



## SUMMARY

Meat inspection and quarantine are basic to the continued well being of the Australian meat industry. These services are the responsibility of and are delivered by the Australian Quarantine and Inspection Service (AQIS). AQIS is a modern, forward thinking organisation with a strong emphasis on accountable and efficient management. Meat inspection and quarantine are both areas in which there is an ever changing environment; there are always contemporary issues. Some of those contemporary issues are discussed below.

## INTRODUCTION

For financial year 1986/87 the Australian meat industry earned almost \$2.3 billion in export income. Its overall contribution to the Australian economy during that same year was over \$4.5 billion. Until it was surpassed in 1984 by the heavily subsidised European Community (EEC) meat industry, Australia was the world's largest exporter of meat. Australia remains the second biggest meat exporter. By any measure, the Australian meat industry is a vitally important contributor to the well being of the Australian economy. Frequently overlooked in their contribution to the Australian meat industry are two of its most important cornerstones, the functions of meat inspection and agricultural quarantine. The Australian Government's meat inspection and agricultural quarantine services are the responsibility of AQIS. AQIS operates in an area which, contrary to the perceptions of many of those who happen to think about the subject, is vital and dynamic. This paper sets out to provide a better understanding of some of the contemporary issues in meat inspection and quarantine.

## BACKGROUND

AQIS is located within the Commonwealth Department of Primary Industries and Energy. It delivers a variety of essential inspection services as well as Australia's agricultural and operational quarantine service. With a staff of approximately 3,500 located throughout Australia and overseas and managing an annual budget of almost \$142 million in 1987/88, AQIS provides the inspection and certification which enables Australia to export products worth in excess of \$12 billion. As a consumer protection body, the services it provides enables the Australian agricultural industries to market their produce, both internationally and domestically. AQIS provided quarantine services protect Australia's favourable animal health situation, which in turn enables access to foreign markets, while at the same time helping to find safe ways to allow imports. Of particular value to the meat industry is the facilitation of the introduction of new and desired genetic material, including new breeds. Relevant also to the meat industry as to the general community is the protection of human and plant health flowing from the AQIS delivered quarantine service.

## SETTING THE SCENE

Historically, the Australian meat industry was based upon low production cost and relatively inexpensive labour to convert live animals to meat. Export markets were readily available for that part of production which exceeded domestic needs. Australia, because of its favourable animal health situation, had only limited competition in "premium markets".

The contemporary scene is different. Australian livestock production remains highly efficient by international standards, while processing costs have lost some of their earlier competitive

edge. Access to markets can be subject to quotas and import duties. In some markets, imported meat has to compete against heavily subsidised domestic production, while in others it competes against other countries' subsidised offerings. While Australia's animal health status remains favourable, improvements in other producing countries and other ways of eliminating risks erode our traditional advantages. Australian meat, undoubtedly as free of residues as any in the world, is being subjected to the most intense scrutiny and being required to meet standards rarely applied by market countries to their own domestic production. The Australian meat industry is being forced to re-examine its cost base. At the same time, government is requiring "efficiency dividends" to be paid by public service bodies such as AQIS, and applying "user pays" principles to the provision of services such as meat inspection and quarantine.

The contemporary scene in meat inspection and quarantine has changed radically in recent years – and it will continue to change for the foreseeable future. The challenge is to manage that change.

## THE CONTEMPORARY ISSUES

### Residues

Residues are contaminants which are taken up by the animal during its lifetime and deposited in tissues which eventually become food. Residues may be of agricultural or veterinary chemicals, such as pasture treatments, worm treatments and antibiotics, or the likes of heavy metals originating from activities such as mining operations or industrial enterprises.

