

*Import Risk Analysis: Hides
and skins from specified
animals*

Review of Submissions

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Review of submissions

Biosecurity New Zealand
Ministry of Agriculture and Forestry
Wellington
New Zealand



April 2008

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Biosecurity New Zealand

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Approved for general release

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Contents

- 1 Executive Summary..... 1
- 2 Introduction..... 2
- 3 Review of Submissions: Hides and skins from specified animals 4
 - 3.1 Poultry Industry Association of New Zealand..... 4
 - 3.2 Meat Industry Association of New Zealand (Inc) 11
 - 3.3 Leather and Shoe Research Association 12
- 4 APPENDIX 1: COPIES OF SUBMISSIONS
- 5 APPENDIX 2: PRELIMINARY HAZARD LIST FOR RENDERED POULTRY PRODUCTS

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1 Executive Summary

The biosecurity risks associated with the importation of hides and skins of ruminants, horses, pigs, llamoids and ratites for processing into leather were examined in a draft import risk analysis released for public consultation on November 16th 2007. The risk analysis was initiated as part of New Zealand's obligation under Annex V of the EU veterinary agreement although it considered hides and skins from all countries.

The draft import risk analysis concluded that the highest risks posed by imported hides and skins were the agents of foot and mouth disease and anthrax. Specific options for managing those risks were discussed.

General risk management options that are appropriate for effectively managing the low or very low risk posed by a number of organisms were discussed. These options included:

- Importation from safe sources.
- Treatment of hides and skins before importation.
- Secure packaging of imported commodities.
- Safe transport to tanneries that are approved transitional facilities.
- Safe disposal of tannery wastes.

Three submissions were received, from the Poultry Industry Association of New Zealand (PIANZ), the Meat Industry Association of New Zealand (Inc), and the Leather and Shoe Research Association (LASRA).

PIANZ were concerned that the draft risk analysis had focussed on OIE listed diseases and not examined the risks associated with other exotic poultry pathogens. Further analysis of risks associated with other pathogens is presented here.

Both PIANZ and LASRA have suggested a number of minor amendments to amend typographical errors and improve clarity. These have been accepted where appropriate.

None of the issues raised affect the conclusions of the draft import risk analysis for hides and skins from specified animals. Therefore, the conclusions of the draft import risk analysis are considered to be valid for the development of import health standards for these commodities.

Summary of proposed changes to be made to the draft import risk analysis

- An appendix should be added to the risk analysis to include the further analysis of poultry pathogens presented here.
- Typographical and formatting amendments should be made.

2. Introduction

Risk analyses are carried out by MAF Biosecurity New Zealand under section 22 of the Biosecurity Act 1993, which lays out the requirements in regard to issuing Import Health Standards (IHSs) to effectively manage the risks associated with the importation of risk goods.

Draft risk analyses are written by the Risk Analysis Group and submitted to internal, interdepartmental, and external technical review before the draft risk analysis document is released for public consultation. The Risk Analysis Group of MAF Biosecurity New Zealand then reviews the submissions made by interested parties and produces a review of submissions document. The review of submissions identifies any matters in the draft risk analysis that need amending in the final risk analysis although the decision to implement these changes lies with an internal committee of MAF Biosecurity New Zealand. The final risk analysis and the review of submissions together inform the development of any resulting IHS by the Border Standards Group of MAF Biosecurity New Zealand for issuing under section 22 of the Biosecurity Act by the Director General of MAF on the recommendation of the relevant Chief Technical Officer (CTO).

Section 22(5) of the Biosecurity Act 1993 requires CTOs to have regard to the likelihood that organisms might be in the goods and the effects that these organisms are likely to have in New Zealand. Another requirement under section 22 is New Zealand's international obligations and of particular significance in this regard is the *Agreement on Sanitary & Phytosanitary Measures* (the "SPS Agreement") of the World Trade Organisation.

A key obligation under the SPS agreement is that sanitary and phytosanitary measures must be based on scientific principles and maintained only while there is sufficient scientific evidence for their application. In practice, this means that unless MAF is using internationally agreed standards, all sanitary measures must be justified by a scientific analysis of the risks posed by the imported commodity. Therefore, risk analyses are by nature scientific documents, and they conform to an internationally recognised process that has been developed to ensure scientific objectivity and consistency.

MAF Biosecurity New Zealand released the document *Import Risk Analysis: Hides and skins from specified animals* for public consultation on 16 November 2007. Every step was taken to ensure that the risk analysis provided a reasoned and logical discussion, supported by references to scientific literature. The draft risk analysis was peer reviewed internally and externally and then sent for interdepartmental consultation to the Ministry of Health, the Department of Conservation and the New Zealand Food Safety Authority. Relevant comments were incorporated at each stage of this review process. The closing date for public submissions on the risk analysis was 15 February 2008.

Three submissions were received. Table 1 lists the submitters and the organisations they represent.

This document is MAF Biosecurity New Zealand’s review of the submissions that were made by interested parties following the release of the draft risk analysis for public consultation. Public consultation on risk analyses is primarily on matters of scientific fact that affect the assessment of risk or the likely efficacy of any risk management options presented. For this reason, the review of submissions will answer issues of science surrounding likelihood¹, not possibility², of events occurring. Speculative comments and economic factors other than the effects directly related to a potential hazard are beyond the scope of the risk analysis and these will not be addressed in this review of submissions.

Table 1. Submitters and Organisations Represented

Submitter	Organisation Represented/Location
Michael Brooks	Poultry Industry Association of New Zealand (PIANZ)
Tracy Galland	Meat Industry Association of New Zealand (Inc) (MIA)
Tony Passman	Leather and Shoe Research Association (LASRA)

¹ Likelihood: The quality or fact of being likely or probable; probability; an instance of this.

² Possible: Logically conceivable; that which, whether or not it actually exists, is not excluded from existence by being logically contradictory or against reason.

3 Review of Submissions: Hides and skins from specified animals

3.1 POULTRY INDUSTRY ASSOCIATION OF NEW ZEALAND

- 3.1.1 PIANZ suggest that the first sentence of paragraph 5 should read “ ...the Ministry of Healthi...”. The same applies in the eighth sentence of the first paragraph of Chapter 4 (Hazard Identification).

MAF response: These typographical errors in the executive summary and hazard identification section of the draft IRA will be corrected in the final version of this document.

