APPENDIX SIX

MID TERM REVIEW OF THE NATIONAL OVINE JOHNE'S DISEASE CONTROL AND EVALUATION PROGRAM EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

Overview

Ovine Johne's disease (OJD) is an insidious but significant disease that has the potential to cause high mortalities in infected flocks over time. Clinical manifestation of the disease appears to be linked to a number of integrated factors relating to level of bacterial infection on individual and groups of farms, nutritional status, parasitic burdens and other management factors.

There is still limited understanding among the Australian sheep industry and broader community of the disease and its causes. This is mainly due to the technical difficulties in early detection and the lack of epidemiological understanding of how the disease spreads. This poor understanding and the complexity of the disease has facilitated the promulgation of misinformation about the disease and its impacts.

The Review Team was encouraged by the substantial progress that had been made in a number of key areas in the Research and Development Program, notably the Pooled Faecal Culture test, screening tests, survival of *M. paratuberculosis* in the environment, Gudair vaccination, epidemiology and the use of tracer weaners.

Overall, there is majority support for the National Ovine Johne's Disease Control and Evaluation Program (NOJDP) from signatories to the Deed of Agreement. But it is clear that nationally, OJD cannot be eradicated in the short to medium term. A recent analysis of surveillance data has indicated that the disease is still at a relatively low prevalence in Australia. Even in New South Wales, the number of infected flocks is estimated at between six to eight percent of total flocks.

However, there was widespread agreement that the national goal should be for the long term eradication of the disease to place the industry in the best position for the future. This is partially driven by a new global precautionary approach to the safety and wholesomeness of the human food supply in the wake of bovine spongiform encephalopathy experiences in Europe.

Being mindful of the distress suffered by graziers in areas of high prevalence of the disease, the Review Team suggests continuation of the NOJDP subject to changes recommended throughout this report.

The Review Team believes that the long-term goal be the eradication of ovine Johne's disease from Australia, subject to regular review as outcomes from the NOJDP are assessed.

In order to enhance producer confidence in the overall NOJDP, especially in New South Wales and Victoria, the Review Team recognises that significant changes to the current "top down" regulatory process need to be made.

Given that the sheep industry is almost universally supportive of continuing a control program, there is a need to provide the appropriate incentives for individual producers

to want to actively manage their risk of exposure or potential exposure to the disease. It is in the national interest of all parties concerned that some financial support is offered from the national sheep industry to those affected. Without such help, the lack of goodwill will continue to frustrate the sheep industry's capacity to keep the disease in check.

The Review Team believes that the national sheep industry needs to agree to a national levy on both wool and sheepmeats along the lines suggested in the Animal Health Australia Report on National Assistance Measures for OJD, prepared by ACIL Consulting.

These funds could be used to assist affected producers within the Residual Zone with the cost of the vaccine and the provision of risk management planning and advice. In addition, some funds could be used to assist with destocking in areas where infection is minimal and a move to Protected status is being sought.

In the Residual and Control Zones it is essential to improve the management tools available for producers with infected or suspect flocks. Continuing research, improved on-property management and a managed risk approach will help provide a way forward for these producers.

The Review Team believes that processes should be set in place immediately to make the Gudair killed vaccine widely available to all producers in the Residual Zones accompanied by an education program on the use of the vaccine and the consequences of its use.

State and Commonwealth authorities should develop advisory programs aimed at developing integrated whole farm management plans for affected producers or producers in high-risk situations.

The Review Team strongly supports the introduction of a mandatory vendor declaration scheme as soon as possible to assist with industry self-regulation (comanagement) of the sheep trade.

Additionally, areas where only isolated cases of the disease are known should be encouraged to continue to apply the necessary operations to meet the agreed eligibility requirements for Protected Zone status.

All of the above should be implemented as soon as possible. The success of these changes will be significantly enhanced with the financial assistance recommended.

1.2 Key Factors for Future Success of the NOJDP

In addition to its recommendations, the Review Team identified the following critical success factor for the future of the NOJDP:

• The key success factor to achieving results by 2004 is to gain producer support and confidence in the revised NOJDP as suggested in this Review.

