

## **A DECLARATION OF COMMITMENTS MADE BY THE AUSTRALIAN WOOL AND SHEEP INDUSTRY TASKFORCE IN RELATION TO ANIMAL WELFARE AND THE PHASING OUT OF MULESING**

This Declaration sets out for the National Retail Federation (NRF) and its member companies in the US retail industry the Australian Wool and Sheep Industry Task Force's commitment and plans to phase out the blowfly strike prevention procedure known as mulesing.

1. The Australian Wool and Sheep Industry Task Force aspires to produce wool in a way which alleviates animal discomfort to the greatest extent practicable, which ensures the sustainability of the environment in which it is grown and which minimizes and, in the longer term, ultimately eliminates the need for chemicals in its production and processing.
2. Wool is a naturally occurring and produced fiber with well-established benefits for wearers of woollen apparel. For these reasons, it is highly desirable to continue to offer consumers apparel made from wool.
3. Australian woolgrowers must comply with Australia's animal health and welfare standards which are among the most stringent in the world and are set out under State Acts of Parliament (refer Attachment 3).
4. A new Code of Practice and new Guidelines for mulesing are currently being finalised by the Australian Government and the Australian Wool Industry. Among other matters, they set out how the procedure should be conducted and require, for the first time ever, that all personnel who are to perform the procedure be accredited by 31 December 2006.
5. The Australian Wool and Sheep Industry Task Force has resolved that mulesing will be phased out by the end of 2010 or sooner if viable alternatives become available prior to that date.
6. In the meantime, the Australian Wool and Sheep Industry Task Force will adopt the use of painkilling products when such products are proven to be efficacious, practical to administer and commercially available..
7. Research and development into alternatives to mulesing and, more generally, into blowfly control, has been conducted over decades and has reached the point where there is scientific confidence that viable alternatives to mulesing can be developed within the targeted timeframe.
8. Australian Wool Innovation Limited (AWI), the research and development arm of the Australian Wool and Sheep Industry Task Force, has committed to spend AUD\$15 million over the period 2004-2007 in research and development to bring acceptable alternatives to mulesing to the industry. The research and development projects being funded include the development of pain relief products; the development of an animal pharmaceutical product based on a naturally occurring protein, collagenase, which results in bare skin in the area to which it is applied, together with tightening of the skin in that area; the development of a non-invasive, bloodless skin wrinkle removal technology; research into other agents that may deliver a similar result to mulesing and to collagenase; separate projects with four companies to develop applicators for collagenase or other agents; research into genetic solutions to breed blowfly resistant merino sheep; and research into technologies to control and

manage the blowfly. The details of these projects, together with their status as at 2 September 2005, are set out in Attachment 1.

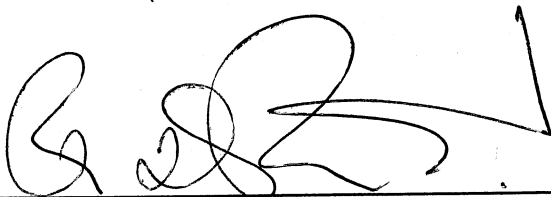
9. AWI will actively strive to fast-track these projects so that the phase-out could possibly be implemented before 2010 and will provide funding additional to the \$15 million already committed should new projects be identified.
10. The Australian Wool and Sheep Industry Task Force will provide quarterly reports of progress, verified by the Australian Veterinary Association (AVA), to NRF and its member companies in the US retail industry. It is intended that every second quarterly report will involve a face to face meeting in the United States and to include managers involved in the research, unless otherwise agreed.
11. Once an effective alternative to mulesing has been developed and registered, if necessary for its adoption, the Australian Wool and Sheep Industry Taskforce will submit a mulesing phase-out plan which will include specific and quantified target reductions to the mulesing of merino lambs.

