabling profitable farming operating within environmental limits.
- 3 FANZ on behalf of the industry supports and encourages an environmentally responsible, science-based approach to nutrient management and regulation.

- 4 FANZ member companies provide product that is critical to New Zealand farming systems with interests and responsibility across all agricultural sectors, including dairy, sheep, beef, arable and horticulture. The industry has an almost unique pan-sector perspective.
- 5 To promote good management practices, FANZ has funded training programmes, and developed codes of practice, information booklets and fact sheets. FANZ also funds research, partners with government on research and development projects, and works closely with other organisations in the agricultural sector on industry-good issues.
- 6 Along with AgResearch and the Ministry for Primary Industries, FANZ is a one third owner of Overseer. Management of Overseer was transitioned in 2016 to a new company structure (Overseer Ltd).
- 7 Overseer is an agricultural management tool which assists farmers and their advisers to examine nutrient use and movements within a farm system. It assists in decision making for nutrient use to optimise production and manage the risk of losses to the environment. It is a science-based model that is regularly updated to incorporate improved science.

FANZ's philosophy and approach

- 8 The industry supports systems that provide flexibility for land users to achieve desired outcome from an environmental and production perspective by managing farm system losses. This allows farmers to choose the most effective way of achieving outcomes for their particular property. It helps avoid regulation un-intentionally constraining business growth and gives space for innovation and transition to achieve both primary production goals and environmental outcomes.
- 9 FANZ supports effects-based measures, based on losses from the farm system. Losses cannot be easily measured directly, and modelling provides for the management of discharges by way of estimating annual average inputs and outputs of nutrients per hectare per year.
- 10 The Fertiliser Association of New Zealand is an associate member International Fertiliser Association and supports the representations by the International Fertiliser Association, which are considered to be consistent with the approach sought in this feedback.

Summary of submission points

- 11 Key consideration in the feedback include:

- Clause 1.4.6 to include provision for industry standards
- Clause 4.7.6 to provide for output based nutrient limits as an alternative to input limits

12 Additional Considerations in the feedback include:

- Clause 3.6.5 to provide for guidelines rather than highly prescriptive input limits
- Clause 6.3.1 to provide for industry programmes
- Clause 6.3.2 to provide for risk-based approach
- Clause 6.5.4 to provide for industry guidelines and stewardship
- Clause 7.1.3 Government should enforce agreed standards, not necessarily be responsible for industry training relating to retail sales
- Clause 8.1.6 avoid duplication of intent
- New Definition: include definition for 'Damaging effects' as not all adverse effects can be avoided.
- New Clause 1.3.8 to provide for an objective supporting agricultural produce which is not food

Submission in detail

Please respond to the questions leaving your comments below:

<p>Question</p>
<p>Is an International Code of Conduct for the Use and Management of Fertilizers beneficial and useful? To whom, and why?</p>
<p>Comment</p> <p>The Fertiliser Association of New Zealand supports the International Fertiliser Association's earlier submission, approach and values in relation to an International Code of Conduct for the Use and Management of Fertilisers. The proposed Code of Conduct should provide a considered and universal framework based on scientific principles and technical guidelines. Its value to New Zealand would be that it provides guidance and support to policy makers and regulators as well as importers and users of fertiliser about appropriate management and use of fertiliser. It adds</p>

credence and support to the industry good programmes which have been developed or are in the process of development.

The one caveat however is that the principles and framework should be broad enough and flexible enough to provide for the differences in international approaches.

For example, one important difference in comparison to Europe, is that New Zealand does not seek to control environment impacts by regulating fertiliser inputs (i.e. applications, as required by clause 4.7.6 of the proposed Code of Conduct). Using an alternative approach to support optimisation of productive land use, the current New Zealand regulatory approach is to limit the farm system output (losses). It is more specifically the nutrient losses, not the nutrient inputs which give rise to the adverse environmental effects. The New Zealand approach also recognises that fertilisers are only one contributor to the nutrient cycle giving rise to losses from a farm system. The output limits can be specific to different environmental circumstances. Hence, the approach to nutrient management is broader than input controls on fertiliser. This is especially so for intensive pastoral systems.