In order to achieve producer support and commitment the following key success factors will need to be given emphasis in any revised NOJDP:

- A. The provision of financial, managerial and social assistance is essential for affected producers.
- B. Improved property disease management programs, including the use of vaccination in high prevalence areas to control disease and lateral spread must be adopted.
- C. Widespread consultation and communication with affected producers with regard to all aspects of the revised program, will be critical.

1.3 Review Findings

During the review process a range of issues were raised that were used as the basis for our analysis and recommendations. These issues led to certain findings that are presented as background to the remainder of the Report and its recommendations. The findings are listed under each of the Review's Terms of Reference.

Findings

NOJDP Purpose

- The overall purpose stated in the Deed of Agreement was supported by Parites to the Deed and remains relevant.
- The stated purpose of accumulating sufficient information by July 2004 to make an informed decision on future national management of OJD is achievable.
- Feasible, cost-effective eradication of the disease in central and southern high prevalence regions in NSW and other high prevalence areas is not achievable in the short to medium term.
- In low prevalence areas, eradication measures are likely to be feasible.
- Current evidence suggests that control of spread of OJD in certain parts of Australia has not been achieved.

NOJDP Objective (a) – Research and Development

• The objective of evaluating existing and potential methods for detecting, controlling and eliminating ovine strains of M. paratuberculosis from

- infected sheep, properties and regions of Australia remains relevant and supported.
- Progress on detection has been achieved through application of abattoir surveillance and use of better tests such as Pooled Faecal Culture. Work will need to continue to address the key limiting factors of:
 - Opposition by individual producers to test;
 - Long delay in confirming infection using current test methods (PFC);
 - Absence of a suitable individual animal test; and
 - Apparent insufficient resources in certain jurisdictions.
- Desirable progress on control will require engendering producer support:
 - In high prevalence areas through wider availability of vaccine, trade facilitation and closer consultation;
 - Through assistance measures, social support and integrated management approaches; and
 - For a national sheep identification system and mandatory use of an appropriate vendor declaration.
- The majority of Australia's sheep producers support:
 - the eradication of the disease from free or low prevalence areas of Australia; and
 - containment and progressive eradication in the high prevalence areas.
- Successful eradication of the organisms subject to information from continued research on survival of the organism in the environment and in its hosts.

NOJDP Objective (b) – Disease Prevalence

- OJD is an insidious disease that has the potential to cause significant mortalities over time.
- The prevalence of OJD nationally has been estimated and distribution broadly defined¹, but considerably more intensive surveillance and testing is required to determine more accurately the local boundaries of the disease.
- Factors limiting knowledge on the extent of the disease include:

¹ 2001 Animal Health Australia consultancy on analysis of OJD surveillance results.

- Incomplete trace-forward and trace-back;
- Lack of a national sheep identification system and movement records:
- Variation in level of surveillance testing in difference jurisdictions and prevalence areas;
- Producers unwilling to test;
- Slowness in PFC testing procedures;
- Lack of appreciation of the importance of lateral spread; and
- Unrestricted movement of unidentified infected sheep.
- While the Program has reduced the rate of spread, it has not achieved the objective of minimising spread in some high prevalence and adjoining areas to date.

NOJDP Objective (c) - Management of NOJDP

- Animal Health Australia is responsible for overall program management and coordination, but not implementation.
- States have approached operational aspects of disease control differently, based on perceived prevalence.
- Current arrangements are very complicated with 'distributed management' and accountability that has contributed to lack of understanding at the producer level and lack of focus on clear national goals.

NOJDP Objective (d) – Communication

- Most Producers appeared to understand and support the objectives of the NOJDP.
- Communication has failed to keep the sheep industry full briefed on NOJDP processes and outcomes, including information about the disease, which has limited the effectiveness of the Program and led to considerable negative publicity about the NOJDP.
- There has been limited feedback to producers on important negative results from abattoir surveillance mainly due to the lack of sheep ID.

Policies and Programs

- Indications from the Parties to the Deed were that the current policies and programs defined in the Deed of Agreement and NOJDP Business Plan remain largely relevant and generally supported.
- Some recommendations from this Review may require negotiation for changes in existing policies and priorities. Producers and some agencies

- are seeking agreement for immediate widespread availability of vaccine in high prevalence areas.
- Adoption of new surveillance and test approaches is building confidence that the disease can be contained and eradication/improved status appears feasible in certain jurisdictions.
- There as been severe socio-economic impact on affected producers as a result of implemented control measures.
- The Review Team supports the majority view that the NOJDP should continue, but that a number of essential changes identified in this report should be implemented.

