MAF Biosecurity Authority
Animal Biosecurity

Standard 154.02.02

Standard

for

Sheep and Goat

Transitional Facilities

Ministry of Agriculture and Forestry
Biosecurity Authority
P O Box 2526
Wellington
New Zealand

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Endorsement

This MAF Biosecurity Authority Standard is approved pursuant to sections 39 and 40 of the Biosecurity Act 1993.

_____
B D O'Neil
Chief technical officer
(Acting pursuant to delegated authority)

Date:

Review

This Standard is subject to review and amendment at any time, to ensure that it continues to meet current needs. Amendments will be issued to holders of controlled copies and operators of transitional facilities approved under this Standard.

Amendment Record

Amendments to this Standard will be given a consecutive number and will be dated.

Please ensure that all amendments are inserted, obsolete pages removed and the record below is completed.

Amendment No:	Entered by:	Date:
1		
2		
3		
4		
5		

1. Introduction

Scope of Part One

This Standard specifies the structural and operating requirements for operators of transitional facilities holding sheep and goats meeting scrapie safeguards as a requirement of an import health standard. This Standard also specifies how operators and facilities may be approved.

The primary purpose of quarantine is to minimise the risk of introducing infectious agents such as scrapie and the slow virus diseases, and their transmission to susceptible species in New Zealand.

Scope of Part Two

Part Two of this Standard specifies the requirements for the supplier of supervision of transitional facilities for sheep and goats to ensure that operators are in compliance with Part One of this Standard.

1.1 References

This Standard is an approved standard in terms of sections 39 and 40 of the Biosecurity Act, 1993.

The following publications are referred to in this MAF Biosecurity Authority Standard:

- ISO 9002 (1994): Quality Systems - Model for quality assurance in production, installation and servicing.
- ISO/IEC 17020 General criteria for the operation of various types of bodies performing inspection.
- Import health standards for sheep and goats, which have a requirement for scrapie safeguards.

1.2 Definitions

For the purposes of this Standard the following definitions apply:

Approval

Approved by the Director-General, MAF, or his/her delegate. The chief technical officer, National Manager (Import Management) and National Adviser (Import Management) are delegatees for this Standard. The National Manager (Import Management) [see below] is the contact person for this Standard.

Approved Disinfectant

A disinfectant approved by MAF for animal disease prevention at the border. The supervisor has access to the list.

Approved Person

A person with suitable training and experience who has been approved by the chief technical officer to undertake specific duties on the transitional facility, e.g. a registered veterinary surgeon performing the necropsies on sheep and goats. This person is responsible to the supervisor.

Approved Seal

A tamper proof seal e.g. Tyden seal, lead seal or padlock, approved by MAF to ensure that between application and removal security has been maintained.

Audit

An evaluation to determine the degree of conformity with prescribed criteria and provide a basis for ongoing improvement.

Bioassay

The inoculation of a sentinel goat with material from original imports or donors of imported embryos or semen for the detection of pre-clinical scrapie.

Biosecurity clearance

A clearance under section 26 of this Act for the entry of goods into New Zealand: Biosecurity Act, 1993.

Biosecurity direction

Authority from an inspector, given under section 25 of the Biosecurity Act, to move uncleared goods to a transitional facility, containment facility or biosecurity control area.

Chief technical officer

Is the chief technical officer (as defined in section 101 of the Biosecurity Act, 1993) of MAF with responsibility for animal health in New Zealand. The delegatees identified in the definition of approval [see above] are the people to contact where reference is made to a chief technical officer in this Standard.

Director-General

The chief executive of the Ministry of Agriculture and Forestry or his/her delegate.

Exotic Animals

Original imports and any animals with genetic material derived from them.

Import health standard

A document issued under section 22 of the Biosecurity Act, 1993, which specifies the requirements to be met for the effective management of risks associated with importation of risk goods before those goods may be imported, moved from a biosecurity control area or a transitional facility, or given a biosecurity clearance.

Inspector

A person appointed as an inspector under the Biosecurity Act, 1993.

Internal audit

An audit carried out by the company or organisation to evaluate its own performance in relation to the Standard or prescribed criteria.

Laboratory

MAF Biosecurity Authority approved veterinary diagnostic laboratory that is also a transitional facility.

MAF Biosecurity Authority

The body within the MAF responsible for regulatory functions associated with this standard.

National Manager

The contact person for matters relating to this Standard.

Address: National Manager, Import Management
MAF Biosecurity Authority
Box 2526
Wellington
Fax: (04) 4744 133

Operator

The person who has overall responsibility for the facility, its maintenance and operation in terms of section 40 of the Biosecurity Act, 1993.

Original Import

- Any imported live sheep or goat, or
- imported embryo subsequently implanted into a surrogate dam in New Zealand, or
- animal imported as an embryo or foetus in an imported live sheep or goat, or
- progeny of imported semen.

Permit

Authorisation issued by the supervisor for entry/exit of people, animals and goods onto or off the transitional facility. For the purpose of this Standard a permit will include biosecurity directions.

Permit to import

A numbered document, issued as a requirement of the import health standard.

Procedure

A document that specifies, as applicable, the purpose and scope of an activity; what shall be done and by whom; when, where, and how it shall be done; what materials, equipment, and documentation shall be used; and how it shall be controlled.

Quarantine

Confinement of organisms or organic material that may be harbouring pests or unwanted organisms. Section 2, Biosecurity Act, 1993.

Quarantine period

A minimum period of quarantine as specified in the import health standard.

Risk goods

Any organism, organic material, or other thing or substance, that (by reason of its nature, origin, or other relevant factors) it is reasonable to suspect constitutes, harbours, or contains an organism that may-
(a) Cause unwanted harm to natural and physical resources or human health in New Zealand; or
(b) Interfere with the diagnosis, management, or treatment, in New Zealand, of pests or unwanted organisms: Section 2, Biosecurity Act, 1993.

Sentinel

Bioassay goat used for the detection of scrapie.

Supervisor

The person employed by the supplier who inspects the transitional facility and audits the operation of quarantine [See 5.2.2].

Supplier

The party responsible for the performance of the inspection and audit work under a contract with the MAF Biosecurity Authority. MAF Quarantine Service is the present supplier.

Transitional facility

Any place approved as a transitional facility in accordance with section 39 for the purpose of inspection, storage, treatment, quarantine, holding, or destruction of specified types of uncleared goods; or part of a port declared to be a transitional facility in accordance with section 39. From section 2, Biosecurity Act 1993.

Uncleared goods

Imported goods for which no biosecurity clearance has been given.

Unwanted organisms

Any organism that a chief technical officer believes is capable or potentially capable of causing unwanted harm to any natural and physical resources or human health: Section 2, Biosecurity Act 1993.

Part One: Requirements of the Operator

2. Approval of a Facility and an Operator

2.1 Approval of a Facility

A transitional facility shall be approved in accordance with section 39 of the Biosecurity Act 1993. It shall have an approved operator and be constructed and operated in accordance with this Standard.

(It is also expected that the facility will comply with the requirements of the Resource Management Act, 1991, Building Act, 1991 and any other relevant legislation.)

A facility may not be approved unless there is an approved operator.

2.1.1 Procedure for approval of a transitional facility

Any person wishing to have a facility approved and to be approved as an operator shall establish contact with the supervisor. (The supervisor's identity may be obtained from the supplier.)

The supervisor will consider applications before construction or alteration of a facility, in order to provide advice on whether the proposed facility is likely to comply with this Standard.

2.1.2 Site approval

An application for site approval shall be submitted to the national manager through the supervisor before construction of a facility is considered. (If the site is not approved then there is no value in investing resources into developing the facility.)

The application for site approval shall provide the following:

- Details of the proposal: describe the farming operation including the breeding programme, the maximum number of sheep and goats that can be held on the facility, plans for an association with another importation programme, projected plans for expansion. (Note: It has been agreed that the maximum number of animals to be run on any one site is limited to 5000 and the maximum number of quarantine facilities involved in any one project is limited to five.)

- A site plan of the property that shows the location of the proposed facility and the entrance/exits to the site, the land drainage system, buildings, the location of a residence providing surveillance/security, access ways, paddocks and boundary fences. Boundaries of neighbouring properties shall be shown. The physical location of the property shall be clearly shown in relation to roads in the area. Aerial photographs shall be provided if possible.