In summary:

The 'International Code of Conduct for the Use and Management of Fertiliser' could be beneficial and useful because as it provides a robust and defensible framework and a set of principles for responsible fertiliser use, for sustainable food, fuel and fibre production with environmental accountability.

It has relevance to policy makers, regulators and primary industry. However, to be relevant and acceptable, it must provide for a wide range of valid and appropriate regulatory and voluntary approaches to achieve the goals of responsible, sustainable nutrient management.

Question

Does this Fertilizer Code of Conduct address all aspects necessary to ensure the responsible use of fertilizers, optimizing benefits while minimizing risks?

Specific examples where different approaches must be provided for, are addressed with the comments and recommendations as given below:

Section 1. Scope, Goals and Objectives:

Comment - Clause 1.4.1 and Clause 1.4.6

Under Objectives of the Code, support is given to Clause 1.4.1 which addresses voluntary standards of practice for all stakeholders. Under Clause 1.4.6, industry standards are not recognised as having a place in helping to control and enforce fertiliser quality and reducing economic loss. Industry standards have a role, in combination with regulatory mechanisms.

Recommendation:

Amend Clause 1.4.6 to include provision for industry standards, for example;

“Assist countries and regions to control and enforce fertilizer quality through appropriate regulatory mechanisms and/or industry standards, and to ~~reduce~~ reducing economic losses to end users”

Section 3 Soil fertility and plant nutrition

Clauses under 3.6 through their NARS, universities and AEAS, in collaboration with international research centers, and other research organizations, governments should:

Comment –Clause 3.6.5

This clause requires that governments should ‘prohibited’ phosphorus applications or limit applications above a specified soil phosphorus limit. While there is support for the general intent of ensuring any phosphorus applications are warranted and justified with appropriate regard to agronomic benefit and environmental risk, caution is expressed about the requirement for highly prescriptive input controls prohibiting applications. It is recognised there is a very high level of variability in the conditions and circumstances which affect agronomic performance and also environmental risk. Top down controls should be softened in this clause, while still supporting evidence-based guidelines to ensure phosphorus applications are warranted and justified.

Recommendation:

Amend Clause 3.6.5 as follows

“Establish evidence-based ~~limits~~ guideline values for phosphorus levels in soils above which ~~additional phosphorus applications are prohibited or limited due to a low probability of where there is low probability of a positive crop response and a high probability of negative environmental impacts on surface water resources,~~ additional phosphorus applications are limited.”

Section 4 Fertiliser Use and Management

Clauses under 4.7 Governments should:

Comment –Clause 4.7.6

The framework and principles applied in Clause 4.7.6 require the establishment of application limits for nutrient from fertilisers to avoid damaging effects on the environment and on human and animal health.

While the intended outcomes and purpose for the limits stipulated in this clause are supported, the limits on inputs (application) of fertiliser is contrary to the approach adopted by industry and many of the regional regulatory authorities in New Zealand.

Under the current regulatory and industry approach to farming within environmental limits, the New Zealand Fertiliser Association would not be able to endorse the Code of Conduct’s requirement for application limits for nutrients from fertilisers as presented in Clause 4.7.6. It is also contrary to many of our existing regional regulations for controlling adverse effects on the environment.

An alternative to limiting fertiliser inputs is provided to support agricultural productivity, through innovation and flexibility in nutrient management. While also addressing environmental protection this flexibility and innovation is being provided for by introduction of limits on the

farm system 'losses'. It is considered it is the losses which give rise to the adverse environmental effects.

While control of fertiliser derived nutrient losses can be achieved by the traditional approach of limiting fertiliser applications, the New Zealand approach controls farm system losses using modelling of the farm system nutrient flows. It addresses all sources of nutrient, of which fertiliser is just one contributor. The controls on nutrient losses are implemented to ensure defined environmental limits are met.

