Farm product verification

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Abstract

The Animal Products Act 1999 requires that suppliers make certain declarations about food safety issues with regard to live animals presented to the meat industry for processing. This is driven, both by overseas market access and New Zealand requirements.

Contingent with these "Animal Status Declarations" is the ability to conduct trace back from any part of the processing chain should a violation be identified.

As the livestock status declaration programme provides one important element of public health assurance for meat and meat products, it is essential to provide credibility by asking suppliers to provide evidence that will verify the statements made, in some instances, the verification process may extend back to the veterinary supplier.

The New Zealand Ministry of Agriculture and Forestry Verification Agency has developed a programme that will seek evidence to support any statement made by suppliers when presenting stock for slaughter.

Introduction

To fulfil the requirements placed on suppliers of live animals to the meat processing industries, certain declarations pertaining to food safety issues must be made. This situation is driven by both New Zealand, and Overseas Market Access Requirements (OMAR).

Contingent with the food safety requirements is the ability to conduct trace-back from any part of the processing chain should a violation be identified.

The Animal products Act 1999 defines primary producers supplying livestock as "Animal Business Operations", and each supplier is required by the Animal Products (Specifications for Products Intended for Human Consumption) Notice 2000, to provide a declaration regarding the status of those livestock being supplied.

This Animal Status Declaration as it is known, requires the supplier to make statements regarding:

- Animal history
- Animal treatments
- Residues movement control
- Feeding of ruminant protein
- Johnes vaccination
- HGP (hormonal growth promotant) treatment
- Certain information relating to the TB Pest Management Program.

The declaration must be signed by the supplier and presented with the animals at the time of submission for slaughter.

As the Animal Status Declaration program provides an important element of public health assurance for meat and meat products, it is essential to provide credibility by asking suppliers to provide evidence that will verify the statements made and occasionally the process may extend back to the veterinary supplier. To this end the Verification Agency of the Ministry of Agriculture and Forestry has developed an on farm program that seeks to verify statements made when to the Animal Status Declaration is completed.

Quality assurance programmes

A number of farm operations have been accredited to one of the Quality Assurance programs provided by processing companies, the Game Industry Board and ratite exporters. These

programs have been developed to provide market leverage and require robust animal remedy and animal identification controls along with good animal transaction records.

Animal History

Obviously no supplier can make valid statements about animals without knowledge of their history. The Animal Products Notice specifies in section 39 that unless the supplier is able to determine the status of animals they must not be presented within 180 days of purchase. This specification is to be amended and will default back to the 60 days required prior to July 2001. Note also that the requirement to produce Animal Status Declarations is found in section 40 of the Notice.

Therefore to enable any supplier to provide valid information:

- The animals must have been in their care for the previous 60 days, *or*
- The supplier must be in possession of an Animal Status Declaration from the previous owner.

Unfortunately this latter requirement has not yet been mandated as has the need to present a declaration at slaughter. However, commercial pressure and liability is driving most transactions to comply. There is little doubt that there is still the opportunity for operators to launder animals in a sale transaction and take the risk.

The verification program then asks:

- Whether stock are brought in for finishing or for other purposes
- How brought in stock are identified and differentiated from others
- How the status of purchased stock is assessed.

Animal Treatments

The Animal Products Notice provides the specifications regarding submission of animals after treatment with animal remedies including:

- Licensed remedies used according to recommendations
- Off label use, ie licensed remedy not used according to recommendations
- Use of unlicensed remedies.

As previously stated, if the status is not known then animals should be retained for at least 60 days from purchase.

For a supplier to be able to verify statements made with regard to residues, he or she must keep basic records of animal remedies used on his property. Industry quality assurance programs are operated to satisfy the commercial requirements of large supermarket chains, they focus on residues and traceability. Accordingly they have developed programs that document:

- Remedies purchased
- Remedies used
- When
- Dose rate
- Identification of animals treated
- With holding period / first date eligible for slaughter
- Person administering.

While we do not demand records that are identical to these programs we certainly encourage their use and expect an equivalent outcome at least.

With regard to requirements for storage of remedies, there are a number of regulatory changes in the wind. The Agricultural Compounds and Veterinary Medicines Act is under consideration to change certain over-the-counter compounds to prescription items. Due to the

present state of regulatory controls, advice is that any mandated conditions for secure storage will be advised on the label, otherwise common sense should prevail.

The expectation with regards to animal treatments is that:

- Records of purchases are available
- Storage is in dedicated facilities, preferably secure
- There are clear records of administrations and withholding periods
- Treated animals are clearly identifiable.
- Veterinarians prescribing prescription drugs or administering veterinary remedies have an obligation to inform the owner what the withholding periods for remedies used are.

Movement Control

There is a generic Overseas Market Access Requirement that effective trace back and control systems must be in place for animal material identified as presenting a risk to animal or human health. New Zealand was required to implement a program as a result of the EU visit in 2000. MAF-Food maintain a residues suspect list to which is added the name of the owner, or person in charge of animals identified as a source of risk.

Identification of risk is likely to be through the routine residue surveillance programme where samples are taken randomly in the slaughterhouse, or alternatively stock from a particular supplier may be targeted because of anomalies in information supplied. Observation of injection site lesions must always attract attention.

Properties concerned may be placed under a movement control notice. This in effect provides control by requiring that a permit be obtained from MAF-Food to allow animal movement. Movement controls to manage risk due to residues are imposed under the authority of sections 88 and 89 of the Animal products Act and are based on the principles of :

- Control, not restriction
- Traceability
- Education.