- 3.1.2 Industry notes that the OIE list of diseases was used in the development of Table 1: Disease agents of possible concern. However, the New Zealand Poultry Industry notes that none of the avian diseases previously listed on the list B of the OIE have been included in the table and questions the reasoning behind this.

Industry acknowledges that a number of avian diseases may not be considered hazards based on the criteria laid out in table 4.1. However, the New Zealand Poultry Industry believes that it is essential that the same process be followed for all animal species from which hides are likely to be imported into New Zealand. Furthermore, industry believes that the omission of avian diseases of possible concern and the subsequent completion of hazard identification and classification as either a potential hazard or not leaves a considerable gap in the coverage of the Import Risk Analysis and must be rectified.

In particular, the New Zealand Poultry Industry believes that infectious bursal disease should be considered in detail as this disease agent has previously been isolated from ostrich chicks (Lukert and Saif, 2003)³, with clinical disease reported in ostriches as a result of infection with a virulent strain of the virus (Mendes *et al.*, 2007)⁴ and is a “very resistant virus”⁵.

³ **Lukert, P. D. and Saif, Y. M.**, 2003. Infectious bursal disease. In: *Diseases of Poultry*. 11th Edition. Eds, Saif, Y. M., Barnes, H. J., Glisson, J. R., Fadly, A.M., McDougald, L. R. and Swayne, D. E., Iowa State Press, Ames, Iowa, pp. 161 - 179.

⁴ **Mendes, A. R., Luvizotto, M. C. R., Ferrari, H. F., Neto, M. G. and Cardoso, T. C.**, 2007. Experimental Infectious Bursal Disease in the Ostrich (*Struthio camelus*). *J. Comp. Path.*, 137, 256 - 258.

⁵ **McFerran, J. B.**, 1993. Infectious Bursal Disease: In: *Virus Infections of Poultry*. Eds. McFerran and McNulty, M.S. , Elsevier Science Publishers B.V., Amsterdam, The Netherlands, pages 213 - 227.

Similarly, other diseases which have not been reported in New Zealand but the occurrence of which have been reported in ratites should be considered.

MAF response: This IRA was initiated in October 1999 and Biosecurity magazine (issue 19, May 2000) contained the following article regarding the scope of this project:

New risk analysis on hides and skins

MAF Biosecurity Authority is to undertake an analysis of the biosecurity risks posed by hides and skins imported to New Zealand for processing. The risk analysis has been initiated as part of the veterinary agreement between New Zealand and the European Union, and will consider risks associated with organisms that may be carried on imported hides. A project team consisting of representatives from MAF and the Ministry of Health has been established, and a working group has been set up.

The project team has concluded that the risk analysis should cover least-processed hides and skins from the following animal species: cattle, sheep, goats, deer, pigs, horses, llamas, alpacas, horses, emu and ostriches. The following will not be considered: rabbit skins, drum skins, hunting trophies, pigs noses/ears and other hide products for petfood. The diseases to be considered are those listed in OIE lists A and B.

MAF invites interested parties to make written submissions on the scope of the project.

The deadline for submissions is 15 June 2000

This project has been repeatedly re-prioritised downwards since 2001 and 2002, with the result that it has not been finished until recently. The hazards examined in this document therefore reflect an historical decision to consider only OIE listed diseases.

MAF recognises the concern raised by PIANZ that a number of exotic hazards that are likely to be of concern to the domestic poultry industry have not been specifically examined in this draft IRA. Therefore, the following discussion examines the effect of proposed risk management measures for hides and skins on these other exotic hazards.

The preliminary hazard list for poultry meals used in the MAF Biosecurity New Zealand's import risk analysis (IRA) for fish food is reproduced below in appendix 2. Please note, this list has been amended to include avian intestinal spirochaetosis as suggested in the PIANZ submission concerning the draft fish food IRA. Based on information presented in the draft fish food IRA, it is reasonable to suggest that the following poultry disease agents might be considered here as "exotic hazards of concern to PIANZ":

Viruses

Adenoviridae
Astroviridae
Birnaviridae
Coronaviridae
Flaviviridae
Herpesviridae
Orthomyxoviridae
Paramyxoviridae
Parvoviridae
Picornaviridae
Polyomaviridae
Reoviridae
Retroviridae
Togaviridae

Bacteria

Aegyptianella spp.
Bacillus spp.
Bordetella avium
Borrelia spp.
Brachyspira spp.
Brucella spp.
Campylobacter spp.
Chlamydophila psittaci
Coenonia anatine
Coxiella burnetii
E. coli 0111, 0157:H7 and others
Francisella tularensis
Haemophilus paragallinarum
Microsporum gallinae
M. avium intracellulare
M. avium subsp *paratuberculosis*
Mycoplasma spp.
Ornithobacterium rhinotracheale
Pasteurella multocida
Planococcus spp.
Riemerella anatipestifer
Salmonella spp.

The draft IRA for hides and skins indicates (Section 5.18.2) that risks associated with dried and salted skins may be managed if imported skins are transported directly to a tannery/processing plant that is a transitional facility approved under MAF Standard 154.02.18. Furthermore, it is suggested that any solid waste from processing of this material be rendered or incinerated and that liquid waste be either subject to formaldehyde disinfection, discharged into municipal sewers that do not discharge onto agricultural land or into rivers, or discharged into a securely fenced and isolated soak-pit.

Therefore, before exploring release, exposure, and consequence assessments for the above organisms, it might be reasonable to suggest that only those organisms that are likely to be resistant to rendering or formaldehyde disinfection should be given further consideration.

The fish food IRA examined the above agents and concluded that commercial rendering would effectively destroy all of these organisms and they should therefore not be considered hazards in rendered material.