- The quarantine site shall be on flat or gently sloping land that is clear of scrub where animals could hide and preferably does not have a permanent river or permanent flow of water running through it. If there is a flow of water then plans shall be provided that show how this will be fenced off from sheep and goats.

- As the supervisor is required to make frequent visits to the facility [see 6.4.1] the operator shall agree to pay the costs associated with these visits.

- Detailed procedures shall be provided to show how the sheep and goats and genetic material are to be transported from the aircraft or ship arriving in New Zealand to placement within the transitional facility. Show the distance and an estimate of the time taken to travel to the facility. These procedures shall ensure that the sheep and goats and genetic material are isolated from other animals and contained to prevent escape on the journey. Identify the animal welfare measures that will be instituted for long journeys.

- If the import health standard requires that bioassay is used in the project then evidence shall be provided to show that approval has been given by an Animal Ethical Committee for the procedure to be used [see Appendix Three].

- Evidence from the relevant regional council and/or district council that the proposed operation satisfies planning requirements under the Resource Management Act, Building Act or any other relevant legislation under which these Councils have jurisdiction. The Director-General shall also be satisfied that the Local Authority has been properly informed about the project and, if appropriate, has issued a building consent to construct the facility.

- Written conformation from the owner of the land, that he or she accepts that the following action may be taken by the chief technical officer if scrapie is diagnosed in the sheep or goats:

    - the facility will be declared to be a restricted place (section 130, Biosecurity Act 1993).

    - the land will not be available for livestock farming and the property shall be planted in trees, which shall be grown for a minimum of twenty-five years. All costs associated with forrestation will be borne by the owner.

- A recommendation from the supervisor for site approval, which includes verification of the site's physical location.

Site approval from the national manager shall be in writing and the supervisor shall be advised.

2.1.3 Facility approval

When the operator has met the requirements of section 2.1.2, section 3 and section 4 of this Standard, the supervisor shall be requested to inspect the quarantine manual and the facility. When the supervisor is satisfied that:

- the operator has met the structural requirements of a facility as required in this Standard,
- the quarantine manual [section 3] meets the requirements of this Standard,
- the application form on page 47 of this Standard has been completed satisfactorily by the prospective operator,

the application form and a copy of the quarantine manual shall be sent by the supervisor to the national manager, together with the supervisor's written recommendation for approval of the facility.

The prospective operator may apply for registration as an operator at this time [see section 2.2].

Approval of a transitional facility will be in writing. A facility will usually be approved for an unspecified time.

Only when the facility has been approved may it be used for the quarantine of imported sheep and goats.

2.1.4 Modifications to an approved facility

Subsequent to approval, any modifications or changes to procedures must be notified to the supervisor.

A new floor and/or site plan may be required. Major modifications will require approval and inspection by the supervisor to check that the facility continues to meet the Standard. A major modification is defined as a modification that potentially affects the integrity of quarantine. Minor modifications should be recorded and checked by the supervisor at the next visit.

2.1.5 Renewal of approval

If approval was cancelled at the end of a previous quarantine period the operator shall apply to the supervisor for renewal of approval before a permit to import may be issued for another shipment of animals.

2.2 Approval of the Operator

The operator is responsible for the operation of a facility and ensuring that mechanisms are in place for resourcing the facility.

An operator shall be approved in accordance with section 40 of the Biosecurity Act, 1993. If the Director-General is satisfied:

- that the applicant is a fit and proper person to be the operator of the facility specified in the application and

- the applicant is able to comply with the operating standards for that facility,

s/he may approve the applicant as the operator of the facility.

The operator shall provide the Director-General with consent as required in the form on page 49 'Consent to Disclosure of Convictions'. This information provides a basis for the approval decision [see also 2.2.2].

The operator shall satisfy the supervisor that s/he has the technical and financial resourcing mechanisms in place to maintain that facility. The technical resources shall be provided by a person or persons in authority [identified in section 3.3] with the qualifications, training and experience for ensuring that both the structure of the facility and the operating procedures used in the facility are appropriate for the quarantine of sheep and goats.

The supervisor shall send the application forms on page 48 & 49 to the national manager with the supervisor's written recommendation for approval of the operator.

Approval of the operator will be in writing.

2.2.1 Leased facilities

It is not advisable that a facility is approved on leased land in view of the consequences should scrapie be found.

If the facility is leased, the lessee responsible for the operation of the facility shall apply to be the operator. The contract with the owner shall clearly identify who is responsible for the maintenance of the premises and the resourcing of the operation. The supervisor shall be satisfied that no part of the lease contract shall override the requirements of this Standard for the operation of the facility.

2.2.2 Collection of personal information on individuals

In regard to any information being collected on the application for approval as an operator, this is personal information (being information identifying or being capable of identifying an individual person). Notification is hereby provided, in accordance with Principle 3 of the Privacy Act 1993, to individuals of the following matters:

- This information is being collected for the purposes relating to the approval as an operator as per section 40 of the Biosecurity Act, 1993.

- The recipient of this information, which is also the agency that will collect and hold the information, is the Ministry of Agriculture and Forestry, PO Box 2526, Wellington.

- You are reminded that under Principles 6 and 7 of the Privacy Act, 1993, you have the right of access to, and correction of, any personal information which has been provided.

2.3 Cancellation of Approval

A facility is no longer approved when the time specified in the approval expires or an event specified in the approval occurs. In addition a chief technical officer may cancel approval of a facility if:

- the facility no longer complies with this Standard,
- the chief technical officer is satisfied that the facility is no longer used for the purpose(s) specified in the approval,
- the operator ceases to be an operator of the facility,
- the operator is no longer a fit and proper person,
- the operator requests cancellation.

The chief technical officer may cancel approval of an operator if:

- no longer satisfied that the facility is being operated according to this Standard,
- the operator ceases to be an operator of the facility,
- the operator is no longer a fit and proper person,
- the operator requests cancellation.

Notice of cancellation shall be given in writing to the operator.

3. Quarantine Manual

The operator shall prepare, maintain and implement a quality assurance programme and procedures based on the principles of AS/NZ 9002, code of good manufacturing practice or similar quality system. Accreditation with other agencies such as IANZ is not required.

The quality assurance programme and any amendments shall address the requirements of this Standard. It shall be documented in a quarantine manual or in an alternative quality system e.g. standard operating procedures.

The supervisor shall approve the quality assurance programme and any amendments.

The items listed below are the minimum requirements for the quarantine manual or alternative quality system.

3.1 General

Describe the main purpose of the business associated with the import of sheep and goats.

3.2 Quarantine Requirements

Document the procedures used in the transitional facility to meet all of the requirements of the import health standard and section 4 in this Standard.

Describe the structural components of the facility and how it shall be maintained.

Provide a site plan showing the general layout of the facility and where imported sheep and/or goats will be held.

3.3 Management

Identify the operator. Identify the manager if the operator nominates one. Identify the staff working in the facility.

Specify and document the responsibilities of the operator, the manager and staff.

3.4 Training

Nominate a person or position responsible for ensuring that all people who work in the facility are familiar with the principles of quarantine and the procedures of the facility which ensure quarantine and containment.

Describe how the training programme is to be implemented, the time scale for implementation and refresher courses.

Document training records for all staff.

3.5 Internal Controls

Identify quality systems used in the facility.

The operator shall carry out an internal audit at least once every six months to verify that the activities associated with the facility continue to comply with the quality assurance programme. If the facility is not in continuous use the operator shall perform an internal audit on each occasion that it is used.

The quality system shall be reviewed at least once a year by the management to ensure that it is appropriate and effective, and to introduce any necessary changes or improvements.

All audit and review findings and any corrective actions shall be documented.

3.6 Version

Record the version number and issue date of the quarantine manual on each page. Updates are to be approved by the supervisor.

4. Structural and Operational Requirements

4.1 General Requirements

The facility shall be constructed and operated in a manner to ensure that all exotic animals, sentinels and other farm animals are contained in isolation.

During the quarantine period the operator shall ensure that no animals, genetic material or any other material may be removed from quarantine without approval of the supervisor. The supervisor shall use a permit system. The conditions of removal shall address the risk of removing unwanted organisms from the facility.

The quarantine facility shall not be used for any purpose other than the quarantine of exotic animals, animals for bioassay, and domestic animals for stock and/or pasture control. That is, dogs and horses, and cattle and sheep respectively.