The **Australian Wool and Sheep Industry Taskforce** draws members from the major peak bodies representing the industry including the National Farmers Federation, WoolProducers, Australian Wool Innovation Limited, Australian Wool Services Limited, Federation of Australian Wool Organisations, Meat and Livestock Australia Limited, Sheepmeats Council of Australia, the Live Exporters Council and Livecorp. The Australian Government participates as an observer. WoolProducers, which represents over 14,000 woolgrower members and Australian Wool Innovation Limited, which manages the wool industry's research and development funds, are the two signatories to this Declaration on behalf of the Taskforce.



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Ian McLachlan (Chairman, Australian Wool Innovation Limited)



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Robert Pietsch (National President, WoolProducers)

## AUSTRALIAN WOOL INNOVATION PROJECT DETAILS AND STATUS (as at 2 September 2005)

Title	Budget (AU\$)	Research partner	Aims	Status
Development of collagenase	\$266,291 over 6 months, plus \$1.372m over 5 years for additional staffing support	<ul style="list-style-type: none"> <li>University of Adelaide</li> </ul>	<ul style="list-style-type: none"> <li>Continued development of collagenase as an intradermal treatment to replace mulesing (depth, spacing, type of collagenase, field testing etc)</li> </ul>	<ul style="list-style-type: none"> <li>Treatment parameters virtually complete. We have been blocked from importing certain types of collagenase by the Aust Quarantine and Inspection Service because of concern over risk of BSE-infected material in product. This raises potential cost issues.</li> </ul>
Formulation of collagenase	\$100,747 over 12 months	<ul style="list-style-type: none"> <li>Victorian College of Pharmacy (Monash University)</li> </ul>	<ul style="list-style-type: none"> <li>Develop a commercial formulation for collagenase (to ensure safety, stability etc)</li> </ul>	<ul style="list-style-type: none"> <li>Late starting, but progressing. May be diverted to other actives as we need to.</li> </ul>
Feasibility of other intradermal treatments	\$60,000 over 6 months	<ul style="list-style-type: none"> <li>Veterinary Health Research</li> </ul>	<ul style="list-style-type: none"> <li>Establish the feasibility of using a range of other compounds as intradermal treatments to replace mulesing (backups for collagenase)</li> </ul>	<ul style="list-style-type: none"> <li>Progressing well – have established initial proof-of-concept for two alternative compounds. Now entering the next phase of feasibility studies (optimal dose, depth, spacing etc). Good candidates will be tested in field trials in October.</li> </ul>
Needle-less injector (1)	\$229,500 (to date); next phase \$181,000 if commenced	<ul style="list-style-type: none"> <li>Norwood Abbey</li> </ul>	<ul style="list-style-type: none"> <li>Develop a device for the intradermal injection of mulesing alternative agents</li> </ul>	<ul style="list-style-type: none"> <li>Progress slower than hoped, but a proof-of-concept device has worked well on live sheep. Aiming for prototype to be evaluated in October field trials.</li> </ul>
Needle-less injector (2)	Approx \$55,000 over 3 months	<ul style="list-style-type: none"> <li>Confidential</li> </ul>	<ul style="list-style-type: none"> <li>Develop a device for the intradermal injection of mulesing alternative agents</li> </ul>	<ul style="list-style-type: none"> <li>This international supplier only recently identified, but a very promising candidate as the company already has needle-less applicators on the animal health market. Prototype devices due by October for field testing.</li> </ul>
Needle-less injector (3)	\$62,500 (committed to date – will require further funds for full development)	<ul style="list-style-type: none"> <li>Confidential</li> </ul>	<ul style="list-style-type: none"> <li>Develop a device for the intradermal injection of mulesing alternative agents</li> </ul>	<ul style="list-style-type: none"> <li>Device progressing well. May have prototype ready for October field trials.</li> </ul>