Residues are very much a contemporary issue. While Australian meat is relatively free of residues and is safe, heightened consumer awareness is leading to increased demands for assurances as to residue levels. The tendency internationally is to push residue tolerances down to the limits of detection, with increasingly sensitive test procedures being developed. Selective testing of imported meats can be used to gain trade advantages. Violative levels of residues of agricultural and veterinary chemicals almost always are the result of knowing or unknowing misuse. Australia's approach to the residues issue has involved a number of parties, including Commonwealth and State services, industry and farmer bodies and other private enterprises. An intensified national residue monitoring program has been put in place which includes trace back of animals to their origin. Where problems are identified, corrective action can be taken and this may include the quarantining of farms. Major effort has been put into the development of more rapid and cheaper residue testing procedures and this has resulted in some cases in the use of sophisticated but cheap and easy "on abattoir" tests undertaken by inspection staff.

Testing for the presence of unacceptable residues, identification of problems and their resolution, has been backed by farmer awareness programs designed to achieve correct and safe usage of agricultural and veterinary chemicals.

AQIS, along with the Department of Primary Industries and Energy's Bureau of Rural Resources, has been in the forefront of efforts to address the residue issue. The challenge now is to refine and strengthen our overall integrated approach and to harness the results of research into rapid diagnostic techniques and knowledge of chemicals.

### Modern Inspection Procedures

Meat inspection procedures in Australia's export industry have long been, and to a great extent continue to be, determined

by those in place in Australia's export markets; this has been seen as the only way of ensuring continued access to those markets. In many ways, the world's meat inspection procedures have become very traditional, with the emphasis being on the detection of signs of diseases which are relatively easy to detect but not always of great human health significance. The diseases that have been the objective of meat inspection have also not always been those relevant to the contemporary animal health situation. Further, there are significant conditions – the “invisibles” which include residues and microbiological contaminants of human health significance – which should be included among the objectives of modern meat inspection procedures which have not been addressed by traditional procedures.

There is a recognition among meat inspection authorities in a number of countries that it is no longer acceptable to undertake inspection procedures which are unnecessary, wasteful of resources, inappropriate to the particular present day animal health circumstances and less than optimal in their protection of human health. Australia has been well to the fore in urging on the international community a revised approach to meat inspection procedures, and has revised (and will continue to revise as appropriate) Australian procedures.

Yet much remains to be achieved in the way of international acceptance of modern, revised meat inspection procedures. The challenge is to gain acceptance that procedures appropriate to one set of circumstances may not be appropriate to a different set of circumstances. While there can be no argument that procedures which are optimal in one country are optimal in all countries which have identical circumstances, such identical circumstances is rarely if ever the situation. Animal health status, agricultural and veterinary needs and practices, public health standards, processing technology and the climate are just a few of the variants which need to be considered in determining optimal meat inspection procedures to achieve adequate consumer protection. The increasing recognition of this is leading to an increasing acceptance that the best, most efficient consumer protection is that which is designed by competent authorities of high integrity in meat producing countries, and of the concept of “equivalency” of standards.

AQIS is recognised internationally for its achievements in modernising meat inspection procedures, in improving the handling and sanitary processing of livestock to minimise the risk of contamination by “invisible” organisms of public health significance such as *Salmonellae*, and in pushing for international acceptance of its approach. This approach and emphasis will continue.

### **Industry Self Regulation**

Self regulation is a major contemporary issue in meat inspection, and one which is vital to the continuing existence of an internationally competitive Australian meat industry. Greater self regulation by all Australian industry is a plank of government policy and has long been a catch cry of the Australian meat industry. In meat inspection terms, self regulation comprises the meat industry putting in place systems to ensure that necessary requirements are being met and standards are being achieved, with regulatory bodies such as AQIS drawing back to a monitoring role in these areas and concentrating their efforts on their specific health inspection responsibilities.

A basic tenet of self regulation is that the industry, in return for the privilege of operating a potentially remunerative enterprise, has a responsibility to the community to act as a good corporate citizen. It is not valid for sectors of the industry to act, to the extent that they can get away with it, in ways that jeopardise the interests of the community, the consumer or the national interest. It is important to recognise that, in the meat industry, responsibility to act as a self regulating good corporate citizen is not limited to

meat processors, but equally applies to all who participate, including producers, manufacturers and sellers of agricultural and veterinary chemicals, and agricultural and veterinary professionals.