In response to the PIANZ submission, we have undertaken some further analysis and the effect of formaldehyde disinfection on these agents can be summarised as follows:

<i>Organism of concern</i>	<i>Likely to be sensitive to formaldehyde?</i>	<i>Reference</i>
<i>Adenoviridae</i>	Yes	McFerran JB and Adair BM (2003) Egg drop syndrome. In Diseases of Poultry, 11 th Ed, Saif YM et al, Iowa State Press, p.229.
<i>Astroviridae</i>	Yes	Schultz-Cherry S, King DJ, and Koci MD (2001) Inactivation of an astrovirus associated with poult enteritis mortality syndrome. <i>Avian Diseases</i> 45, p.76-82.
<i>Birnaviridae</i>	Yes	Lukert PD and Saif YM (2003) Infectious bursal disease. In Diseases of Poultry, 11 th Ed, Saif YM et al, Iowa State Press, p.163.
<i>Coronaviridae</i>	Yes	Guy JS (2003) Turkey coronavirus enteritis. In Diseases of Poultry, 11 th Ed, Saif YM et al, Iowa State Press, p.302.
<i>Flaviviridae</i>		<i>CSF and BVD already considered in the draft hides and skins import risk analysis (Section 5.6)</i>
<i>Herpesviridae</i>	Yes	Hlozaneck I, Jurajda V, and Benda V (1977) Disinfection of Marek's disease virus in poultry dust. <i>Avian Pathology</i> 6, p.241-250.
<i>Orthomyxoviridae</i>		<i>HPAI already considered in the draft hides and skins import risk analysis (Section 5.7)</i>
<i>Paramyxoviridae</i>		<i>Newcastle disease already considered in the draft hides and skins import risk analysis (Section 5.8)</i>
<i>Parvoviridae</i>	Yes	Virus Taxonomy (2005), Ed. Fauquet CM et al, Elsevier Academic Press, p.354.
<i>Picornaviridae</i>		<i>FMD and SVD already considered in the draft hides and skins import risk analysis (Sections 5.2 and 5.3)</i>
<i>Polyomaviridae</i>	Yes ⁶	Phalen DN (1997) Avian Polyomavirus: My thoughts. http://www.blackstone-aviaries.com/polyom.html
<i>Reoviridae</i>	Yes ⁷	Anon (2004) OIE manual of diagnostic tests and vaccines for terrestrial animals, OIE, Paris.
<i>Retroviridae</i>	Yes	Virus Taxonomy (2005), Ed. Fauquet CM et al, Elsevier Academic Press, p.422.
<i>Togaviridae</i>	Yes ⁸	Quinn PJ et al (1994) Control of infectious diseases. In Veterinary clinical microbiology. Mosby international limited. p.491.
<i>Aegyptianella</i> spp.	Yes ⁹	Quinn PJ et al (1994) Control of infectious diseases. In Veterinary clinical microbiology. Mosby international limited. p.491.
<i>Bacillus</i> spp.		<i>Anthrax already considered in the draft hides and skins import risk analysis (Section 5.9)</i>
<i>Bordetella avium</i>	Yes	Wilding GP (2001) <i>Bordetella avium</i> – Turkey coryza. In Poultry diseases, 5 th Ed, Jordan F et al, W.B.Saunders. p.151.
<i>Borrelia</i> spp.	Yes ¹⁰	Barnes HJ (2003) Miscellaneous and sporadic bacterial infections. In Diseases of Poultry, 11 th Ed, Saif YM et al, Iowa State Press, p.846.

⁶ Formaldehyde fumigation is recommended for disinfection of aviaries following polyomavirus infection

⁷ Formaldehyde recommended for virus inactivation when manufacturing vaccines against African horse sickness (Chapter 2.1.11 of OIE Manual)

⁸ Aldehyde disinfectants are described as highly effective against enveloped viruses

⁹ Aldehyde disinfectants are described as effective against rickettsiae

¹⁰ *B. anserina* is not resistant outside the host

<i>Organism of concern</i>	<i>Likely to be sensitive to formaldehyde?</i>	<i>Reference</i>
<i>Brachyspira</i> spp.	Yes	Hampson DJ, Fellstrom C, and Thomson (2006) Swine dysentery. In Diseases of swine 9 th Ed. Straw BE et al. Blackwell publishing.p.800.
<i>Brucella</i> spp.		<i>Brucellosis already considered in the draft hides and skins import risk analysis (Section 5.11)</i>
<i>Campylobacter</i> spp.	Yes	Evans S (2001) Campylobacter. In Poultry diseases, 5 th Ed, Jordan F et al, W.B.Saunders. p.174.
<i>Chlamydomphila psittaci</i>		<i>EAE already considered in the draft hides and skins import risk analysis(Section 5.12)</i>
<i>Coenonia anatine</i>	Yes ¹¹	Quinn PJ et al (1994) Control of infectious diseases. In Veterinary clinical microbiology. Mosby international limited. p.491.
<i>Coxiella burnetii</i>		<i>Q-fever already considered in the draft hides and skins import risk analysis (Section 5.10)</i>
<i>E. coli</i> 0111, 0157:H7 and others		<i>Enterobacteriaceae already considered in the draft hides and skins import risk analysis (Section 5.13)</i>
<i>Francisella tularensis</i>	Yes ¹²	Quinn PJ et al (1994) Control of infectious diseases. In Veterinary clinical microbiology. Mosby international limited. p.491.
<i>Haemophilus paragallinarum</i>	Yes	Blackall PJ and Matsumoto M (2003) Infectious coryza. In Diseases of Poultry, 11 th Ed, Saif YM et al, Iowa State Press, p.692.
<i>Microsporium gallinae</i>	Yes	Radostits OM et al (2007) Dermatofomycoses. In Veterinary Medicine 10 th Ed. Saunders Elsevier. p.1478.
<i>M. avium intracellulare</i> and <i>M. avium</i> subsp. <i>paratuberculosis</i>	Yes ¹³	Quinn PJ et al (1994) Control of infectious diseases. In Veterinary clinical microbiology. Mosby international limited. p.491.
<i>Mycoplasma</i> spp.	Yes	Ley DH (2003) Mycoplasma gallisepticum infection. In Diseases of Poultry, 11 th Ed, Saif YM et al, Iowa State Press, p.723.
<i>Ornithobacterium rhinotracheale</i>	Yes	Van Empel P (2001) Ornithobacterium rhinotracheale. In Poultry diseases, 5 th Ed, Jordan F et al, W.B.Saunders. p.143.
<i>Pasteurella multocida</i>	Yes	Glisson JR, Hofacre CL, and Christensen JP (2003) Fowl cholera. In Diseases of Poultry, 11 th Ed, Saif YM et al, Iowa State Press, p.660.
<i>Planococcus</i> spp.	Yes ¹⁴	Quinn PJ et al (1994) Control of infectious diseases. In Veterinary clinical microbiology. Mosby international limited. p.491.
<i>Organism of concern</i>	<i>Likely to be sensitive to formaldehyde?</i>	<i>Reference</i>
<i>Riemerella anatipestifer</i>	Yes ¹⁵	Quinn PJ et al (1994) Control of infectious diseases. In Veterinary clinical microbiology. Mosby international limited. p.491.
<i>Salmonella</i> spp.		<i>Enterobacteriaceae already considered in the draft hides and skins import risk analysis (Section 5.13)</i>