Injection device using needles	\$351,000 (committed to date – will require further funds for full development)	<ul style="list-style-type: none"> <li>• Invetech</li> </ul>	<ul style="list-style-type: none"> <li>• Develop a device for the intradermal injection of mulesing alternative agents</li> </ul>	<ul style="list-style-type: none"> <li>• Progressing well, with proof-of-concept device already working. Prototype will be ready for field trials in October.</li> </ul>
Field trials of intradermal alternatives to mulesing	Approx \$320,000 (still under negotiation)	<ul style="list-style-type: none"> <li>• Veterinary Health Research</li> <li>• Agrisearch</li> </ul>	<ul style="list-style-type: none"> <li>• Compare, establish efficacy of, and identify practical problems associated with new intradermal mulesing alternatives on commercial farms</li> </ul>	<ul style="list-style-type: none"> <li>• In planning, to commence October. Expect to have three actives and 2-3 applicators under evaluation.</li> </ul>
Revisiting the mules operation	\$301,900 over 3 years	<ul style="list-style-type: none"> <li>• University of Sydney</li> </ul>	<ul style="list-style-type: none"> <li>• Establish precisely how mulesing works, and develop simpler patterns for use with the new products</li> </ul>	<ul style="list-style-type: none"> <li>• Commenced recently, no major results yet.</li> </ul>
Welfare impacts of mulesing alternatives	\$251,645 over 18 months	<ul style="list-style-type: none"> <li>• Animal Welfare Science Centre (Department of Primary Industries Vic)</li> </ul>	<ul style="list-style-type: none"> <li>• Establish the welfare impacts of various candidate mulesing alternatives on sheep in comparison with mulesing</li> </ul>	<ul style="list-style-type: none"> <li>• Will commence in September or October.</li> </ul>
Development of bloodless wrinkle removal technology	\$310,930 (committed to date – will require further funds for full development)	<ul style="list-style-type: none"> <li>• Various (confidential)</li> </ul>	<ul style="list-style-type: none"> <li>• Establish the efficacy and animal welfare impacts of the bloodless wrinkle removal technology</li> </ul>	<ul style="list-style-type: none"> <li>• Preliminary study of welfare impacts completed, with results showing significant reduction in pain compared to mulesing; efficacy trials under commercial conditions conducted during August, first major results expected October.</li> </ul>
Evaluation of breeding to reduce breech strike susceptibility	\$1,978,368 over 5 years	<ul style="list-style-type: none"> <li>• Western Australian Department of Agriculture</li> <li>• CSIRO Livestock Industries</li> </ul>	<ul style="list-style-type: none"> <li>• Determine whether breech-strike resistant sheep can be bred and, if so, the time it takes, trade-offs with other traits and degree of resistance</li> </ul>	<ul style="list-style-type: none"> <li>• Contracts just finalised, project commencing September in two states.</li> </ul>
Development of a standardised breech scoring system	\$65,000 over 4 months	<ul style="list-style-type: none"> <li>• Currie Communications</li> </ul>	<ul style="list-style-type: none"> <li>• Develop and publish a standard system for describing breech traits of importance to flystrike (for use in breeding programs)</li> </ul>	<ul style="list-style-type: none"> <li>• Progressing well, despite difficulties obtaining appropriate photographs to illustrate scores. Due for publication in November.</li> </ul>