The benefit of self regulation to the meat processing industry is an increased ability to manage, to a Company's best ability, in a way which maximises productive efficiency and therefore profitability. In the delivery of its meat inspection service, AQIS is committed, both by Government policy and by inclination, to go as far as possible down the path of self regulation. What is yet to be seen is an industry wide ability to take up the challenge or, perhaps more accurately, the opportunity.

AQIS has actively promoted self regulation in the meat processing industry, and has been gratified to see the response of some processing companies. What is needed is overall, industry wide adoption of this approach.

### **Quality Control/Assurance**

The trend within leading industries within Australia is toward greater quality control, including the concept of “total quality control” (TQC). TQC is an approach which seeks to “get it right the first time” rather than assuming that some production will be defective and attempting to detect and eliminate it at the end of the production line. A key element in TQC is commitment, with every member of a company or organisation from the chief executive down being involved in identifying, analysing and realising opportunities for improved performance.

Improved quality control, with arrangements right up to and including TQC, is the trend throughout the food industries to which AQIS provides an inspection service. Of those industries, it is notable that interest in this approach has probably been least in the meat industry. Perhaps this is not surprising in view of the variability of the processing inputs, namely livestock, with which the meat industry has to cope, but this in itself underlines the value of TQC in continuing to satisfy an increasingly fastidious consumer of increasingly further processed meat.

AQIS recognises that there are not only advantages to the food industries in the increased use of quality control and quality assurance, but that there are also advantages for the service itself. These benefits manifest themselves in greater efficiency in the delivery of services, assurance of more effective control over production processes, less problems arising overseas and a more interesting job for inspection staff. Greater inspection efficiency results in decreased inspection costs, which translate into lower charges to the industry. In recognition of these issues, AQIS has established a Quality Assurance Unit in its Central Office. While the major role of this unit is the training of its own staff in quality assurance as it affects the inspection task, it also stands ready to play a part in industry wide adoption by the meat industry of an enhanced quality assurance approach.

### **International Trade**

Australia is a trading nation and a signatory to the General Agreement on Tariffs and Trade (GATT). The GATT in effect sets out rules designed to facilitate international trade and dispute settlement. Periodic discussions and negotiations under the GATT are conducted under the heading of Multilateral Trade Negotiations (or MTN). The current round of MTN negotiations, the “Uruguay Round”, has as one of its major objectives the removal of so called technical barriers to trade. Meat inspection standards and quarantine measures fall within the definition of technical barriers to trade.

Australia, in the GATT context, is a member of the so called “Cairns Group of fair trading nations”, whose objective is to act as a “third force” to the major groupings in trade negotiations. Common to all Cairns Group members is that they see themselves as disadvantaged in international trade by other countries.

agricultural trade subsidisation, unfair price support schemes and other protectionist measures. The natural instinct of a number of countries heavily dependent upon their exports of agricultural products is to work for the elimination of quarantine restrictions, thus freeing up trade. The tendency of countries which practice what Australia perceives as blatant protectionist measures is to counter attack by accusing countries such as Australia which have favourable animal and plant health situations, with using animal and plant health quarantine as a subterfuge to protect themselves from foreign competition on their domestic markets.

The approach Australia must take is clear. It is important that we continue to identify and criticise unfair protective measures in international trade. While doing this, it is important to ensure that Australia is above reproach in its use of quarantine measures, ensuring that they are applied in a way which does not impede, or impede to the least extent possible, the entry of foreign goods to the Australian market. It is important that decisions as to quarantine measures to be put in place are taken on the basis of the national interest, not on more narrow sectional interests. It is important that, while pursuing this approach domestically, Australia continues to insist on its right to take whatever measures are justified to protect human, animal and plant life and health.

AQIS, responsible to the Australian Government and community for quarantine, is pursuing the path of maximum "transparency" in the development and continuing review of quarantine measures. The purpose of this approach is to satisfy both the international and Australian community that measures which are put in place are put in place solely on the basis of what is known as bio-economic analysis, that being the determination of whether or not measures necessary to exclude a pest or disease is in the national economic interest, taking into account the cost to the nation of not taking such measures.