¹¹ Aldehyde disinfectants are described as highly effective against gram-negative bacteria

¹² Aldehyde disinfectants are described as highly effective against gram-negative bacteria

¹³ Aldehyde disinfectants are described as effective against acid-fast bacteria

¹⁴ Aldehyde disinfectants are described as highly effective against gram-positive bacteria

¹⁵ Aldehyde disinfectants are described as highly effective against gram-negative bacteria

In conclusion, MAF considers that the above analysis indicates that the risk management measures proposed by the draft hides and skins IRA should be considered effective to manage any other exotic hazards likely to affect domestic poultry. Without considering release, exposure, and consequence assessments for these other hazards, it is therefore reasonable to suggest that the proposed risk management measures will be effective for managing any risk that may be associated with these agents in this context.

- 3.1.3 Industry notes that the first paragraph of the section "*Enterobacteriaceae*" suggests that the section deals specifically with *Salmonella* spp. and other Enterobacteriaceae associated with the skins of sheep. However, the risk assessment under *section 5.13.4* suggests that Enterobacteriaceae should be considered for all animal species. Industry supports the suggestion that Enterobacteriaceae should be considered for hides from all animal species which have not undergone pickling or tanning, and recommends that the first paragraph of *section 5.13* be amended accordingly.

MAF response: The wording of the section on Enterobacteriaceae will be amended to reflect consideration of all species, not just sheep as erroneously stated in the draft IRA.

- 3.1.4 The first sentence of paragraph 1 of *section 5.18.2* (Risk Management Options) should read "... would be significantly reduced if the hides or skins were derived only ...". Similarly the first sentence of the third paragraph of the same section should read "... on imported hides and skins".

MAF response: The error you have pointed out in 5.18.2 is a result of a typographical error. This sentence should read, "...would be significantly reduced if they were...". This error will be corrected in the final version of the IRA.

- 3.1.5 Bullet point 1 of *section 5.18.2* (Risk Management Options) should read "Discharge or liquid wastes into municipal sewage systems that do not dispose of sewage".

MAF response: The first bullet point of this section will be corrected to "Discharge of liquid wastes into municipal sewage systems that do not dispose of sewage onto agricultural land or into rivers".

3.2 MEAT INDUSTRY ASSOCIATION OF NEW ZEALAND (INC)

The Meat Industry Association of New Zealand (inc) submission is included in Appendix 1.

This submission raises no technical challenges to the published draft risk analysis and supports the findings of this work.

3.3 LEATHER AND SHOE RESEARCH ASSOCIATION

- 3.3.1 LASRA suggest amending section 2.2 (SCOPE) from "... the Leather and Shoe Research Association (LASRA) imports samples of pickled or tanned products mainly..." to "... the Leather and Shoe Research Association (LASRA) imports samples of salted, pickled or tanned products mainly..."

MAF response: The suggested amendment is accepted.

- 3.3.2 LASRA are concerned that there is no reference to the substantial provisions in place at LASRA to contain untanned samples received from overseas. Imported samples are kept sealed until opened within the LASRA facility. Unpickled or untanned samples are securely contained under quarantine provisions and MAF audit for disposal by MAF incineration.

MAF response: The import risk analysis is concerned with the biosecurity risks associated with the importation of hides and skins into a number of facilities. Further discussion of the provisions in place at a single importer would be inappropriate.

- 3.3.3 LASRA are concerned that the reference to "sea salt" (in section 2.3.2.1) should not preclude the use of salt derived from other sources. The term "sea salt" has been used in the Balai Agreement as the common term for sodium chloride, not to define where the sodium chloride should come from and also that the requirement for 2% sodium carbonate does not clarify what this percentage is to be based on. LASRA have suggested an amendment that reads "...salted for 7 days in stoved sea salt (sodium chloride) with the addition of sodium carbonate to 2% on the weight of the salt."

MAF response: The wording used in this section reflects that used in the EU legislation described. The suggested amendment is not accepted.

- 3.3.4 LASRA suggest that convention dictates that references to "wet blue (chromium iii)" should be amended to "wet blue (chromium III)".

MAF response: The suggested amendment is accepted.

- 3.3.5 Section 2.3.7 states "wet white tanned are hides pre-tanned with alum sulphate. They have been limed and pickled". However, alum sulphate is not used for modern production of wet white and LASRA suggest rewording to "Wet white pre-tanned or tanned are hides or skins treated with a white

tanning agent as an alternative to the use of chromium III. They have been limed and pickled.”

MAF response: The suggested amendment is accepted.

- 3.3.6 LASRA have requested a note in section 4.2 to clarify the conditions used in New Zealand for wet salting of hides.

MAF response: The wording in section 4.2 reflects that used in the OIE Code (Article 3.6.2.4.). The suggested amendment is not required.

- 3.3.7 Section 4.74 currently states, “Weeds and weed seeds could be found attached to the hair or wool on hides”. It is suggested that this should be changed to “Weeds and weed seeds could be found attached to the hair of hides/skins or the wool of sheep skins”.

MAF response: MAF agrees that the suggested wording is more appropriate.

- 3.3.8 LASRA suggest that it might be helpful if Table 2 in section 5 identified which animal species could be affected by each of the 17 disease agents listed.

MAF response: This information is included in the preceding hazard identification section of the risk analysis (Section 4) and it is not necessary to amend the risk analysis as suggested.

- 3.3.9 LASRA suggest that section 5.2.1 should be amended to “the Code recommends, as a safeguard against FMD virus, the treating hides or skins by salting for at least 28 days in stoved sea salt (sodium chloride) with the addition of sodium carbonate to 2% on the weight of the salt”.

MAF response: Article 3.6.2.4. of the OIE Code states “for the inactivation of viruses present in raw hides and skins for industrial use, the following procedure should be used: salting for at least 28 days in sea salt containing 2% sodium carbonate”. The risk analysis reflects this wording and the suggested amendment is not accepted.