Integrated parasite management – sheep	\$2.683 million over 4 years	<ul style="list-style-type: none"> <li>University of New England</li> <li>Department of Agriculture Western Australia</li> <li>University of Melbourne</li> <li>Department of Primary Industries Queensland</li> </ul>	<ul style="list-style-type: none"> <li>Validation and demonstration of IPM systems in a range of environments (flytraps, resistant sheep, strategic jetting, etc), better understanding of blowfly ecology</li> </ul>	<ul style="list-style-type: none"> <li>Progressing well – first full year completed on the 22 participating farms. Some may start to trial 'no-mules' or 'low-mules' systems.</li> </ul>
Biocontrol of flies and lice (1)	\$72,000 over 1 year	<ul style="list-style-type: none"> <li>Department of Primary Industries Queensland</li> </ul>	<ul style="list-style-type: none"> <li>Proof-of-concept for biocontrol of flies and lice using microscopic worms</li> </ul>	<ul style="list-style-type: none"> <li>Progressing well. Will not provide an alternative to mulesing, but a possible component of an integrated approach to blowfly control.</li> </ul>
Biocontrol of flies and lice (2)	\$301,000 over 2 years	<ul style="list-style-type: none"> <li>Department of Primary Industries Queensland</li> </ul>	<ul style="list-style-type: none"> <li>Proof-of-concept for biocontrol of flies and lice using fungi</li> </ul>	<ul style="list-style-type: none"> <li>Progressing well. Will not provide an alternative to mulesing, but a possible component of an integrated approach to blowfly control.</li> </ul>
Blowfly genomics	\$1.482m over 3 years	<ul style="list-style-type: none"> <li>University of Melbourne</li> <li>Massey University (NZ)</li> </ul>	<ul style="list-style-type: none"> <li>Mapping of the sheep blowfly genome and identification of new targets for insecticides and vaccines</li> </ul>	<ul style="list-style-type: none"> <li>Progressing well, although technical problems encountered with an early milestone, which should not affect progress. Will not deliver blowfly solutions for 10 years but may open enormous possibilities then.</li> </ul>
Mulesing guidelines and accreditation	\$260,000 over 9 months already spent in first phase; cost of next phase to be confirmed	<ul style="list-style-type: none"> <li>To be confirmed</li> </ul>	<ul style="list-style-type: none"> <li>National training and accreditation program for mulesing operators</li> </ul>	<ul style="list-style-type: none"> <li>Revised plan for program expected soon.</li> </ul>
Diagnosis of insect growth regulator resistance	\$157,000 over 2 years	<ul style="list-style-type: none"> <li>Department of Primary Industries New South Wales</li> <li>Department of Primary Industries Queensland</li> </ul>	<ul style="list-style-type: none"> <li>Tests to diagnose and manage fly resistance to the IGR group of insecticides</li> </ul>	<ul style="list-style-type: none"> <li>Progressing well. Work to date has shown that flies resistant to one particular chemical are not necessarily resistant to others, which is good news.</li> </ul>

<p>Pain relief for mulesing</p>	<p>\$100,000 over 4 months already spent; this phase \$97,000 over 3 months</p>	<p>• CSIRO Livestock Industries</p>	<p>• Proof-of-concept for analgesia during mulesing using pain relief drugs</p>	<p>• First trial of 2 drugs was unsuccessful in controlling pain. Current phase expands the number of drugs under evaluation. Research trial completed, data analysis underway and will be complete late October.</p> <p>• Progressing well.</p>
<p>Investigation of the crutchless mutation</p>	<p>\$87,000 over 2 years</p>	<p>• University of Adelaide</p>	<p>• Determine mode of inheritance for crutchless mutation ('bare-bum' sheep found in a South Australian stud flock)</p>	

## MULESING PHASE-OUT 2010

## INTERIM MILESTONES

Date	Milestone	Measure of Success
September 2005	Bloodless skin wrinkle removal technology – limited field trials and commercial partner appointed	Trials commenced and partner appointed
December 2005	<p>At least two proof-of-concept applicators ready for field trials of collagenase</p> <p>Bloodless skin wrinkle removal technology full scale trials</p> <p>Complete feasibility trials on a range of pain relief agents</p> <p>Scoring system and guidelines for breeding sheep with low breech flystrike susceptibility released</p>	<p>Applicators demonstrated</p> <p>Trials conducted</p> <p>Publication of list of pain relief agents for detailed study</p> <p>Scoring system launched and widely available</p>
March 2006	Alternatives to collagenase developed	Commencement of commercialisation
June 2006	<p>Bloodless skin wrinkle removal technology in commercial use</p> <p>Preliminary field trials of collagenase and prototype applicator(s) completed</p> <p>Formulation of collagenase complete</p> <p>Commercial partner identified, registration trials commenced</p>	<p>Commercial availability and industry take-up</p> <p>Publication of report detailing results from treatment of up to 1000 lambs</p> <p>Details of formulation held by AWI</p> <p>Agreement signed with commercial partner, written confirmation from AWI that trials have commenced</p>
December 2006	<p>Detailed studies of pain relief options completed and, <i>if any are feasible</i>, agreement signed with commercial partner to launch the product onto the sheep market</p> <p>Mulesing accreditation completed</p>	<p>Publication of report; agreement signed with commercial partner</p> <p>Register and accreditation completed</p>
March 2007	Effective analgesia for mulesing	Registered product on the market
June 2007	<p>Registration dossier completed and lodged with Australian Pesticides and Veterinary Medicines Authority (if required)</p> <p>Applicator(s) fully transferred to</p>	<p>Written confirmation of receipt of dossier from APVMA</p> <p>Confirmation from commercial partner that applicator is ready for</p>