Australia is strongly linking in international negotiations the subject of quarantine measure with the issue of inspection requirements and food standards. The Australian argument is that inspection requirements and food standards can be used equally as well as quarantine measures as a means of keeping out, or reducing the competitiveness of, imported foodstuffs.

### **Integrity**

An issue which unfortunately remains contemporary is the question of the integrity of those who participate in the Australian meat processing industry. It is an unfortunate reality that in the past there have been those who have engaged in illegal activities for their own gain to the detriment of the national interest. It would be naive to believe that there will not always be such individuals around the fringes of an industry as large and scattered as ours.

AQIS has a small but very active and highly professional compliance unit whose function includes the deterrence and investigation of illicit activity in both the meat inspection and quarantine areas. Its activities include the collection and analysis of information from a wide range of sources with the objective of being able to deter or detect illegal activities before the national interest is damaged. They aim, among other things, to identify those who may, because of past convictions in industry related areas, not be deemed fit and proper persons. Once such persons are determined in accordance with objective criteria and publicly accountable procedures to be unfit to be a part of Australia's export meat industry, the compliance unit monitors their exclusion. Close liaison takes place with authorities in related areas such as those in State Government services.

In an industry such as the Australian meat industry, official bodies such as AQIS cannot be expected to shoulder the full responsibility for industry wide integrity. As in operational areas, the industry itself must be prepared to play a major, self regulating role in order to protect its own and the wider national interest.

### **Management Issues**

Always a contemporary issue in meat inspection and quarantine is the management of the service. As a major public sector operational unit managing very significant public resources, AQIS is very conscious of its responsibility for open, accountable administration. To this end, to facilitate better planning and management during a period of major fundamental change, to stimulate the widest possible participation in the planning process and to aid communication with the private sector, AQIS was one of the first public service bodies to adopt corporate planning. The approach adopted has been that of an annually updated five year plan, with the first covering the period 1983 to 1988. AQIS is keen to have the widest possible distribution of its corporate plans, which are available to all through either its Central or Regional offices. AQIS has adopted a board of management approach to overview its activities.

A key element in the management approach of AQIS has been that of maximising the delegation of authority to the operation level, with AQIS staff at the work place having the greatest possible authority to reach mutually acceptable arrangements with those they have the responsibility to regulate. This approach ensures, within broad guidelines, that both consumer protection and industry needs are satisfied.

Public accountability is achieved by the oversight of AQIS operations and policies by the Quarantine and Inspection Policy Council (QIPC). QIPC, whose membership includes producer, processor and consumer interests, reviews, the AQIS corporate plan and budget, and has direct access to the Minister for Resources.

AQIS is currently embarking on a customer awareness program among its staff, stressing the needs and perspective of the industry and other consumers of AQIS services.

Though essentially a technical and regulatory service, with the great majority of its staff having technical qualifications, AQIS stresses management skills. This has resulted in all supervisors, at all levels, being provided with management training.

### **A More Scientific Workforce**

Advances in science and technology and a modern approach to quarantine and meat inspection has created a need for more specialised training in areas including statistics, food technology and quality control. AQIS, foreseeing this need, has established a cadre of veterinary specialists trained within Australia and overseas in food technology. Further, a large percentage of AQIS inspection staff have now received advanced training in meat processing and quality assurance as part of the AQIS continuing training program. AQIS now has and will continue to develop a skilled workforce, equipped to meet current challenges and prepare the way for the future. To maximise the return on this preparation, the meat industry should provide its workforce more generally with broad based training covering areas such as quality assurance.

### **Modernising Quarantine**

Australian agricultural and operational quarantine has just been the subject of an independent and comprehensive review which took twelve months to complete. The outcome of this review, by a Quarantine Review Committee chaired by Professor David Lindsay, Dean of the Faculty of Agriculture, University of Western Australia, is a government policy discussion paper. The Lindsay committee report will, after full consultation and discussion, lead to the development for Government consideration of a detailed blueprint for quarantine for the rest of this century and beyond.