- 3.3.10 Section 5.7.4 should be amended from “safeguards are justified for ostrich and emu hides and skins that have not undergone pickling or tanning” to “safeguards are justified for ostrich and emu skins that have not undergone pickling or tanning”.

MAF response: MAF agrees that the suggested wording is more appropriate.

3.3.11 LASRA suggest that section 5.9.1 incorrectly discusses the effect of sodium metabisulphate instead of sodium metabisulphite.

MAF response: Schedule 1 of the Anthrax Prevention Regulations 1987 states, “The skin or hide of any animal, or the skin or hide of any animal bearing wool, fur, hair, or bristle, shall be completely immersed in a 1/10000 solution of sodium bisulphate for a period of not less than 5 hours”.

The effect of sodium metabisulphate ($\text{Na}_2\text{S}_2\text{O}_6$) or sodium metabisulphite ($\text{Na}_2\text{S}_2\text{O}_5$) have not been examined in this risk analysis, and the last sentence of this paragraph should be amended to state “...no data could be found that indicates that sodium bisulphate is an effective biocide for anthrax spores”.

4 Appendix 1: Copies Of Submissions

4.1 POULTRY INDUSTRY ASSOCIATION OF NEW ZEALAND

Poultry Industry Association of New Zealand (Inc)

1st Floor, 96D Carlton Gore Road, Auckland 1001, New Zealand

Phone: 64 9 520 4300 Fax: 64 9 520 1553

Email: michael@pianz.org.nz

Martin Van Ginkel
MAF Biosecurity New Zealand
P. O. Box 2526
Wellington

15 February 2008

Dear Martin

Import Risk Analysis: Hides and Skins from Specified Animals

The Poultry Industry Association of New Zealand (PIANZ), contactable at the above address, represents almost all of the poultry breeding and processing companies in New Zealand. Similarly, the Egg Producers Federation of New Zealand (EPF) represents all commercial egg producers in New Zealand. The PIANZ and EPF Veterinary Technical Committee has reviewed the Import Risk Analysis for the importation of hides and skins from specified animals into New Zealand (subsequently referred to as the IRA).

The New Zealand Poultry Industry (including PIANZ and the EPF) subsequently note the following points in this regard.

Chapter 1. Executive Summary

The first sentence of paragraph 5 should read “...the Ministry of Healthi ...”. The same applies in the eighth sentence of the first paragraph of **Chapter 4** (Hazard Identification).

Chapter 4. Hazard Identification

Industry notes that the OIE list of diseases was used in the development of Table 1: Disease agents of possible concern. However, the New Zealand Poultry Industry notes that none of the avian diseases previously listed on the list B of the OIE have been included in the table and questions the reasoning behind this.

Industry acknowledges that a number of avian diseases may not be considered hazards based on the criteria laid out in table 4.1. However, the New Zealand Poultry Industry believes that it is essential that the same process be followed for all animal species from which hides are likely to be imported into New Zealand. Furthermore, industry believes that the omission of avian diseases of possible concern and the subsequent

completion of hazard identification and classification as either a potential hazard or not leaves a considerable gap in the coverage of the Import Risk Analysis and must be rectified.

In particular, the New Zealand Poultry Industry believes that infectious bursal disease should be considered in detail as this disease agent has previously been isolated from ostrich chicks (Lukert and Saif, 2003)¹⁶, with clinical disease reported in ostriches as a result of infection with a virulent strain of the virus (Mendes *et al.*, 2007)¹⁷ and is a “very resistant virus”¹⁸.

Similarly, other diseases which have not been reported in New Zealand but the occurrence of which have been reported in ratites should be considered.

Chapter 5. Risk Assessment

Industry requests that this chapter is updated to include any additional potential hazards following the inclusion of avian diseases in **Chapter 4** (Hazard Identification).

5.1.3 Enterobacteriaceae

Industry notes that the first paragraph of this section suggests that the section deals specifically with *Salmonella* spp. and other Enterobacteriaceae associated with the skins of sheep. However, the risk assessment under *section 5.13.4* suggests that Enterobacteriaceae should be considered for all animal species. Industry supports the suggestion that Enterobacteriaceae should be considered for hides from all animal species which have not undergone pickling or tanning, and recommends that the first paragraph of *section 5.13* be amended accordingly.

Chapter 5. Risk Management

The first sentence of paragraph 1 of *section 5.18.2* (Risk Management Options) should read “... would be significantly reduced if the hides or skins were derived only ...”. Similarly the first sentence of the third paragraph of the same section should read “... on imported hides and skins”.

Bullet point 1 of *section 5.18.2* (Risk Management Options) should read “Discharge or liquid wastes into municipal sewage systems that do not dispose of sewage”.

¹⁶ **Lukert, P. D. and Saif, Y. M.**, 2003. Infectious bursal disease. In: *Diseases of Poultry*. 11th Edition. Eds, Saif, Y. M., Barnes, H. J., Glisson, J. R., Fadly, A.M., McDougald, L. R. and Swayne, D. E., Iowa State Press, Ames, Iowa, pp. 161 - 179.

¹⁷ **Mendes, A. R., Luvizotto, M. C. R., Ferrari, H. F., Neto, M. G. and Cardoso, T. C.**, 2007. Experimental Infectious Bursal Disease in the Ostrich (*Struthio camelus*). *J. Comp. Path.*, 137, 256 - 258.

¹⁸ **McFerran, J. B.**, 1993. Infectious Bursal Disease: In: *Virus Infections of Poultry*. Eds. McFerran and McNulty, M.S. , Elsevier Science Publishers B.V., Amsterdam, The Netherlands, pages 213 - 227.

The New Zealand Poultry Industry appreciates the opportunity to comment on the draft IRA. We look forward to continued work with Biosecurity New Zealand on this topic to ensure the establishment of a robust and appropriate IHS.

Please do not hesitate to contact our offices should you have any queries.

Kind regards
Michael Brooks
Executive Director

4.2 MEAT INDUSTRY ASSOCIATION OF NEW ZEALAND (INC)

Meat Industry Association Comment on the Import Risk Analysis: Hides and Skins from Specified Animals, Draft for Public Consultation

I: ABOUT THE MEAT INDUSTRY ASSOCIATION

1. The Meat Industry Association of New Zealand Incorporated ('MIA') is a voluntary trade association representing New Zealand meat processors, marketers and exporters. It is an Incorporated Society that represents companies supplying virtually all of New Zealand sheepmeat exports and all beef exports, producing 15 per cent of our nation's exports by value. This amounts to 29 percent of New Zealand's primary sector export revenue.
2. A list of Association members is attached as Appendix 1.