The operator or member of staff authorised to take charge in the operator's absence shall live on the same property. At no time can the facility be left without someone able to investigate any disturbance as it occurs.

There is no specific restriction on the distance of the site from an international airport but planning for the transport shall take into account the welfare needs of the animals as well as those of biosecurity.

As the quarantine period is long it is anticipated that sheep and goats will be kept in an open fenced area. If animals were to be housed then approval would be required from the chief technical officer and the Standard 154.02.14: Standard for medium security farm animal quarantine facilities, would be used as a basis for the structural requirements for the facility.

4.2 Security of the transitional facility

A prominent sign shall be displayed at entrances to the facility to show that it is a transitional facility and that unauthorised entry is prohibited.

The facility shall be subject to surveillance from a residence sited adjacent to and affording good visibility over the primary access to the quarantine facility.

Procedures shall be adopted to prevent unauthorised access to the facility.

The entrances to the facility shall be kept locked, except when in active use.

Access through the perimeter fence shall be limited. For vehicular access the preferred option is described in section 4.5.1. For the alternative option see section 4.5.2. If there is a gate for pedestrian access only, it shall be self-closing, self locking, and require a key to gain access from outside the perimeter.

4.3 Fencing Requirements

4.3.1 Perimeter fences

The quarantine facility shall be enclosed by a double perimeter fence a minimum of 2 metres apart. One of the perimeter fences shall be a minimum of 2 metres high and may be located as either the inner or the outer perimeter fence of the quarantine facility.

Both perimeter fences shall be stock-proof and capable of containing all quarantined animals. The outer fence shall be capable of preventing the entry of neighbouring stock. The area between fences shall be clear, so that if animals gain access they can be easily seen.

Selection of fence type shall take into consideration the quarantine animals and animals held on the neighbouring farms. If, during the quarantine period there is a change in either the type of quarantine animal or neighbouring stock, perimeter fences may need to be upgraded to new specifications.

Fences shall be sited on either benched or suitable level and stable ground. They should be erected such that stock pressure on the wire, netting or timber is against the post, not the staple or nail.

Where swinging or sliding gates are incorporated into either the inner or outer perimeter fence (such as at the vehicle entrance-way and stock loading race), the gudgeons or rollers shall be of such type or so placed, as to prevent the gates being lifted from them.

Fences shall be free from any risk of falling trees or any other factor such as erosion or a roadway that may predispose them to loss of their integrity.

The operator shall maintain the security of the perimeter fences so as to prevent the escape of quarantined animals and the entry of other animals.

Procedures shall address such issues as the frequency of fence inspection, measures taken to keep the space between fences clear, inspection of perimeter fences before stock are introduced into boundary paddocks and movement of stock away from the boundary in bad weather.

Fencing specifications for sheep and goats are located in appendices to this Standard [Pages 38 and 40].

4.3.2 Internal fencing requirements

Fencing within the facility shall prevent access of stock to areas of scrub or bush, waterways and floodways that exit the property. Such exits shall be screened to prevent the exit and entry of animals.

4.4 Entry and Exit of People

The facility shall have a single primary access area where the access for personnel, machinery, stock, stores and vehicles are located close together. Additional access areas require chief technical officer approval.

4.4.1 Personnel entry facility

A personnel entry facility shall be provided for authorised people accessing the quarantine site. It shall be lined and of sound construction. The materials used shall enable it to be cleaned and disinfected.

The access doors to the facility shall be locked except when in active use.

The operator shall provide the supervisor with a copy of the access keys.

Provision shall be made for holding the logbook and conditions of entry.

An outer changing room shall be provided for the storage of street clothes and footwear.

A shower facility shall be placed between this room and the inner changing room.

Clothing and footwear for use in the quarantine facility shall be provided by the operator and stored in the inner changing room. These should include protective clothing as appropriate: e.g. combination overalls, hats, jerseys, socks, gum boots, boots and wet weather gear.

Handwashing facilities shall also be provided with supplies of towels, soap, shampoo and general disinfectant.

4.4.2 Approved access

Access to the facility shall, in the main, be limited to those people identified in section 3.3, the supervisor and any representative of the chief technical officer.

People essential for the operation of the facility such as veterinarians, carpenters, electricians and plumbers may also be permitted entry. This group of 'visitors' shall be authorised by the operator. The supervisor shall approve any other visitors. All visitors shall adhere to entry and exit procedures as directed by the operator or staff member.

During quarantine, access to the facility shall be via the personnel entrance facility only. Procedures for access shall be available at the entrance.

4.4.3 Procedures for access and exit

Before entering, **all** personnel shall sign a declaration to the effect that they will observe the operating instructions for the facility. The logbook shall also record the names and addresses of all people who visit.

The instructions of the operator or supervisor are to be followed at all times.

No items apart from person goods (e.g. jewellery, cell phones, etc.) may be taken onto or off the facility unless authorised by a permit.

People on the facility shall wear protective clothing and footwear supplied by the operator. This clothing shall not be removed from the facility.

People who work with stock shall remove all clothing (underwear optional) and leave them in the outer changing room before entering the inner changing room where they don quarantine facility clothing.

- During exit the dirty clothing is to be left in the inner changing room and the worker shall wash or shower before entering the outer changing room.

- People whose bodies become soiled while working on the facility shall shower before leaving the quarantine facility. Sufficient time shall be taken in the shower to ensure a thorough body washing with soap and a hair shampoo.

- A shower is not compulsory if only arms and hands get dirty. These people shall, as a minimum, wash their hands and forearms clean with soap and water.

People who do not intend to work with stock shall wear the protective clothing provided. If their street clothes are not removed on entry then the protective clothing shall cover their clothing. If their street clothes become soiled then these shall be washed thoroughly before leaving, and the visitor shall shower before leaving.

The supervisor may give approval for waiving the requirement to wear protective clothing under specific circumstances where it is appropriate.

The supervisor may direct that all personnel shower before exit if a disease is suspected or confirmed.

Dirty clothing shall be washed using laundry detergent. It may be laundered offsite but must be taken to the laundry in a sealed container, e.g. a plastic bag.

4.5 Entry and Exit of Vehicles

4.5.1 Vehicular access to the perimeter fence

An unloading bay that allows vehicles to remain outside the quarantine facility while farm animals or stores are unloaded directly into the quarantine facility may be provided.

- This unloading area shall have a double gate for truck entry. At a suitable place on the perimeter fence of the facility a loading race shall be constructed. This shall preferably have a double gate on the perimeter fence that allows the vehicle to back onto a narrow race on the inner fence of the facility.

- During unloading of sheep and goats into the facility the truck shall be driven into the unloading area and the two double gates secured. The double gate through the outer fence of the facility is opened and the truck backed up to the opening of the inner fence. Animals are unloaded and the gates through the perimeter fence are locked.

4.5.2 Machinery and vehicular access through perimeter fence

If the entry and exit of vehicles is unavoidable then they must be thoroughly cleaned before exit. Lockable entrance gates through the perimeter fence and a vehicle cleaning area shall be provided. Facilities shall include:

- a concrete pad for the hosing down and disinfection of vehicles and machinery,

- a water supply with high pressure hose,

- drainage back onto the facility.

High-pressure water sprays or steam cleaners and scrubbing utensils shall be used for cleaning and disinfection of vehicles before exit from the facility.

4.6 Entry and Exit of Sheep and Goats to the Transitional Facility

Sheep and goats may only be transferred to a transitional facility with the authority of the supervisor [section 6.4.4]. This movement may occur from the port of arrival or from one facility to another. The permit shall specify the conditions of transfer and destination.

The supervisor shall verify the identity and the destination of all animals moved.

If the supervisor does not accompany the consignment the conveyance will be secured with an approved seal. This seal shall remain intact until broken by a supervisor at the destination.

All sheep and goats shall be transported in an approved transport, which shall be cleaned (including effluent tanks) and disinfected using an approved disinfectant after unloading.

A sign shall be displayed in the cab, or at the rear of the approved transport which states: "In the event of an accident or emergency phone these people as soon as possible……."

The driver shall also be given contact phone numbers in the case of an emergency between the quarantine facility and the destination.

If the driver has contact with the sheep and goats he/she shall follow the protective clothing and showering requirements for people who work with quarantined animals.