1.4 Review Recommendations

Recommendations

Recommendation 1	Being mindful of the distress suffered by graziers in areas of high prevalence of the disease, that the NOJDP continue, subject to changes recommended throughout this report.
Recommendation 2	That the funding formulas as agreed in the Business Plan form the basis for funding the remainder of the NOJDP to 2004.
Recommendation 3	That the Program Advisory Committee address the issue of the variation between states in charging overheads with a view to developing an agreed uniform national rate.
Recommendation 4	That the Program Advisory Committee review the current budget allocation and reporting processes under the business plan to improve flexibility in implementing programs and to optimise outcomes.
Recommendation5	That the NSW Agriculture and the RLPBs, and other states as necessary, ensure the provision of adequate field staff for program delivery and on-property disease management advice given that adequate funds are available from the Program.
Recommendation 6	That the states be required to meet their reporting accountability obligations as per the Deed of Agreement and MLA be required to meet its reporting obligations defined in its contract with Animal Health Australia.
Recommendation 7	That Animal Health Australia fully reviews the budget needs of the NOJDP to 2004.

Recommendation 8	That Animal Health Australia, in re-examining what funding they now estimate will be needed until 2004, investigate the potential to reallocate some of any savings identified from the revised budget estimates to providing assistance for onproperty disease management and control for infected producers.		
Recommendation 9	That Animal Health Australia re-examine the NOJDP Deed of Agreement and Business Plan with respect to the lack of flexibility of fund allocation between programs.		
Recommendation 10	That Animal Health Australia reviews its approach to management, its management structure and delegations in order to ensure a national focus by all parties involved in the NOJDP is achieved.		
Recommendation 11	That Animal Health Australia review the Terms of Reference and membership of the Program Advisory Committee to ensure a greater focus on national goals, policy matters and financial accountability.		
Recommendation 12	That Animal health Australia consider appointing a full time manager of the NOJDP to manage national program delivery, budgets, accountability of outcomes and to ensure a coordinated national focus on the Program.		
Recommendation 13	That the NOJDP recognise that the key contact person in each state be the Chief Veterinary Officer through the state coordinators.		
Recommendation 14	That Animal Health Australia consider the desirability of disbanding the NJDILC while ensuring other industry representation is preserved, possibly through membership of the Program Advisory Committee.		
Recommendation 15	That Animal Health Australia investigates the use of unspent restocking incentive funds to assist destocking and restocking the low number of infected flocks in the current Control Zone of NSW to assist the movement to improved status.		
Recommendation 16	That current moves to implement a national sheep identification system under the National Livestock Identification System to support disease control and surveillance activities continue.		

Recommendation 17	That the National JD Coordinator facilitate national debate and agreement between sheep breed studs, Vet Command other relevant groups for adoption of the Pooled Faecal Culture test as the national test for the SheepMAP.
Recommendation 18	That Animal Health Australia request SCARM to facilitate the development of a national information system for the collection and analysis of disease data.
Recommendation 19	That Animal Health Australia seek advice from its Animal Disease Surveillance Program experts to ensure that OJD data is collected and recorded in a consistent and reliable way across all jurisdictions.
Recommendation 20	That Animal Health Australia work with Veterinary Committee to establish the optimum surveillance requirements for low, medium and high prevalence OJD areas, using abattoir surveillance and other approved methods.
Recommendation 21	That the NOJDP Business Plan support strategic flock surveillance to delineate boundaries of infection within the control zone.
Recommendation 22	The NOJDP should continue to protect free and low prevalence zones from the spread of Infection.
Recommendation 23	That QLD, SA western VIC and some of the existing Control Zone of NSW continue to apply the necessary operations to meet the agreed eligibility requirements for Protected Zone status by July 2002.
Recommendation 24	That funding be considered through the Research and Development Program for the investigation of the potential role and development of Infected Flock Profiles.
Recommendation 25	That a mandatory vendor declaration scheme for all sheep transactions be introduced.
Recommendation 26	That the long-term goal be the eradication of ovine Johne's disease from Australia, subject to regular review as outcomes from the NOJDP are assessed.