II: CONSULTATION

3. In developing this comment on the Import Risk Analysis: Hides and Skins from Specified Animals, Draft for Public Consultation ("the Analysis") all MIA members and affiliate members were consulted and asked for their contributions, although individual members may also make their own comment specific to the view of their operations.

III: COMMENT

4. The MIA notes the careful risk based analysis undertaken by the Policy and Risk Biosecurity Directorate ("the Directorate"), for each disease described from the OIE list and its associated risk assessment in relation to each hide and skin type. The MIA commends the Directorate on the quality, clarity, and readability of the Analysis.
5. The MIA is not aware of any flaw in the risk assessment for each hazard group and organism.
6. The MIA is of the view that the risk management objectives appear to be reasonable.
7. The MIA is not aware of any alternative measures that will achieve a better risk management objective.
8. For any queries relating to these comments, please contact Tracy Galland or email tracy.galland@mia.co.nz

**IV: APPENDIX 1: ASSOCIATION MEMBERS AND AFFILIATE MEMBERS
AS AT 1 JULY 2007**

Members	Head Office Location
Advance Marketing Ltd	Auckland
AFFCO New Zealand Ltd	Hamilton
Alliance Group Ltd	Invercargill
ANZCO Foods Ltd	Christchurch
ANZCO Green Island Ltd (ANZCO group)	Dunedin
ANZPAC Foods Ltd	Auckland
APJ Meats Ltd	Mapua
Auckland Meat Processors Ltd	Auckland
Ballande New Zealand Ltd	Auckland
Bernard Matthews New Zealand Ltd	Waipukurau
Blue Sky Meats (NZ) Ltd	Invercargill
Canterbury Meat Packers Ltd (ANZCO group)	Ashburton
Columbia Exports Ltd	Auckland
Crown Marketing Ltd (ANZCO group)	Wellington
Crusader Meats New Zealand Ltd	Benneydale
Davmet New Zealand Ltd	Napier
Fern Ridge Ltd	Napier
Frasertown Meat Company Ltd	Auckland
Garra International Ltd	Christchurch
Greenlea Premier Meats Ltd	Hamilton
Harrier Exports Ltd	Auckland
Horizon Meats New Zealand Ltd (wholly owned subsidiary of Blue Sky Meats (NZ) Ltd)	Auckland
Lamb Packers Feilding Ltd (wholly owned subsidiary of Bernard Matthews NZ Ltd)	Waipukurau
Land Meat (NZ) Ltd (AFFCO group)	Hastings
Lanexco Ltd	Tauranga
Lowe Corporation Ltd	Hastings
Mathias International (Mathias Meats NZ Ltd)	Auckland
New Zealand By-Products	Havelock North
Pilot (NZ) Ltd	Christchurch
PPCS Ltd	Dunedin
Progressive Gisborne Ltd (wholly owned subsidiary of Bernard Matthews NZ Ltd)	Waipukurau

Progressive Meats Ltd	Hastings
Riverlands Ltd (ANZCO group)	Eltham
South Pacific Meats Ltd (AFFCO group)	Invercargill
South Pacific Meats - Malvern (AFFCO group)	Malvern
Tara Exports Ltd	Auckland
Taylor Preston Ltd	Wellington
Te Kuiti Meat Processors Ltd	Te Kuiti
Towers Thompson (New Zealand) Ltd	Christchurch
Universal Beef Packers Ltd (UBP)	Te Kuiti
Wallace Corporation Ltd	Waitoa, Waikato

Affiliate Members	
AgResearch-MIRINZ Centre	Hamilton
Aon New Zealand Limited	Wellington
Axis Intermodal (Ports of Auckland Ltd)	Auckland
CentrePort Wellington	Wellington
DeLaval Cleaning Solutions	Hamilton
Energy for Industry (ex Meridian Solutions)	Wellington
GHD Ltd	Palmerston North
Hamburg-Sud New Zealand Ltd	Auckland
Hapag Lloyd (New Zealand) Ltd	Auckland
Maersk New Zealand Ltd	Auckland
Millers Mechanical NZ Ltd	Dunedin
NZI Marine	Auckland
Oceanic Navigation Ltd	Auckland
Port of Napier	Napier
Port Otago Ltd	Port Chalmers
Port Taranaki Ltd (previously Westgate Transport Ltd)	New Plymouth
Sealed Air (New Zealand), Cryovac Division	Wellington
Vero Marine Insurance	Auckland

4.3 LEATHER AND SHOE RESEARCH ASSOCIATION

SUBMISSION ON Import Risk Analysis: Hides and skins from specified animals
Draft for public consultation November 2007

BY Tony Passman
ON BEHALF OF NZ Leather & Shoe Research Association (LASRA)
ADDRESS Private Bag 11-333, Palmerston North
CONTACT DETAILS phone: 06 355 9028
email: lasra@xtra.co.nz

COMMENTS :

SECTION	DRAFT READS	AMENDMENT / ADDITION
2.2 SCOPE the Leather and Shoe Research Association (LASRA) imports samples of pickled or tanned products mainly the Leather and Shoe Research Association (LASRA) imports samples of salted, pickled or tanned products mainly
	<i>Concern There is no reference to the substantial provisions in place at LASRA to contain untanned samples received from overseas</i>	Imported samples are kept sealed until opened within the LASRA facility. Unpickled or untanned samples are securely contained under quarantine provisions and MAF audit for disposal by MAF incineration.
2.3.2.1 EU Balai Agreement	... salted for 7 days in sea salt with the addition of sodium carbonate to 2%, or <u>Concerns</u> <i>The reference to “sea salt” should not preclude the use of salt derived from other sources. The term “sea salt” has been used in the Balai Agreement as the common term for sodium chloride, not to define where the sodium chloride should come from.</i> <i>In New Zealand we use stoved salt to avoid contamination by halophilic organisms. We think New Zealand should retain this provision.</i> <i>The requirement for 2% sodium carbonate does not clarify what this percentage is to be based on.</i> salted for 7 days in stoved sea salt (sodium chloride) with the addition of sodium carbonate to 2% on the weight of the salt.