4.6.1 Disinfection of crates and prevention of weed establishment

Transport crates for live animals used during the importation that arrive at the facility shall be unloaded within the facility and subject to cleaning as soon as possible after arrival. Special attention shall be given to prevent the introduction of weed seeds. Waste matter including hay, soil and faecal material shall be incinerated. The crates shall be subsequently disinfected with an approved disinfectant.

The animals shall be examined and measures taken to recover and destroy weed seeds. For example, clipping, brushing or combing the coat and cleaning the feet.

Surveillance shall be maintained for the presence of foreign plants within and around the facility. A contingency plan shall cover the identification and eradication of any foreign plants.

4.7 Entry and Exit of Other Animals

Non-exotic cattle and sheep may be used as grazing animals. They may be slaughtered at a meat premise but shall be transported directly in a truck secured with an approved seal.

On arrival they shall be unloaded under MAF supervision, checked against the schedule and kept isolated until slaughtered. Slaughter shall be verified. The truck shall be cleaned and disinfected.

A dog may be removed from the facility when it has been fed commercial dog food for at least 48 hours before exit. The dog shall be brushed clean or shampooed prior to exit.

If, in an emergency a dog is taken to a veterinary clinic for treatment, it shall stay there for at least 48 hours before it is taken to any place other than the quarantine facility.

A horse may be removed when dirt has been removed from the coat and hooves.

4.8 Entry and Exit of Goods

Wool and/or fibre shall be fully enclosed within its container prior to its removal from the quarantine facility. The outside of the container shall have all dirt removed with a dry brush before exit.

Raw or processed ewe's milk may not be removed from the facility.

4.9 Approved Transport

The operator shall identify a transport service for the transportation of sheep and goats. The approved transport shall be a vehicle or trailer with the following characteristics:

- A crate which is sealed at the bottom and whose solid sides are high enough to effectively prevent the discharge of faeces and urine from the conveyance.
- A sealed effluent system with a storage capacity to meet the requirements of the distances to be travelled. The supervisor shall approve the effluent disposal.
- Each external gate capable of having an approved seal applied to it.
- Provision for towing the conveyance, so that in the event of a breakdown it can be effectively towed to its destination, e.g. a Hard Tow System.

4.10 Identification of Sheep, Goats and Cattle

All ruminants shall be permanently and individually identified by two authorised methods. These include, but not exclusively, the following:

- individually numbered metal tags (in the case of exotic progeny these are inserted within three days of birth).

- coloured plastic tag in the opposite ear from the metal tag and showing the same number as the metal tag.
- tattoo (applied before the age of six months).
- electronic identification e.g. microchips.

The identification system for exotic animals shall clearly provide the following information:

The year born
Genotype or breed
Generation
Ownership

Indigenous sheep/goats shall be clearly identified from exotic sheep and goats.

4.11 Stock Tally and Register

A register of quarantined animals shall be maintained which records the identity and fate of all animals on the facility.

For each exotic animal the following records shall be kept:

- Tag identification number
- Breed, dam and sire, sex and date of birth
- Death date and cause

All stock shall be counted every six months under the supervision of the supervisor and the result compared with that recorded on the register.

If the stock numbers do not tally with those recorded on the register the supervisor may require that all animals be mustered so that the identification of each can be individually checked off against the schedule.

The supervisor may require a muster of stock at any time for identification or inspection.

4.12 Breeding of Sheep and Goats

4.12.1 Genetic material register

All embryos and semen shall be clearly and securely identified and held under strict security on the facility.

The operator shall maintain a register of stored genetic material. Records shall include:

- the identity of donors and recipients,
- number of embryos/straws of semen,
- dates of collection and implantation/insemination,
- details of movements off the facility.

Genetic material may only be moved off the facility to an authorised storage site, or to another transitional facility with a permit from the supervisor.

4.12.2 Breeding records

For exotic animals detailed and accurate records shall be maintained of breeding activities on the facility, and these shall include:

- date of mating,
- identification of each animal being bred,
- the quantity of any reproductive material collected,
- the identity coding of the genetic material;
- storage site,
- records of any unsuccessful attempts to collect reproductive material.

Embryos may be transferred from a primary quarantine facility to a secondary facility as directed by the import health standard. However, each embryo shall first be fully washed by the approved minimum10 wash and trypsin treatment as prescribed by the International Embryo Transfer Society.

4.12.3 Facility for lambing and kidding

A facility for the lambing/kidding of exotic animals shall be provided which shall:

- be adequate for all lambing/kidding requirements;
- exclude carrion-eating or scavenging birds or animals;
- have either slats/mesh or solid floors;
- be equipped with fixed or portable secure pens to:
  - facilitate individual lambing/kidding,
  - accurate identification of animals born,
  - the retention of these lambs/kids in the area of their dam,
  - the collection and identification of placenta.

4.13 Treatment of Sick Animals

A veterinary practitioner may attend to an animal in the facility provided that the rules for visitors are followed.

If surgical and anaesthetic equipment is brought to the facility it shall be cleaned and disinfected as described in section 4.15 under direction of the supervisor before removal.

4.13.1 Hospital facility

A covered facility with a solid or slatted/mesh floor shall be provided for the isolation, treatment and care of sick animals and those subject to surgery.

Provision shall be made for:

- the containment and handling of individual fractious or sick animals,
- long term (i.e. several days) accommodation of individual animals,
- adequate cleaning of the facilities,
- adequate drainage,
- protection from the weather.

4.14 Waste Management Plan

Provision shall be made for the disposal of waste in each of the following areas:

Urban

- Access to a commercial incinerator for the disposal of carcasses and animal tissue.
- A connection to the city sewer for the discharge of liquid effluent or alternatively, a sedimentation/oxidation pond within the confines of the quarantine facility.
- An approved transport system for the transfer of solid wastes (excluding animal tissues) to a landfill tip outside the facility.

Rural

- Access to a commercial incinerator or an offal hole within the facility for the disposal of carcasses, placenta, and other waste. The latter having a secure and close fitting lid.

- A sedimentation/oxidation pond within the confines of the quarantine facility or alternatively a secure and covered sump of adequate capacity for the disposal of liquid effluent; the latter allowing for natural permeation into the subsoil without direct entry to any drainage system discharging off the property.

- A landfill tip within the confines of the quarantine facility (subject to drainage and wind exposure factors) or alternatively an approved conveyance system for the transfer of solid wastes (excluding animal tissues) to a landfill tip outside the facility.

4.15 Disinfection and Sterilisation

For cleaning and disinfection of vehicles and equipment before removal from the facility special attention shall be given to thorough cleaning followed by the use of an approved disinfectant.

4.15.1 Sterilisation of surgical equipment

Instruments and equipment used in the necropsy facility, surgery, or artificial breeding operations should be dedicated to the facility. Autoclaving is not completely reliable. The only procedures that appear to be reliable are likely to damage surgical instruments as follows:

- exposure to sodium hypochlorite solution containing 20,000 ppm available chlorine for an hour,

- exposure to 1M sodium hydroxide in an autoclave at 121 ^{0} C for 30 minutes.

Other equipment such as anaesthetic machines and warming ovens shall be cleaned thoroughly before removal.

4.16 Necropsy Facilities

Necropsy facilities shall be provided with access to hot and cold water. Materials for processing and packaging samples for further examination shall be provided.

Provision shall be made to keep dead animals in a chilled state, or otherwise as directed by the supervisor, until they have been necropsied.

The facility shall have sufficient equipment to perform a full necropsy, and provide for the collection and submission of samples. Suggested equipment includes: necropsy table, surgical scissors, No. 4 scalpel and blades, skinning and boning knives, steel meat saw, tomahawk, rat tooth forceps, chisel, head vice, rib cutters and/or pruning shears, specimen bottles, plastic bags, slides and slide covers, vacutainer tubes and needles, formalin, measuring cylinder, permanent felt marker, general disinfectant, sodium hypochlorite, soap, scrubbing brush, handtowels, disposable gloves, large covered plastic bin, plastic apron, plastic rubbish bags, 10 litre buckets, laboratory submission forms.

4.17 Disease Surveillance

The animals shall be subjected to such examinations, testing or treatment as is required:

- by the import health standard,
- for disease investigation, or
- as required by the chief technical officer.

Original imports and sentinels shall receive a high level of care to ensure their survival throughout the quarantine period. A planned animal health programme shall be developed by the operator and approved by the supervisor.