Recommendation 27	In the short to medium term, emphasis for infected properties in high prevalence areas should be on disease management rather than eradication.
Recommendation 28	That all necessary steps be taken to facilitate discussions with the National Registration Authority for Agriculture and Veterinary Chemicals for revision of the current NSW permit to extend the use of the Gudair OJD vaccine, while recognising the importance of completing necessary trials for registration.
Recommendation 29	In line with the Animal Health Australia Report on National Assistance Measures for OJD, prepared by ACIL Consulting, that the Wool Council of Australia and the Sheepmeat Council of Australia work with the Commonwealth Government's Agriculture, Fisheries and Forestry Australia to progress implementation of a national transaction levy and an increased wool levy for the NOJDP, including new assistance measures for infected producers.
Recommendation 30	That the NOJDP Business Plan be modified to make provision for non-financial assistance such as counselling or the facilitation of catchment or local area groups of infected producers.
Recommendation 31	Providing that some meaningful assistance to producers with infected flocks becomes available, it is recommended that a number of significant changes be made to the existing NOJDP to gain producer support and to better control the spread of the disease. These changes involve:
	 availability of vaccine property management planning to minimise disease impact and spread access to social support measures support for eradication of infected flocks in low prevalence areas management plans for studs support for group and catchment management programs destocking infected flocks in low prevalence areas.
Recommendation 32	That where the NOJDP requires destocking, appropriate assistance measures should be provided.

Recommendation 33	In recognition that there are sufficient funds available, it is recommended that appropriate numbers of staff are employed by the relevant governments to ensure timely traceforward/trace-back activities and to service the additional activities required for adoption of Mid Term Review recommendations.
Recommendation 34	That MLA, Animal Health Australia and representatives from Sheepmeat Council Australia and Wool Council Australia meet to clarify the amount of funds available for OJD R&D and who has prime responsibility for the custodianship.
Recommendation 35	That coordination and management of OJD R&D be strengthened through:
	• Appointment of a national R&D coordinator by Animal Health Australia to be responsible directly to Animal Health Australia; and
	A new management agreement with MLA for their administration and budget control of approved R&D trials.
Recommendation 36	That the R&D coordinator proposed in Recommendation 35 be a member of the TSC of Program Advisory Committee.
Recommendation 37	The membership of TSC be reviewed by Program Advisory Committee to ensure that it has the most appropriate people to make recommendations on the R&D needs and priorities.
Recommendation 38	That consideration be given to encouraging greater participation by research groups throughout Australia through a tender process for selected OJD problem areas that require definition.
Recommendation 39	That Program Advisory Committee and its TSC give consideration to the following points when deciding on future OJD research directions:
	Support basic research which is aimed at increasing our understanding of the disease and its causative organism
	Continuing to shift the emphasis from research on strategies for eradication to strategies for the control and management of OJD
	Provide greater flexibility in funding so that resources can be shifted within the R&D program to accommodate changes in direction and emphasis.

Recommendation 40	That research be supported to improve the current available tests that support the NOJDP:		
	• Improving the Pooled Faecal Culture test by increasing the rate of growth of the organism in vitro and reduce test result times		
	• Continue to invest in improving the polymerase chain reaction test to improve specificity		
	Continue to explore novel diagnostic tests such as the gamma interferon		
	• Promote the development of a suitable test to detect early infections in individual animals.		
Recommendation 41	Animal Health Australia take the dominant role in developing a national communication and education plan and strategy and, in doing so, work closely with state coordinators to help them develop complementary plans to ensure that changes to the program are well understood and supported by the industry generally.		
Recommendation 42	Part of this strategy involve plans at state level, especially in NSW, of the process of consultation with industry in planning the details of the changes to the program in order to change past perceptions, counter current negativity and engender new support for the changes envisaged.		
Recommendation 43	Case studies of successful on-farm management of the disease should form an essential part of the communication and education program.		
Recommendation 44	Knowledge of international trends in the management of OJD should also form an essential part of the communication and education program.		
Recommendation 45	The Program Advisory Committee seek an estimate of the cost of the national and state communication plans, once developed, and ensure the remaining budget is adequate to address the needs of all states and the national program.		
Recommendation 46	That a national review be undertaken in 2004 at the end of the current NOJDP and Business Plan.		