The verification program asks if any animals are from properties under movement control for residues and if so, the audit will dig deeper to ensure movement permits have been issued and the conditions of the permit followed.

MAF-Food maintain a list of persons whose property has been placed on movement control and lists of farmers who have been placed on the residue suspect list due to identified violations.

It is also a requirement to notify processors if animals are being supplied under permit, as certain sampling procedures will have to be followed

Animal Product Feeding

The Biosecurity (Ruminant Protein) Regulations 1999 forbid the feeding of protein derived from ruminants to ruminants., this does not include dairy products. Feed mills producing feeds for ruminant consumption are required to have registered risk management programmes if they also manufacture other feeds that contain ruminant protein. These registered programs are audited and randomly selected feed samples are taken for analysis. These events are just part of the OIE requirements for any country to stake its claim to BSE freedom.

Farmers are questioned about their understanding of the regulations and whether they supplement with prepared feeds, if so, they are expected to be in possession of the manufacturers statement that the feed is suitable to be fed to ruminants. The auditor will also confirm the secure storage of feeds maintained for non-ruminants and for fertilisers containing ruminant protein. We are also interested in knowing whether feeds are mixed on-farm and will check ingredients.

Johnes Disease Vaccination.

The requirements for identification of animals treated with Johnes disease vaccine are found in the Animal products Notice and are to be amended to remove reference to the vaccine trade name, and to remove specific reference to species as registration of other vaccines and expansion to include deer is likely.

Side effects from the use of the vaccine have been variable, but if the injection is not strictly subcutaneous, or if hygiene is compromised, purulent tracts, sometimes fistulous, will extend down the fascial planes of the neck from the injection site and drain into lymph nodes, particularly prescapular and axillary. These nodes become swollen with areas of inflammation and caseation and from which *Mycobacteria* can be demonstrated. If a European health authority investigating the complaint of a housewife that the ready to cook lamb shoulder roast has a large objectionable defect finds *Mycobacteria* in the prescapular lymph node, they are unlikely to differentiate between *M. bovis* or *M. paratuberculosis* which on its own is under a cloud anyway. This is why Johnes vaccinates are subjected to a very intensive and invasive inspection regime to ensure lymph nodes that may be affected by the vaccination are identified and removed.

If the status of animals presented for slaughter is uncertain, the whole line must be regarded as vaccinated and undergo the special inspection process.

Accordingly the audit will enquire if:

- Any animals on the property have been vaccinated
- The vaccine was purchased from a registered veterinarian
- For cattle, was proper authorisation obtained
- Vaccinates are correctly identified
- The correct declaration been made.

Hormonal Growth Promotants

The EU and about a dozen other countries are HGP restricted markets. To enable the export of beef to these markets, the country of origin must either ban the use of HGPs or implement a national control program. New Zealand has chosen the latter option.

The specific responsibilities of owners of bovine animals are to:

- Ensure correct identification, that is;
    - Primary ear tag
    - Secondary ear tag, both to be obtained from approved suppliers
    - An orange HGP tag
- Ensure the official tags are used only for the purpose intended
- Maintain accurate records of lost ear tags and of HGP animals that are acquired or disposed of.

It should be noted that the Animal Products Act covers the requirements of the control program from the point of administration of HGPs. Control from importation or manufacture to distribution and receipt by veterinarians is covered by other legislation and the involvement of veterinary practices will be covered in separate HGP specific audits.

In the farm verification program, interest is focussed on identification of treated animals and records.

Practice veterinarians or the trained technician must maintain complete records of all HGP administrations and provide MAF-Food with the information within 10 days of animals being implanted. This information is placed in the database or central registry for HGP purchasers and distributing veterinary practices. The database has two important purposes:

- Maintain a credible audit trail of HGP distribution

- Facilitate the identification of HGP cattle at slaughter premises.

Primary processors have responsibility to confirm, before post mortem inspection, that any individual animal identification number on the tags of cattle not identified with an HGP tag, is not listed in the database.

This exercise is completed by the use of scanners that read the barcode, and, have a direct electronic link to the database. Problems with the ability of scanners to read the barcodes have been experienced and it is expected that later this year radio frequency tags will be used.

Once HGP cattle have been identified, processors must ensure that none of the product, either carcass meat or offal, is exported to the EU or the other HGP averse countries. Detailed and effective control programmes are necessary as any contamination of a lot of HGP free product will result in that lot being excluded.

The Verification Agency is required to verify these company operated programmes.

As with Johnes vaccinates, if any animals in a mob are of doubtful status regarding HGP administration, the whole mob will be regarded as treated, and for both Johnes and HGPs, MAF-Food maintain a users list that is available to authorised persons.

TB Declarations

The requirements for TB declarations are embodied in legislation that is separate from the Animal Products Act and the farm verification program only looks at the issue superficially. We examine the farmer understanding of:

- herd status and testing records
- movement control
- status of purchased stock.

The farm audit follows the conventions of ISO 10011 and as farmers tend to be suspicious of any regulatory visit, great care is taken to extend all courtesies and to make sure the farmer understands the necessity, particularly that the issue is one of protecting market access for their products.

The Verification Agency is working to introduce the program, which is supported by the Meat Industry and Federated Farmers, in a non-threatening way. The outcome is not expressed in terms of pass or fail, but a judgement that the farm systems are either "competent" or "not yet competent" in a similar fashion to NZQA assessments. In the latter case the auditee will be given advice on the minimum corrective actions to achieve competency.

As practitioners you may receive comment or be consulted about these audits, it is in the national interest that the importance is reinforced.