(It is not likely to be possible to avoid all adverse effects, but defined environmental limits should not be compromised. Therefore, it is interpreted that "damaging effects" in Clause 4.7.6. means 'significant adverse effects, beyond the acceptable limits').

Recommendation:

Amend Clause 4.7.6 as follows:

"Establish evidence-based ~~application~~ limits for controlling nutrients losses from farms including those originating from fertilizers, including inorganic and organic fertilizers, sewage sludge, animal waste and organic residues to avoid damaging effects on the environment, and on human and animal health."

Comment – Clause 4.7.7

The directive for governments in Clause 4.7.7 requires databases and statistics on the adverse effects of fertilisers.

As with comments on Clause 4.7.6 above the intended outcomes and purpose for this directive are supported. However, caution is expressed that it may be a mistake if all adverse effects on the environment due to nutrient, are attributed to a misuse of fertiliser. Particularly for an intensive pastoral system, the nitrogen cycle can be fortified by imported high nitrogen feed, and even clover, even without the use of fertiliser. It is more likely the urine deposits of livestock rather than fertiliser, which drive nitrogen loss in intensive grazing systems.

Recommendation:

Amend Clause 4.7.7 as follows:

"Maintain databases and statistics on the environmental effects of ~~fertilizers~~ nutrients, and the nutrient sources, in coordination with industry and relevant international agencies, such as FAO (FAO, 2018c). Suitably trained personnel and adequate resources should be made available to ensure the reliability and accuracy of data and information collected."

Section 6 Composition, limits and testing:

Clauses under 6.3 Governments should:

Comment – Clause 6.3.1

This clause requires government to regulate all aspects of fertiliser composition in terms of nutrient content, heavy metal content, harmful microbes, other dangerous or toxic material, and additive such as sand, ground rocks and other materials used to dilute original product.

Under the current New Zealand context there are not highly regulated limits on nutrient content nor contaminants, however there are regulatory requirements for “fitness of purpose” and industry standards with an underlying legislative baseline under the Agricultural Compound and Veterinary Medicines Act. There are additional requirements under the Commerce Act and Fair Trading Act, the Resource Management Act, Hazardous Substances and New Organisms Act, and the Biosecurity Act. While there is no minimum requirement for nutrient content, the industry bodies provide for ‘quality assurance’ through voluntary programmes with independent audits.

That is to say; highly prescriptive government regulations on the composition of fertilisers are not the only option for providing appropriate protection for the consumer, the primary industry sector and the environment.

Although the Fertiliser Association of New Zealand fully endorses the intent of Clause 6.3.1, it would not be able to endorse regulating the composition of fertilizers in terms of:

- 6.3.1.1 nutrient content;
- 6.3.1.2 heavy metals linked to the production process and source of raw material;
- 6.3.1.3 harmful microbes;
- 6.3.1.4 other dangerous or toxic materials; and
- 6.3.1.5 additives such as sand, ground rocks and other materials used to dilute the original product.

Recommendation:

Amend clause 6.3.1 as follows:

“6.3 Governments should:

6.3.1 ~~Be responsible for regulating the composition, whether working with industry programmes or through regulation, for protecting the interests of consumers, primary industry and the environment, in relation to the use of fertilisers in terms of:~~

- 6.3.1.1 nutrient content;*
- 6.3.1.2 heavy metals linked to the production process and source of raw material;*
- 6.3.1.3 harmful microbes;*
- 6.3.1.4 other dangerous or toxic materials; and*
- 6.3.1.5 additives such as sand, ground rocks and other materials used to dilute the original product.*

Comment – Clause 6.3.2

While the controls in Clause 6.3.1 should ensure that fertiliser products are safe and appropriate to use, Clause 6.3.2 provides for regulation using evidence-based safety standards, limits, and guidelines for any harmful contents of fertiliser products, taking into consideration the different pathways of contamination and their impacts on humans and animals.

If it is a matter of establishing human health and environmental limits, standards and/or guideline values, then these should be “risk based” values to reflect the limitations of science and controls available in absolute terms.