The operator shall observe animals for signs of illness, injury, and abnormal behaviour periodically throughout the day. The level of daily surveillance should be high enough amongst all original stock and sentinels so that dying, sick, and dead animals are found promptly.

Animals with a poor prognosis shall be considered for euthanasia by the supervisor in order to ensure that fresh material is available for laboratory examination.

Any exotic animal showing evidence of a change in behaviour, nervous signs, wasting, or chronic pneumonia shall be reported immediately by the operator to the supervisor, who shall examine it within 24 hours of detection.

The general health and welfare of other animals on the quarantine facility are the responsibility of the operator and the nominated veterinary practitioner, but the supervisor shall be immediately advised of any increase in the mortality rate or unusual causes of mortality.

Sheep and goats shall be available for inspection by the supervisor who reserves the right to take specimens at any time for disease testing.

Treatments or prophylactic measures shall not interfere with disease surveillance.

4.17.1 Abortion and perinatal death investigation

In the first year of quarantine, the operator shall notify the supervisor if there is any abortion or perinatal death in an imported animal, or recipient of an imported embryo or semen. Samples shall be collected for exotic disease investigation, especially for enzootic abortion caused by *Chlamydia psittaci*.

4.17.2 Clinical examination when scrapie is suspected

Any exotic animal showing evidence of a change in behaviour, nervous signs, wasting, or chronic pneumonia shall be reported immediately by the operator to the supervisor, who shall examine it within 24 hours of detection.

Observations shall initially be made at a distance so that the observers do not disturb the animal.

Animals with suspect scrapie should be kept alive and under observation for as long as is humanely possible.

4.17.3 Notification of deaths and necropsy requirements

The operator shall immediately notify the supervisor of deaths in the following groups of animals:

- all exotic animals
- sentinels

They shall be necropsied to determine the cause of death as soon as is possible and preferably within two hours of death. (If the necropsy is to be delayed for more than 30 minutes, the carcase should be removed to cold storage within the facility to delay decomposition.)

In addition, for deaths in the following classes of stock:

- original imports and first generation progeny,
- exotics 12 months of age or more,
- exotics less than 12 months showing signs suggestive of neurological disease,
- all sentinels,
- all original imports and first generation progeny, and sentinels slaughtered at the end of the quarantine period or observation period respectively,

the brain must be removed and each carcase must be examined for evidence of the following diseases:

- scrapie
- visna/maedi
- pulmonary adenomatosis
- nasal adenocarcinoma

The following table summarises these requirements:

Necropsy Requirements for Exotic Animals and Sentinels		
Class	**Full necropsy to determine cause of death**	**Examination for: scrapie, visna/maedi, pulmonary adenomatosis, nasal adenocarcinoma**
Original imports and first generation progeny	Yes	Yes
Exotic animals excluding original imports and first generation progeny	Yes	Yes, for animals 12 months or more Yes, for animals less than 12 months of age with signs of neurological disease
Sentinels	Yes	Yes

4.17.4 Euthanasia of exotic animals

Exotic animals may be euthanased with authorisation from the supervisor for the following reasons:

- on welfare grounds, for example, animals with a physical injury or a chronic condition such as arthritis,
- because they are excess to requirements.

Exotic animals (excluding original imports and first generation progeny) may be exempt from the necropsy requirements above with authorisation from the supervisor [see section 6.4.2].

4.18 Occurrence of Exotic Infectious Disease

If an infectious disease occurs during quarantine the cause shall be established and if an exotic disease is suspected then the supervisor shall report to the chief technical officer. If the disease is exotic to New Zealand the chief technical officer may direct the management of disease control and extend the period of quarantine or order the destruction of the sheep and goats.

If the sheep and goats are to be destroyed and/or the facility requires decontamination the following procedures are likely to be authorised:

- the sheep and goats shall be destroyed,
- all dead sheep and goats shall be disposed as per the waste management plan,

- the indoor pens and equipment etc. shall be thoroughly cleaned and sprayed with an approved disinfectant,

If scrapie is diagnosed the chief technical officer may require, in addition to the above, that the approval for the transitional facility is cancelled and declared to be a restricted place (section 130, Biosecurity Act 1993).

The land will not be available for livestock farming and the property shall be planted in trees that shall be grown for a minimum of twenty-five years. All costs associated with forestation will be borne by the owner.

4.19 Contingency Plans

Contingency plans shall be in place to take account of an inadvertent liberation, vehicle breakdown during transport, fire or any other emergency. Resources shall be identified and accessible for the contingency.

If there is an escape of animals from the facility action shall be immediately taken to prevent further escape and to recover and return to containment the escaped animals. Procedures shall address the fate of in-contact animals and animals that enter the facility. If ruminants enter the facility they shall not be permitted to return to the farm of origin.

The supervisor shall be advised as soon as is possible.

4.20 Costs

The operator is required to pay all costs associated with the operation of the facility. The costs of approval and supervision of the facility shall be in accordance with the Biosecurity Act 1993 and its regulations.

4.21 Biosecurity Clearance

The supervisor shall release animals from quarantine when the requirements of the import health standard are met [section 6.4.7].

4.22 External Audit

The operator shall provide the supervisor or any other representative of a chief technical officer, access to the facility, records and documents for inspection and audit.

The operator shall be available to assist and ensure that all relevant procedures and records are made available to the supervisor.

The supervisor will conduct inspections and on-site audits as specified in section 6. Additional audits will be conducted as required, especially if non-compliance is found. For incidents of non-compliance see section 6.4.6

4.23 Reporting Requirements

The operator shall supply to the supervisor a report every two months, to be forwarded to the National Manager, which shows the following information:

- a summary of animal husbandry activities, including breeding, that have occurred in the previous two months.
- the number of sheep and goats present in the following categories: original imports, first generation progeny, sentinels, other exotics, and indigenous animals,
- comments on the health of individual original imports.
- cause of death in exotic and sentinel animals.
- inventory of embryos and semen held in storage.
- during the first year of quarantine; results of abortion investigations in exotic animals.

4.24 Records

The operator is required to demonstrate compliance with this Standard by keeping records as required for the quality assurance programme and documented in the quarantine manual. The operator shall, for auditing purposes, maintain for five years the following records filed with each permit to import:

- Exporter, country of origin, import health certification, number and identity of sheep and goats imported, date of arrival, name and address of owner receiving the released animals, biosecurity clearance.
- Identify diseases diagnosed, the exotic animal's morbidity and mortality records.
- Entrance log book and declarations.
- Stock register, breeding records and register of stored genetic material.
- Records of the movement of sheep and goats off the facility and authorisations from the supervisor.
- Records of internal audits and corrective actions.
- Records of external audits and corrective actions.

Part Two: Requirements of the Supplier

Scope of Part Two

Part Two of this MAF Biosecurity Authority Standard specifies the requirements for the supplier of supervision of transitional facilities for sheep and goats to ensure that operators are in compliance with Part One of this Standard.

Service Outline

The supplier shall provide the chief technical officer with a service to supervise the activities of operators who are required to operate transitional facilities according to Part One of this Standard.

5. Service Requirements

5.1 General Requirements

Supervision shall be administered in accordance with this Standard, a national quality system based on ISO/IEC 17020 and any relevant legislation.

The supplier shall provide quarterly reports to the chief technical officer giving an update on the supplier's management structure and key personnel [refer section 5.2], and results of internal audits and corrective actions.

The supplier and employees shall have no financial interest in the transitional facilities or any other affiliations that could be construed as conflict of interest.

The chief technical officer may audit the supervisor at each transitional facility.

5.2 Key Personnel

Within one month of receipt of this Standard, the supplier shall make formal arrangements for provision of the key personnel listed below. The chief technical officer shall be notified in writing of these arrangements.

5.2.1 Management representative

The management representative (reporting to senior management) shall have defined authority and responsibility for ensuring that there are systems in place to meet the requirements of this Standard and that these systems are implemented and maintained.

5.2.2 Supervisors

The chief technical officer shall approve supervisors before they are appointed.

Qualifications: The supervisor shall be a registered veterinary surgeon and an inspector as defined by the Biosecurity Act, 1993. The supervisor shall be able to demonstrate the s/he has an understanding of the principles of quarantine, quality systems and auditing, the import health standard, the requirements of this Standard, the relevant legislation and some appreciation of the business and objectives of the operator.

