Risk Management Proposal

Addition of a Tolerance Level for Contaminant Seeds on Imported Grain/Seeds for Consumption, Feed and Processing

FOR PUBLIC CONSULTATION

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Purpose
The purpose of this document is to outline the assessment of risk and propose the addition of a
tolerance level for contaminant seeds to the following Import Health Standards:
- BNZ.GCFP.PHR Importation of Grains/Seeds for Consumption, Feed or Processing
- BNZ-NPP-HUMAN Importation of Stored Plant Products Intended for Human Consumption

Background
Importers of single ingredient food grains for processing, repacking or direct sale to the consumer are
incurring significant losses of product, time, and monetary value. They are often directed to present their
imports as completely free of all admixed contaminants, despite equipment frequently handling many
different lines of food grains. Currently the Import Health Standard does not specify a tolerance level for
contaminant grains or seeds within imported food grains. Consignments are presently managed on a
case-by-case basis, which often involves considerable time and resources for importers, exporters, and
MAF staff.

Various grains and seeds (e.g. soybeans, beans, chickpeas, lentils and sunflower seeds) enter New
Zealand for consumption, feed or processing using one of three options:
1) Importation of non-viable seeds (with heat treatment or irradiation completed prior to export, or on
arrival)
2) Importation of viable seeds for processing at MAF-approved transitional facilities (including viable
grain imported into a MAF-approved Grain Importation System)
3) Importation of viable seeds with biosecurity clearance at the New Zealand border.

Under Option 1, heat treatment will make any imported seeds non-viable, while for Options 2 and 3,
viable seeds may enter New Zealand for processing or consumption with or without any post-entry
control. Where a very small number of regulated contaminant grain/seeds are detected in the
consignment (e.g. 5 seeds identified in a 5kg sample), current standards prohibit their entry unless
these seeds are removed. Alternatively the consignment may be directed for treatment (usually heat
treatment to render any seeds non-viable), reshipped, or destroyed.

Stakeholders have informed us that some overseas suppliers are no longer interested in supplying New
Zealand with food grains due to our unspecified and unrealistic demands for purity. The usual
contaminants are other species of food grain, which is a common problem when grains are processed
on equipment which has previously processed other foods, such as mung beans. There is also a limit in
the capability of machinery to physically separate seeds which are of similar size, shape, weight, or
colour. Many of our trading partners (e.g. Australia, USA, Canada) recognise the above likelihood for
contaminants and have derived food standards which in general allow a total of between 0.1% and
0.5% admixture of other seeds and plant material.

There are no clear guidelines within the current importing requirements for allowing or not allowing entry
to the variety of seeds that may be present as a contaminant on this pathway. In some cases, these
contaminant grains/seeds are listed under MAF’s Plants Biosecurity Index as ‘Basic’ and can be given
biosecurity clearance without any concern over their biosecurity risk. In other cases, the contaminant
grains or seeds themselves would currently have additional phytosanitary requirements under the
Import Health Standard (e.g. requirements for mung beans as prescribed in the Vigna schedule). Where
there are no specific requirements listed in this standard, the requirements are prescribed by MAF’s
Plants Biosecurity Index and the Import Health Standard for Seed for Sowing.

The current import standards require that action is taken on contaminant seeds to ensure that no
harmful pests and diseases enter New Zealand, despite the low risk of exposure, establishment and
impact of contaminants in goods for consumption. This results in importers losing product, time, and
monetary value through re-dressing seed to remove the contaminants, treatment, reshipment or destruction.

**Assessment Of Risk**

There is no formal risk assessment to determine the likelihood of entry and establishment, and the consequences to the environment, human health, and the economy for contaminant seeds on this pathway.

The majority of grains imported into New Zealand for consumption and further processing into food products will be consumed. Contaminant seeds that are within consignments of seeds which are heat treated or irradiated prior to export or on arrival pose few risks as the seeds will be rendered non-viable. In a similar way, contaminants in grains or seeds that are processed (e.g. by cooking, milling) at transitional facilities into products for human consumption or animal feed are highly likely to be rendered non-viable. For this option to be approved, the processing must effectively manage biosecurity risk, and be performed at a MAF-approved transitional facility. MAF evaluates the transitional facility and its suitability for processing, including the evaluation of the final products, by-products, intended uses, and the facility operators.

The third option, imported grains or seeds intended for consumption which are given biosecurity clearance at the border, poses a risk as their end use is not confirmed beyond the border. There is a very low likelihood that seeds could be deliberately planted in domestic gardens or commercial plantations, or be discarded into compost or domestic waste, where they germinate in domestic gardens or landfills.

Most grain/seeds exported for consumption into New Zealand will be consumed, but imported grains or seeds deliberately planted or discarded in the environment provide a mechanism for seed borne pathogens to reach vulnerable hosts. However the likelihood of this occurring is very low given that:

- most imported grains are processed or consumed and there is no likely mechanism for exposure;
- contaminant seeds will be present at very low levels (e.g. 1 in 1000 or more seeds);
- only a very small proportion of contaminant seeds could be planted or discarded in a suitable environment at an appropriate time of year;
- not all planted or discarded grains/seeds will be viable and germinate;
- most planted or discarded grains will not be able to develop persistent populations in New Zealand.

**IHS Proposal**

A draft IHS accompanies this document which includes the addition of a tolerance level for contaminant seeds (Section 2.1.2).

For consignments requiring biosecurity clearance on arrival (option 2), the IHS proposes a tolerance level for contaminant seeds of 0.1% in weight, as long as the seeds are not new or prohibited species as identified below:

1) Prohibited weeds, as listed in the Schedule of Regulated Weed Seeds (Section 1.5.2) of the Import Health Standard and/or MAF’s Unwanted Organisms Register

2) Seed species that are considered to be new to New Zealand, and/or those species listed as either ‘Entry prohibited’ or not listed on MAF’s Plants Biosecurity Index

Contaminant seed types and quantities should be prescribed on the Seed Analysis Certificate, or be determined by any sample and inspection made on arrival by a MAF inspector.
For heat treated consignments, or those directed for processing at a MAF-approved transitional facility, all contaminant grains/seeds should be stated on the Seed Analysis Certificate, or be identified by any sample and inspection made on arrival by a MAF inspector. The IHS proposes that no further action is be taken on these contaminant seeds as treatment or processing in MAF-approved transitional facilities will make them non-viable.

Other processed food products may also contain seed contaminants (e.g. rice, coffee beans). These are imported according to the Import Health Standard for Stored Plant Products Intended for Human Consumption (BNZ-NPP-HUMAN), and this standard will also be amended to include the above tolerance level for contaminant seeds.