Most standards, guidelines and limits in existing legislation, for example food standards are risk-based standards which apply to agricultural produce to provide for the protection of human health.

Furthermore, the proposed wording of Clause 6.3.2 does not currently require any 'environmental' consideration when it should probably be included. An environmental consideration would include animals.

Recommendation:

Amend Clause 6.3.2 as follows:

~~“Set and regulate~~ Develop scientifically established risk-based evidence-based safety standards, limits and /or guidelines for the potentially harmful contents of fertilizer products for the protection of human health and the environment ~~on harmful contents of fertilizer products, taking into consideration the different pathways of exposure, contamination and their impacts on humans and animals”~~

Clauses under the heading 6.5. Fertiliser industry, or relevant private entity should:

Comment – Clause 6.5.4

This clause places the onus on government regulation as the basis for all standards with no compulsion to follow “industry-good” standards, guidelines or stewardship.

Recommendation:

Amend 6.5.4 as follows:

“Ensure fertilizer products comply with any government standards and industry agreed guidelines and that end-users are supplied with safe and high-quality products that have been tested relative to ~~by~~ recognized standards and comply with appropriate regulations.”

Section 7 - Access, distribution and labelling

Clauses under 7.1 Government should:

Comment - Clause 7.1.3

This clause requires that 'government' is responsible for training relating to the retail sale of fertilisers.

The Fertiliser Association of New Zealand recognises that government has a role providing for education standards, however specific training relating to the retail sale of fertilisers rests with the retail industry. Retailers remain subject to complying with the legal standards which apply to the information, labelling, storage, handling and transport of fertiliser products. Government is responsible for enforcing these standards, and this matter is addressed under other clauses in this Code.

Clause 7.2.2 requires industry to provide these assurances that persons involved in the sale of fertiliser are trained adequately and capable of providing sound advice.....

Recommendation:

Delete Clause 7.1.3. or

in the alternative if retained, amend Clause 7.13 as follows:

~~“Ensure any locally or regionally relevant ~~and recognized training~~ regulatory standards relating to the retail sale of fertilizers, so as to ensure that those involved are capable of providing end users with sound advice on fertilizer use and management and on of the environmental and health risks associated with the misuse of fertilizers are complied with”~~

Section 8 - Information, extension and outreach

Clauses under 8.1 Government should

Comment - Clause 8.1.6

Clause 8.1.6 requires the use of science-based regulations and guidelines to regulate new technologies.

This requirement for government control over fertiliser products is covered under the previous sections, and is misplaced under this section for information, extension and outreach.

Recommendation:

Delete Clause 8.1.6 as its intent is addressed elsewhere.

Question

Are there any topics or subject matter missing from this Fertilizer Code of Conduct? If so, what are they?

Comment - new definition:

A definition for ‘damaging effects’ as it is applied in Clause 4.7.6 would be helpful, as it may not be possible or even appropriate to avoid “all” adverse effects. In the current draft, the term ‘damaging effects’ only appears in Clause 4.7.6.

Recommendation:

Introduce a new definition as follows:

Damaging effects: *significant adverse effects, beyond the acceptable limits*

Question

Are there redundancies or unnecessary items or subjects within this Code of Conduct? If so, what are they?

Redundancies are addressed within the body of feedback given above.

Deletion has been recommended for:

Clause 7.1.3

Clause 8.1.6

Question

Do you have any other suggestions or comments not covered in the above questions? If so, please elaborate.

Comment - new Clause:

While appropriate, Scope Goals and Objectives include 'to ensure a priority for global food production and food security' (Clause 1.3.1) and 'Maintain and improve food safety, diets, nutritional quality and human health' (Clause 1.3.7) it is also important to provide for appropriate fuel and fibre production, as food products are not the only saleable and essential produce from agricultural production.

Recommendation:

Insert a new clause 1.3.8 as follows:

1.3.8. Provide for efficient and effective agricultural production of fuel and fibre products while ensuring outcomes consistent with 1.3.1 to 1.3.7 above.

End.