The supplier shall ensure that a person appointed to be a supervisor of a transitional facility is able to describe in a way that can be clearly understood by the operator of these facilities:

- the commonly used means for meeting the transitional facility requirements as specified in this Standard,
- the circumstances in which such means can fail to comply, and
- the steps that should be taken to re-establish compliance.

The supplier shall be responsible for the training of supervisors so that they know their responsibilities as per this Standard and they have an understanding of the relevant legislation.

The supervisor may recommend to the chief technical officer the approval of an approved person to be assigned specified duties. For example, a local veterinary practice may be utilised for the routine necropsy work at the facility.

The supervisor may assign specific duties on the facility to an inspector.

The supervisor shall ensure that these people know the relevant requirements of this Standard in relation to their duties and they shall be responsible to the supervisor.

6. Technical Requirements

6.1 Approval of a Facility

The supervisor shall be prepared to consider applications before construction of a facility, in order to provide advice on whether the proposed facility is likely to comply with the Standard. The supervisor shall assist in the application for site approval if appropriate [section 2.1.2].

The requirements for approval are described in section 2.1 of this Standard and the supervisor shall inspect the facility before making a recommendation on approval.

If the quality system is accredited by an external agency as described in section 3, the supervisor shall satisfy him/herself that the requirements of this Standard are addressed in the quality assurance programme.

6.2 Approval of an Operator

Requirements for approval are described in section 2.2.

Where the facility is leased, the supervisor shall examine the contract and be satisfied that the contract does not override the requirements of the Standard.

The supervisor shall make a recommendation to the national manager taking these requirements into consideration.

6.3 Cancellation of Approval

The supervisor shall refer to section 2.3, and if satisfied that the facility

- no longer complies with this Standard, or
- is no longer being used for the purpose(s) specified in the approval,

he/she shall discuss the issue with the operator. If the issue is not resolved to the satisfaction of the supervisor, and after informing the operator of his/her intention in writing, the supervisor shall make a recommendation to the chief technical officer that approval of the facility should be cancelled.

If the supervisor is satisfied that the operator;

- is not operating the facility according to this Standard,
- is no longer a fit and proper person,
- ceases to act as the operator or requests cancellation,

he/she shall discuss the issue with the operator. If the issue is not resolved to the satisfaction of the supervisor, and after informing the operator of his/her intention in writing, the supervisor shall make a recommendation to the chief technical officer that approval of the operator should be cancelled. If an alternative operator cannot be approved then approval of the facility shall also be cancelled.

6.4 Supervision of a Facility

6.4.1 Minimum requirements for inspection

The supervisor shall have a schedule for regular inspection of the facility and audit of operator's procedures. S/he shall make as many visits as considered necessary but the minimum number of visits are:

Prior to the arrival of animals when a permit to import is required [see section 2.1.5]:

- the supervisor shall audit the facility and procedures to ensure that the facility meets the requirements of this Standard.

- The supervisor shall recommend to the national manager that the facility is approved and/or that a permit to import is issued.

Within 24 hours of the arrival of the animals,

- check the exporter's certification against the requirements of the import health standard,

- check the health and identity of the animals,

- attend to the requirements of the import health standard,

Once a fortnight prior to the last year of quarantine:

- At every visit the supervisor shall inspect the original animals for any sign of disease.

Every week in the last year of quarantine,

- At every visit the supervisor shall inspect the original animals for any sign of disease.

6.4.2 Disease surveillance and treatment

The supervisor shall subject any animal to such testing and treatment as is required:

- by the import health standard,

- for disease surveillance [see section 4.17]

- for disease investigation, or

- as required by the chief technical officer.

The supervisor has the responsibility for ensuring that, wherever possible, the cause of disease or death is established.

If the supervisor suspects an exotic disease then s/he shall phone 0800 809 966.

The supervisor may authorise euthanasia as described in 4.17.4. Euthenased exotic animals (excluding original imports and first generation progeny) may be exempt from the necropsy requirements of 4.17.3 only when the supervisor is confident that there is a minimum probability of an associated exotic disease.

6.4.3 Submission of specimens to the laboratory

The supervisor shall phone the laboratory before submitting samples to advise the laboratory and receive direction on the type of samples to send. The packaging of specimens of infectious material shall be in accordance with instructions from the laboratory. Samples are to be dispatched in a clearly addressed sealed box by the fastest secure method.

6.4.4 Transfer of animals between facilities

As animals in quarantine have a questionable health status they should be kept in the facility to avoid exposing other animals to risk during transport. However, transfers may be made between transitional facilities under the following circumstances [see section 4.6].

A supervisor may give a permit to transfer animals between facilities when satisfied that:

- the receiving facility is an approved transitional facility for sheep and goats which meets the requirements of this Standard,
- the animal shall be transferred by an approved transport,
- the supervisor of the receiving facility confirms that the receiving facility can accommodate the animals and approves the transfer,
- the chief technical officer approves the transfer.

At the time of the transfer the supervisors shall be satisfied that:

- the transfer can be monitored so that both supervisors know when the transfer is to occur and when it has occurred,
- the number of animals sent and the number received can be verified.

The supervisor(s) shall be present during the transfer to ensure that no direct or indirect contact occurs with other animals.

The export of sheep and goats or their genetic material shall require a written authority from the supervisor. The transfer shall be recorded in the register.

6.4.5 Permit system for removal of material from the facility

The supervisor shall use a permit system for the movement of animals and materials from the transitional facility. The conditions of removal shall address the risk of removing unwanted organisms from the facility.

6.4.6 Non-compliance

For incidents of non-compliance the supervisor shall issue:

- a ***critical situation report*** for situations that may present a risk to biosecurity. For example, an animal was moved out of a transitional facility without approval.

  The supervisor shall advise the chief technical officer immediately and the action taken may be in accordance with section 126 of the Biosecurity Act:

  The supervisor shall give a direction in writing to the operator of the facility specifying the suspected failure to comply or unsatisfactory circumstances, stating what the operator is required to do to remedy the situation and specifying the time within which the direction must be complied with.

  The chief technical officer may direct that all permits to import are cancelled and may not be re-issued until the non-conformity is rectified.

  If the chief technical officer considers it necessary s/he may intervene in the management and operation of the facility in order to ensure compliance with the standards for that facility.

  The chief technical officer may direct that all animals are kept for an extended quarantine period.

- a ***corrective action request*** (CAR) for a non-compliance that is not a serious risk to biosecurity. For example, a notice is not placed at the entrance of the transitional facility showing that access is restricted.

  Quarantine be will permitted to continue but the operator will be given a specified period of time to rectify the non-conformity.

  The issuance of a CAR during any of the above audits/visits will necessitate that follow up audits be performed which specifically address compliance to the subject of the CAR.

6.4.7 Biosecurity clearance

At the end of the quarantine period the supervisor shall make a recommendation to the chief technical officer through the national manager for the release of animals when satisfied that:

- the conditions of the import health standard have been met and the exporter's certification is in order,

- the transitional facility has been operating according to this Standard,

- the animals are in good health and there is no evidence of exotic disease.

The recommendation shall include, but is not limited to:

- species and source of animals,

- date of arrival and proposed date of release,
- probable cause of significant disease events,
- mortality and morbidity associated with these disease events,
- summary of laboratory findings of disease events,
- summary of laboratory results from bioassay animals,
- summary of laboratory results of scrapie surveillance.

When approved the supervisor shall issue a biosecurity clearance in writing to the operator.

6.4.8 Cost recovery

The supervisor shall recover the costs associated with supervision in accordance with the Biosecurity Act 1993 and its regulations.

6.4.9 Reporting requirements

The supervisor shall provide every two months, to the national manager, for each facility supervised, a written report of the CARs issued and progress toward compliance. This shall accompany the operator's report.

6.4.10 Records

The supervisor is required to keep records of inspections and audits of the operation of quarantine. These records which are to be archived shall include:

- reports to the national manager,
- audit findings and critical situation reports, CARs and the results of follow-up visits.

The supervisor shall also maintain the following records for each shipment imported:

- permit to import number,
- date of arrival and export health certification documents, country of origin,
- description of animals,
- owners name and address,
- laboratory test results to meet import health standard requirements,
- details of significant behavioural changes and post-mortem results,
- date of biosecurity clearance.