<p>2.3.7 General considerations</p>	<ul style="list-style-type: none"> wet blue (chromium iii) tanned <p><u>Concern</u> <i>There is a convention for defining the trivalency.</i></p> <ul style="list-style-type: none"> wet white tanned are hides pre-tanned with alum sulphate <p><u>Concerns</u> <i>The reference to wet white should include hides and skins. Wet white hides or skins may be pre-tanned or fully tanned. Alum sulphate is not used for modern production of wet white.</i></p>	<ul style="list-style-type: none"> wet blue (chromium III) tanned <p>Wet white pre-tanned or tanned are hides or skins treated with a white tanning agent as an alternative to the use of chromium III. They have been limed and pickled.</p>
<p>4.2 FOOT AND MOUTH DISEASE</p>	<p><i>See above under 2.3.2.1 and comment on sea salt. Recommend a note here for clarification.</i></p>	<p>In New Zealand hides or skins should be salted for 28 days in stoved sea salt (sodium chloride) with the addition of sodium carbonate to 2% on the weight of the salt.</p>
<p>4.74 WEEDS AND WEED SEEDS</p>	<p>.... attached to the hair or wool of hides.</p>	<p>.... Attached to the hair of hides/skins or the wool of sheep skins.</p>
<p>5 Risk Assessment Table 2</p>	<p><i>It might be helpful if the Table identified which animal species could be affected by each of the 17 disease agents listed</i></p>	
<p>5.2.1 Release assessment</p>	<p><i>See above under 2.3.2.1 and comment on sea salt. Recommend a note here for clarification.</i></p>	<p>.... the Code recommends, as a safeguard against FMD virus, the treating hides or skins by salting for at least 28 days in stoved sea salt (sodium chloride) with the addition of sodium carbonate to 2% on the weight of the salt.</p>
<p>5.7.4 Risk estimation</p>	<p>.... ostrich and emu hides and skins</p>	<p>.... ostrich and emu skins</p>
<p>5.9.1 Agent survival</p>	<p>.... no data could be found that indicates that sodium metabisulphate is an effective biocide for anthrax spores.</p>	<p><i>Could it be that sodium metabisulphate has been cited when it should have been sodium metabisulphite?</i> <i>Sodium metabisulphite is certainly a well recognised and used biocide within the leather industry.</i></p>

5 APPENDIX 2: PRELIMINARY HAZARD LIST FOR RENDERED POULTRY PRODUCTS

Disease	Agent (hazard)	OIE notifiable	NZ status
Viral diseases			
Angara disease, quail bronchitis and other group I avian adenovirus infections	Group I avian adenoviruses (<i>Aviadenoviridae</i>)	No	Exotic
Avian adenovirus splenomegaly	Group II avian adenoviruses (<i>Siadenoviruses</i>)	No	Exotic
Avian encephalomyelitis	unassigned (<i>Picornaviridae</i>)	No	Present
Avian enteroviruslike viruses	<i>Picornaviridae</i>	No	Exotic
Avian influenza	Influenzavirus A (<i>Orthomyxoviridae</i>)	Yes	Exotic
Avian leukosis/sarcoma	Alpharetrovirus (<i>Retroviridae</i>)	No	Exotic strains
Avian nephritis types 1-3	unassigned (<i>Picornaviridae</i>)	No	Present
Avian paramyxovirus types 2 & 3	Rubulavirus (<i>Paramyxoviridae</i>)	No	Exotic
Avian pox virus	<i>Poxviridae</i>	No	Present
Big liver and spleen disease	Viral aetiology (not classified further)	No	Exotic
Chicken infectious anaemia	Gyrovirus (<i>Circoviridae</i>)	No	Present
Derzsy's disease (goose parvovirus infection)	Parvovirus (<i>Parvoviridae</i>)	No	Exotic
Duck hepatitis types 1 & 3	Unassigned (<i>Picornaviridae</i>)	Yes	Exotic
Duck hepatitis type 2	Astrovirus (<i>Astroviridae</i>)	Yes	Exotic
Duck viral enteritis (duck plague)	unassigned (<i>Herpesviridae</i>)	No	Exotic
Eastern equine encephalitis	Arbovirus (<i>Togaviridae</i>)	Yes	Exotic
Egg drop syndrome 76	Group III avian adenoviruses (<i>Atadenoviruses</i>)	No	Present
Goose herpesvirus	unassigned (<i>Herpesviridae</i>)	No	Exotic
Haemorrhagic enteritis	Group II avian adenoviruses (<i>Siadenoviruses</i>)	No	Exotic
Haemorrhagic nephritis enteritis of geese	Goose haemorrhagic polyomavirus (<i>Polyomaviridae</i>)	No	Exotic
Highlands J virus infection	Arbovirus (<i>Togaviridae</i>)	No	Exotic
Infectious bronchitis	Coronavirus (<i>Coronaviridae</i>)	Yes	Exotic strains
Infectious bursal disease	Avibirnavirus (<i>Birnaviridae</i>)	Yes	Exotic
Infectious laryngotracheitis	Herpes virus	Yes	Present
Israel turkey meningoencephalitis	Arbovirus (<i>Flaviviridae</i>)	No	Exotic
Marble spleen disease	Group II avian adenoviruses (<i>Siadenoviruses</i>)	No	Exotic
Marek's disease	<i>Herpesviridae</i>	Yes	Exotic strains
Muskovy duck reovirus	<i>Reoviridae</i>	No	Exotic
Newcastle disease, APMV-1	Rubulavirus (<i>Paramyxoviridae</i>)	Yes	Exotic
Poult enteritis and mortality syndrome	<i>Astroviridae?</i>	No	Exotic?
Reticuloendotheliosis	Gammaretrovirus (<i>Retroviridae</i>)	No	Present
Rotavirus infection	Rotavirus (<i>Reoviridae</i>)	No	Present
Turkey coronavirus enteritis	Coronavirus (<i>Coronaviridae</i>)	No	Exotic?
Turkey rhinotracheitis, swollen head syndrome and avian rhinotracheitis	Avian pneumovirus (<i>Paramyxoviridae</i>)	Yes	Exotic
Turkey torovirus infection	Torovirus (<i>Coronaviridae</i>)	No	Exotic?