	manufacture and available on the market	large-scale manufacture
December 2007	First lambs born to specially selected ewes in breeding trial, preliminary comparisons available	Publication and extension to sheep breeders of preliminary comparisons
June 2008	At least one alternative to mulesing is launched to limited market (controlled commercial use while impacts fully evaluated)	Product is available on a limited commercial basis
June 2009	At least one alternative to mulesing launched  Project to test 'no-mules' husbandry alternative husbandry systems completed	Product is available on an unlimited commercial basis  Alternative husbandry systems for some wool production systems / geographic areas identified and extended
December 2009	Detailed results from breeding trial available (first drop of lambs 2 years of age)	Publication and extension to sheep breeders of detailed comparisons

## AUSTRALIAN ANIMAL WELFARE LEGISLATION

State or Territory	Act(s) title	Code title	Government department responsible for animal welfare legislation and codes
New South Wales	Prevention of Cruelty to Animals Act 1979 - Sect 24 (POCTA +)	Model Code of Practice for the Welfare of Animals: The Sheep	NSW Department of Primary Industries <a href="http://www.dpi.nsw.gov.au">www.dpi.nsw.gov.au</a>
	Veterinary Surgeons Act 1986 Sect 44		
	Veterinary Practice Act 2003 Schedule 1		
Western Australia	Animal Welfare (General) Regulations 2003*	Model Code of Practice for the Welfare of Animals: The Sheep	WA Department of Local Government and Regional Development <a href="http://www.dlgrd.wa.gov.au">www.dlgrd.wa.gov.au</a> Ph: (08) 9217 1500 or Free call: 1800 620 511
	Animal Welfare Act 2002+		
	Veterinary Surgeons Act 1960 - Sect 26		
Victoria	Prevention of Cruelty to Animals Act 1986 POCTA*	Code of accepted farming practice for the welfare of sheep	Victorian Department of Primary Industries <a href="http://www.dpi.vic.gov.au">www.dpi.vic.gov.au</a>
South Australia	Veterinary Surgeons Regulations 2002 - Reg 5 Prevention of Cruelty to Animals, 1986*	Model Code of Practice for the Welfare of Animals: The Sheep – this is in Regs of POCTA Act	Department of Environment and Heritage <a href="http://www.environment.sa.gov.au">www.environment.sa.gov.au</a>
Tasmania	Veterinary Surgeons Regulations 1988 - Reg 4 Animal Welfare Act 1993	Animal Welfare Standard No 1 - Sheep	Tasmanian Department of Primary Industries, Water & Environment 1300 368 550 or (03) 6233 8011 <a href="http://www.dpiwe.tas.gov.au">www.dpiwe.tas.gov.au</a>
Queensland	Veterinary Surgeons Regulation 2002 - Sect 3 Animal Care & Protection Regulations 2002* Animal Care and Protection Act 2001	Model Code of Practice for the Welfare of Animals: The Sheep	Queensland Department of Primary Industries and Fisheries <a href="http://www.dpi.qld.gov.au/animalwelfare">www.dpi.qld.gov.au/animalwelfare</a>
Australian Capital Territory	Animal Welfare Regulation 2001 Animal Welfare Act 1992	Model Code of Practice for the Welfare of Animals: The Sheep	Environment ACT: The Animal Welfare Authority (02) 6207 2249 <a href="http://www.environment.act.gov.au">www.environment.act.gov.au</a>
Northern Territory	Veterinarians Regulations – Sect 6 Animal Welfare Act (March 2000)	Model Code of Practice for the Welfare of Animals: The Sheep	Northern Territory Department of Primary Industry <a href="http://www.primaryindustry.nt.gov.au">www.primaryindustry.nt.gov.au</a>