Appendix One

Perimeter Fencing for Sheep

Conventional Fence for Sheep

Line wire
Nine (9) line wires (2.5mm galvanised H/T) with posts at not more than 4 metre spacings and 3 battens per 4 metres. Battens are not to be more than 1 metre apart.

The height from the ground line to the top of each post is to be 1.175 metres.

Wire spacings - when measured from the top of each post, the wires are to be located at the following centres: top wire at 50mm then 220mm - 375mm - 515mm - 655mm - 775mm- 875mm - 975mm -1075mm.

The bottom wire is to be a maximum of 100mm from the ground line.

Wire tension: Between 1400 and 1700 Newtons per wire.

Round wood shall comply with NZS 3607.

Fabricated netting
Eight (8) line wire (2.5mm galvanised H/T) netting (8-900-300); each stay wire or dropper shall be one continuous length and be joined to the line wires by a manufactured knot (e.g. Tightlock or Stiffstay).

The posts are to be at not more than 4 metre spacings and the height from the ground line to the top of each post is to be 1.175 metres.

The bottom wire of the netting is to be a maximum of 100mm from the ground.

A single line wire (2.5mm galvanised H/T) should be located 50mm from the top of each post.

Wire tension: Single line wire - between 1400 and 1700 Newtons.
Netting - between 11,200 and 13,600 Newtons.

Round wood shall comply with NZS 3607.

Timber
Vertical or horizontal boards not less than 150 x 25mm (grade 1 timber) may be used. The distance from the bottom of the fence to the ground line is to be a maximum of 100mm.

Vertical boards: the gap between each board is not to exceed 100mm.

Horizontal boards: the gap between boards shall be in proportion (at any given height) to those specified for a conventional line wire fence.

Two Metre Fence for Sheep

Fabricated netting
Thirteen (13) line wire (2.5mm galvanised H/T) netting (13-1900-150); each stay wire or dropper shall be one continuous length and be joined to the line wires by a manufactured knot (e.g. Tightlock or Stiffstay).

The posts are to be at not more than 5 metre spacings and the height from the ground line to the top of each post is to be a minimum of 2.070 metres.

The bottom wire of the netting is to be a maximum of 100mm from the ground.

Netting tension: between 18,000 and 22,000 Newtons.

Round wood shall comply with NZS 3607.

Line wire
Thirteen (13) line wires (2.5mm galvanised H/T) with posts at not more than 4 metre spacings and 5 battens (2 metre) per 4 metres.

The height from the ground line to the top of the posts is to be 2.070 metres.

Wire spacings, when measured from the top of each post, the wires are to be located at the following centres: top wire 50mm then 230mm - 410mm - 590mm - 770mm - 950mm - 1130mm - 1310mm - 1475mm - 1615mm - 1740mm - 1855mm - 1970mm.

The bottom wire is to be a maximum of 100mm from the ground line.

Wire tension: between 1400 and 1700 Newtons per wire.

Round wood shall comply with NZS 3607.

Timber
Vertical or horizontal boards not less than 150 x 25mm (grade 1 timber) may be used. The distance from the bottom of the fence to the ground line is to be a maximum of 100mm.

Vertical boards: the gap between each board is not to exceed 50mm.

Horizontal boards: the gap between boards shall not exceed 50mm.

Appendix Two

Perimeter Fencing for Goats

Angle stays are not permitted for goat fences, as goats tend to walk up the stay and over the fence.

Conventional Fence for Goats

Line wire
Ten line wires (2.5mm galvanised H/T) with posts at not more than 4 metre spacings and 3 battens per 4 metres. Battens are not to be more than 1 metre apart.

The height from the ground line to the top of each post is to be 1.175 metres.

Wire spacings - when measured from the top of each post, the wires are to be located at the following centres: top wire at 50mm then 250mm - 410mm - 540mm - 670mm - 770mm - 870mm - 945mm -1020mm - 1095mm.

The bottom wire is to be a maximum of 80 mm from the ground.

Wire tension: between 1400 and 1700 Newtons per wire.

Round wood shall comply with NZS 3607.

Fabricated netting
Eight (8) line wire (2.5mm galvanised H/T) netting (8-900-300); each stay wire or dropper shall be one continuous length and be joined to the line wires by a manufactured knot (e.g. Tightlock or Stiffstay).

The posts are to be at not more than 4 metre spacings and the height from the ground line to the top of each post is to be 1.175 metres.

The bottom wire of the netting is to be a maximum of 80mm from the ground.

A single line wire (2.5mm galvanised H/T) should be located 50mm from the top of each post.

Wire tension: Single line wire - between 1400 and 1700 Newtons.
Netting - between 11,200 and 13,600 Newtons.

Round wood shall comply with NZS 3607.

Timber
Vertical or horizontal boards not less than 150 x 25mm (grade 1 timber) may be used. The distance from the bottom of the fence to the ground line is to be a maximum of 80mm.

Vertical boards: the gap between each board is not to exceed 80mm.

Horizontal boards: the gap between boards shall be in proportion (at any given height) to those specified for a conventional line wire fence.

Two Metre Fence for Goats

Fabricated netting
Seventeen (17) line wire (2.5mm galvanised H/T) netting (17-1900-150); each stay wire or dropper shall be one continuous length and be joined to the line wires by a manufactured knot (e.g. Tightlock or Stiffstay).

The posts are to be at not more than 5 metre spacings and the height from the ground line to the top of each post is to be a minimum of 2.060 metres.

The bottom wire of the netting is to be a maximum of 80 mm from the ground.

Netting tension: between 22,000 and 26,000 Newtons.

Round wood shall comply with NZS 3607.

Line wire
Seventeen (17) line wires (2.5mm galvanised H/T) with posts at not more than 4 metre spacings and 5 battens per 4 metres.

The height from the ground line to the top of each post is to be 2.060 metres.

Wire spacings, when measured from the top of each post, the wires are to be located at the following centres: top wire 50mm then 230mm - 405mm - 580mm - 755mm - 930mm - 1105mm - 1200mm - 1295mm - 1390mm - 1485mm - 1580mm - 1660mm - 1740mm - 1820mm - 1900mm - 1980mm.

The bottom wire is to be a maximum of 80mm from the ground line.

Wire tension: between 1400 and 1700 Newtons per wire.

Round wood shall comply with NZS 3607.

Fabricated netting/line wire combination
Fifteen (15) line wire (2.5 mm galvanised H/T) netting (15-1550-300); each stay wire or dropper shall be one continuous length and be joined to the line wires by a manufactured knot (eg Tightlock or Stiffstay).

The posts are to be at not more than 4 metre spacings. The height from the ground line to the top of each post is to be a minimum of 2.060 metres.

The bottom line of the netting is to be a maximum of 80 mm from the ground.

Three (3) line wires (2.5 mm galvanised H/T) above the netting; the centres of the wires are to be no greater than 150 mm apart when measured from the top of the netting.

The line wires may be electrified.

Permanent wire strainers are to be installed in the line wires to allow the wires to be tensioned.

Netting tension: between 22,000 and 26,000 Newtons.

Wire tension: between 1400 and 1700 Newtons per wire.

Round wood shall comply with NZS 3607.

Timber

Vertical or horizontal boards not less than 150 x 25mm (grade 1 timber) may be used. The distance from the bottom of the fence to the ground line is to be a maximum of 80mm.

Vertical boards: the gap between each board is not to exceed 50mm.

Horizontal boards: the gap between boards shall not exceed 50mm.

Appendix Three

Bioassay Procedures for Goats

The import health standard should be checked before animals are bioassayed.

The standard requirement is for mesenteric lymph nodes to be collected from all of the original foreign donor animals (donors of embryos or semen). A prepared inoculum is pooled from not more than five donors and inoculated into the brain and abdominal cavity of not less than five goats. If, for example, there were 8 donors it would be preferable to establish two groups of four donor animals and pool the lymph node material within the two groups. Each pool of lymph node material can then be inoculated into five goats. Ten sentinels would therefore be required for the 8 donor animals.

These goats shall be not more than two years of age and kept under observation for a minimum of three years. For each donor, there must be a minimum of two sentinel goats surviving at the end of the observation period. If, at the end of this period there are no signs of scrapie the sentinels are slaughtered and their brains examined as described for the original imports.

The operator shall make formal application to an Animal Ethical Committee to obtain approval for intra cerebral inoculation before embarking on the programme. It is suggested that the committees at Wallaceville and Batchelar are approached as they have reviewed these bioassay projects previously.