APPENDIX 2 (CONTINUED)

Disease	Agent (hazard)	OIE notifiable	NZ status
Viral diseases (cont)			
Turkey viral hepatitis	Unidentified (<i>Picornaviridae</i>)	No	Exotic
Viral proventriculitis	Undetermined viral agent	No	Exotic?
Viral arthritis	Unassigned (<i>Reoviridae</i>)	No	Present
West Nile virus	Arbovirus (<i>Flaviviridae</i>)	Yes	Exotic
Other diseases			
Acholeplasmiasis	<i>A. laidlawii</i>	No	Present
Arizonosis	<i>Salmonella arizonae</i> serovar 18Z ₄ Z ₃₂	No	Exotic
Aspergillosis	<i>Aspergillus</i> spp.	No	Present
Avian intestinal spirochaetosis	<i>Brachyspira</i> spp	No	Exotic
Avian spirochaetosis	<i>Borrelia anserine</i>	No	Exotic
Avian tuberculosis	<i>Mycobacterium avium intracellulare</i>	No	Exotic strains
Bordetellosis (turkey coryza)	<i>Bordetella avium</i>	No	Exotic
Botulism	<i>Clostridium botulinum</i> and preformed exotoxin	No	Present
Campylobacteriosis	<i>Campylobacter jejuni</i> and others	No	Exotic strains
Candidiasis	<i>Candida</i> spp.	No	Present
Coccidiosis	<i>Eimeria</i> spp.	No	Present
Colibacillosis	<i>Escherichia coli</i> 0111, 0157:H7 and others	No	Exotic strains
Cryptosporidiosis	<i>Cryptosporidium</i> spp.	No	Present
Dactylariosis	<i>Dactylaria gallopava</i>	No	Present
Dermatophytosis	<i>Microsporium gallinae</i>	No	Exotic
Duck septicaemia	<i>Riemerella anatipestifer</i>	No	Exotic
Enterococcosis	<i>Enterococcus</i> spp.	No	Present
Erysipelas	<i>Erysipelothrix</i> spp.	No	Present
Fowl cholera	<i>Pasteurella multocida</i>	Yes	Exotic
Fowl typhoid	<i>Salmonella Gallinarum</i>	Yes	Exotic
Gangrenous dermatitis	<i>Clostridium septicum</i> , <i>Clostridium perfringens</i> and <i>Staphylococcus aureus</i> .	No	Present
Hexamitiasis	<i>Hexamita meleagridis</i>	No	Present
Histomoniasis (Blackhead)	<i>Histomonas meleagridis</i>	No	Present
Infectious coryza	<i>Haemophilus paragallinarum</i>	No	Exotic
Miscellaneous bacterial diseases	<i>Acinetobacter</i> spp.	No	Present
	<i>Actinobacillus</i> spp.	No	Present
	<i>Arcanobacterium pyogenes</i>	No	Present
	<i>Aegyptianella</i> spp.	No	Exotic
	<i>Aeromonas</i> spp.	No	Present
	<i>Arcobacter</i> spp.	No	Present
	<i>Bacillus</i> spp.	Yes	Exotic
	<i>Bacteroides</i> spp.	No	Present
	<i>Borrelia</i> spp.	No	Exotic
	<i>Brucella</i> spp.	Yes	Exotic
	<i>Citrobacter</i> spp.	No	Present
	<i>Coenonia anatine</i>	No	Exotic

APPENDIX 2 (CONTINUED)

Disease	Agent (hazard)	OIE notifiable	NZ status	
Other diseases (cont)				
Miscellaneous bacterial diseases (continued)	<i>Coxiella burnetii</i>	Yes	Exotic	
	<i>Enterobacter</i> spp.	No	Present	
	<i>Flavobacterium</i> spp.	No	Present	
	<i>Francisella tularensis</i>	No	Exotic	
	<i>Helicobacter</i> spp.	No	Present	
	<i>Klebsiella</i> spp.	No	Present	
	<i>Lactococcus</i> spp.	No	Present	
	<i>Lawsonia intracellularis</i>	No	Present	
	<i>Listeria monocytogenes</i>	No	Present	
	<i>Megabacteria</i>	No	Present	
	<i>Moraxella</i> spp.	No	Present	
	<i>Mycobacterium avium</i> subsp <i>paratuberculosis</i>	Yes	Exotic strains	
	<i>Neisseria</i> spp.	No	Present	
	<i>Nocardia</i> spp.	No	Present	
	<i>Peptostreptococcus</i> spp.	No	Present	
	<i>Planococcus</i> spp.	No	Exotic	
	<i>Plesiomonas</i> spp.	No	Present	
	<i>Proteus</i> spp.	No	Present	
	<i>Pseudomonas aeruginosa</i>	No	Present	
	<i>Rothia</i> spp.	No	Present	
	<i>Vibrio</i> spp.	No	Present	
	Mycoplasmosis	<i>Mycoplasma gallisepticum</i>	Yes	Present
		<i>M. meleagridis</i>	No	Exotic
<i>M. synoviae</i>		Yes	Present	
<i>M. iowae</i>		No	Exotic	
<i>M. anseris</i>		No	Exotic?	
<i>M. cloacale</i>		No	Exotic?	
<i>M. gallinaceum</i>		No	Exotic?	
<i>M. gallinarum</i>		No	Exotic?	
<i>M. imitans</i>		No	Exotic?	
<i>M. pullorum</i>	No	Exotic?		
Necrotic enteritis	<i>Clostridium perfringens</i> , <i>Clostridium difficile</i> .	No	Present	
Ornithobacteriosis	<i>Ornithobacterium rhinotracheale</i>	No	Exotic	
Paratyphoid salmonellae	<i>Salmonella</i> Enteritidis, <i>Salmonella</i> Typhimurium and others	No	Exotic	
	<i>Chlamydophila psittaci</i>	Yes	Exotic strains	
Pullorum disease	<i>Salmonella</i> Pullorum	Yes	Exotic	
Sarcocystosis	<i>Sarcocystis</i> spp.	No	Present	
Staphylococcosis	<i>Staphylococcus</i> spp.	No	Present	
Streptococcosis	<i>Streptococcus</i> spp.	No	Present	
Toxoplasmosis	<i>Toxoplasma gondii</i>	No	Present	
Trichomoniasis	<i>Trichomonas gallinae</i>	No	Present	
Ulcerative enteritis (quail disease)	<i>Clostridium colinum</i>	No	Present	