1. Collection of lymph nodes

Collect by aseptic surgical means at least two large mesenteric lymph nodes from the donor animals. Place nodes from each donor in a sterile airtight container, label and store as required.

2. Preparation of the inoculum

The lymph nodes (minimum of 4 gm) are homogenised in a buffer under sterile conditions to make a 10% suspension as follows:

- thaw the lymph node samples (luke-warm water may be used as an aid, but asepsis must be maintained),
- transfer the lymph nodes to a sterile stomacher bag with nine times the tissue weight/volume of 0.85% sterile buffered saline containing 100iu of crystalline penicillin G (60 micro-grams of crystalline penicillin G as the sodium salt per millilitre) and 100 micro-grams of streptomycin sulphate per millilitre (or alternative approved antibiotics); label the stomacher bag,
- pulverise the stomacher bag and contents for at least 5 minutes,
- the stomacher bag contents to sterile centrifuge tubes, label the tubes and centrifuge at 3000 rpm for at least 30 minutes,

- transfer the supernatant to another sterile container and label this container,
- filter the supernatant sequentially through two 1 micron cellulose acetate or TDFE membrane filters and two 0.4 micron filters,
- place approximately 50% of the final volume of supernatant in sterile freezer containers, label and place in frozen storage, in case a sentinel dies,
- pool the remaining filtered supernatant as appropriate into sterile, labelled containers for inoculation,
- immerse the relevant portion of the filtered supernatant in boiling water for at least 15 minutes if required by the conditions of the import health standard.

3. Inoculation of the sentinels

The pooled inoculum shall be inoculated intra-cerebrally (1 ml), and the remainder intra peritoneally into each of 5 sentinel goats. The veterinarian shall provide evidence of experience with the technique and be approved by the chief technical officer before innoculations.

For the intra cerebral inoculation the goat is restrained and local anaesthetic is infiltrated under the skin over the incision site in the scalp. After the hair has been clipped away, the skin is disinfected with a suitable antiseptic. A short incision is made in the skin and underlying periosteum at a site midway between the horn and the ear. A sterile drill is used to make a small hole through the skull. A rubber depth gauge is fixed to the drill to ensure that it penetrates through the bone but not into the brain. A fine needle (50 mm, 20 gauge) is inserted to its full depth and 1 ml of inoculum is injected very gently into the depth of the brain tissue. The needle is withdrawn gently and the skin incision closed. Any inoculum remaining after the intra cerebral injection is then injected by the intraperitoneal route. This additional injection maximises the probability of infection manifesting if present in the inoculum.

4. Identification of sentinels

Each bioassay sentinel must be permanently identified with visible marks that can readily be related to the donor animals.

Appendix Four

Laboratory Examination of Tissue Samples

1. Sampling requirements for scrapie examinations

The brain and anterior cervical cord shall be removed with as little contamination, distortion and laceration as possible.

The brain and spinal cord is then sectioned to obtain samples that are either fixed in formalin or frozen.

- The spinal cord is sectioned distal to the obex and 4-5 cm submitted as fresh tissue. It will be frozen and may be screened for scrapie-associated fibrils or PrP^{sc} protein. It shall be submitted even if the brain is autolysed.

- Approximately 5-10 gm of anterior cerebrum are sectioned from the brain and submitted as fresh tissue. It will be frozen and may be screened for scrapie-associated fibrils or PrP^{sc} protein.

- The remainder of the brain is immediately fixed in formalin. The tissue to be fixed is placed in a wide-mouth jar containing neutral buffered 10% formalin. (Ideally the volume of formalin is 10 times the volume of tissue to be fixed). In no instance shall this part of the brain be frozen since it is destined for histological examination.

The following additional fresh tissues shall be taken:

- Several large mesenteric lymph nodes.

- Spleen (volume required is half a pottle or 50gm).

These fresh tissues shall be frozen initially at -20^{o} C. If the tissues can't be submitted fresh to the laboratory then they shall be frozen in a conventional freezer and submitted the next day in an insulated box well packed with a slicker pad or an ice-pack.

The fresh tissue is held in long term storage at -70^{o} C. They will then be available if the histopathologist finds lesions that are suspicious of scrapie infection. If this occurs they could be examined for scrapie associated fibrils or PrP^{sc} protein. The fresh tissue from original imports will be kept until the exit phase of quarantine, but for other classes of stock it need only be kept until the histopathologist is satisfied that there are no significant lesions in the fixed tissue.

2. Histopathological examination of the brain for scrapie

The following two transverse vertical blocks of the brain will be sectioned by the histopathologist and examined for lesions suggestive of scrapie infection:

- The section from the obex should include the following nuclei; olivary nuclei, nucleus ambiguus, nucleus of hypoglossal nerve, dorsal nucleus of the vagus nerve, lateral cuneate nucleus, spinal tract nucleus of the trigeminal nerve and solitary tract nucleus.

- The section through the pons at the level of the cerebellar peduncles should include the trapezoid body, pontile nuclei, vesicular and spinal trigeminal nuclei.

These two areas of brain are blocked and then sectioned. The 1st and 11th section are then stained. The histopathologist shall examine four sections.

3. Sampling requirements for visna/maedi and pulmonary adenomatosis

If consolidation is seen within the lung then fresh and fixed samples of lung and lymph nodes shall be submitted for laboratory examination.

4. Sampling requirements for nasal adenocarcinoma

The nasal septum shall be examined and if suspicious lesions are seen, fresh and fixed samples shall be taken for laboratory examination.

5. Abortion and perinatal death investigation

Samples shall be collected for exotic disease investigation, especially for enzootic abortion caused by *Chlamydia psittaci*.

Samples required by the laboratory for enzootic abortion investigation:

- whole foetus and foetal membranes

- serum from dam

Routine laboratory procedures for screening:

- demonstration of the organism in placental smears

- histopathology of placenta, and a full range of foetal tissues

- complement fixation test on dam's serum.

Special laboratory procedures in suspect cases:

- ELISA for antigen testing on placenta

- fluorescent antibody testing on placenta or vaginal exudate.

Application for Approval of a Transitional Facility for Sheep and Goats Pursuant to Section 39 of the Biosecurity Act 1993.

Name of the transitional facility:

Physical location of facility (In addition attach a site plan showing relationship of the facility to other buildings, property boundaries and roads):

Species of animal which will be held:

Operator's name:

Organisation:

Postal address:

Telephone No: Facsimile:

I, being the applicant, declaring that the above facility meets the transitional facility requirements of MAF Biosecurity Authority Standard 154.02.02: Standard for sheep and goat transitional facilities, apply to have it approved as a transitional facility.

I include:

- a copy of the quarantine manual,
- a description of the animals that will be imported.

Signature of applicant Date

Application for Approval of an Operator of a Transitional Facility

Pursuant to Section 40 of the Biosecurity Act 1993.

Applicant's name:

Designation:

Organisation:

Postal address:

Telephone No: Facsimile:

Name of facility:

Location of the facility:

I, , being the person (the proposed operator) responsible for the facility named above, declare that:

- I have read and understand MAF Biosecurity Authority Standard 154.02.02. I will ensure that the operation of the facility is in accordance with this Standard.
- I have the technical and financial resourcing mechanisms in place to maintain that facility and contain the animals.
- I hereby apply for approval as an operator of a transitional facility.

Signature of applicant Date

The applicant shall complete this form and send to:
Border Standards
Biosecurity NZ
PO Box 2526
Wellington

CONSENT TO DISCLOSURE OF INFORMATION

Licensing & Vetting Service Centre
Office of the Commissioner
PO Box 3017
WELLINGTON

I, ……
[Surname] [Fore Names]

……
[Maiden or any other names used]

Sex . . . . . [M/F] Date and place of birth ……

Nationality …….. Address ……..

……..

NZ Drivers Licence number ……....

hereby consent to the disclosure by the New Zealand Police of any information they may have pursuant to this application to Border Standards, Biosecurity New Zealand, Ministry of Agriculture and Forestry. I understand that any record of criminal convictions I might have will automatically be concealed if I meet the eligibility criteria stipulated in Section 7 of the Criminal Records (Clean Slate) Act 2004.

Signed …… Date ……

COMMENTS OF THE NEW ZEALAND POLICE