The Quarantine Review Committee, while finding that currently Australia has a world class service, identified a number

of key pressures and demands confronting quarantine and identified a number of necessary changes. These include the need for a more systematic approach in assessing and measuring quarantine risk, the need to include more explicit cost benefit analysis in taking quarantine decisions, the need for the gathering and analysis of quarantine information to be more comprehensive and open to public scrutiny, the need for an improved consultative process between AQIS and its quarantine clients, and some organisational changes involving the Commonwealth and the States to achieve greater efficiency in the delivery of quarantine services.

AQIS welcomes this searching external review, is positive about its findings and the directions it indicates for the future, and is currently deeply involved in consultation as a prelude to the development of recommendations to Government.

### **The External Environment**

While change takes place within Australia, it is important to remain alert to the changes which are occurring beyond our shores which will impact upon the Australian meat industry. Some of these changes are predictable and can be planned for; others are less foreseeable, and the best preparation is the maintenance of vigilance and a proactive, flexible approach. Changes that it is possible to anticipate from outside of Australia include increasing consumer demands for assurances as to freedom from residues and food poisoning organisms. It seems likely that as one set of concerns are met and resolved, another will come along. This poses both an opportunity and a challenge for Australia. With our comparatively residue free production from extensive agriculture, we are well positioned to satisfy fastidious consumers. At the same time, Australia needs to be prepared to recognise and address matters which may lead to future marketing difficulties.

Developments in Europe will change the trade in meat within the EEC. Commencing in 1992, the Community is committed to free trade between member countries; a truly "common market". To achieve this, the EEC is committed to improvements in animal health, including the foot and mouth disease situation. These improvements will inevitably lead to improved access to world markets, resulting in increased competition for Australian meat. All signatories to the GATT, including Australia, are obligated not to use quarantine restrictions as barriers to trade in the absence of meaningful risk to health. In North America, restrictions on trade between the United States and Canada are being wound back, with the objective being "free trade" by 1990. Closer to home, within the context of the Closer Economic Relations agreement, Australia and New Zealand are committed to the greatest possible harmonisation of quarantine and inspection procedures, with 1990 a target date.

### **New Technology**

New technology will always be a contemporary issue in meat inspection and quarantine. In meat inspection, new rapid testing procedures have been developed specifically for the meat works environment. These include rapid and cheap tests for the screening of carcasses for residues, and the verification of truth in labelling of boneless and processed meat with respect to species. These techniques have been specifically developed or adapted to meet AQIS needs. AQIS will continue to seek out and promote the development of such procedures as technology becomes available.

In abattoirs, further processing and marketing operations, the development of new materials, equipment, systems and techniques has resulted in a challenge to both the meat processing industry and AQIS to improve efficiency while maintaining hygiene standards and access to markets.

New technologies have and will continue to have significant potential to increase the ability to manage the risks of importing genetic material. AQIS will continue to support the use of

improved diagnostic techniques employing tools such as gene probes, monoclonal antibody technology and other advanced developments.

Relatively recently developed technologies including embryo washing techniques have provided safer means of moving genetic material internationally, and AQIS has been able through these to facilitate the importation of new breeds of meat animals from countries previously considered unacceptably "high risk". The other side of the equation is that developments in embryo transfer technology have increased the possibility of smuggling, with its inherent risks. This is an example of the way new technology brings with it not only benefits, but also problems which require resolution.

### **Meat Inspection – Toward the Next Century**

An Australian Meat Research and Development Corporation commissioned study has during the past year undertaken a major study into where Australian meat inspection might progress in the next 10 years. Believing that independent review, undertaken constructively, can be nothing but beneficial to all sectors of the meat industry, AQIS has contributed extensively through the provision of background material and an input to the consideration of various options. The study report commends the progress AQIS has achieved and endorses its approach to date. It further suggests that AQIS needs to vigorously pursue objectives which to some extent have already been achieved. AQIS is supportive of the general thrust of the report and will actively pursue the further objectives it recommends.

### **Performance**

The performance of AQIS, in both meat inspection and quarantine, is always a contemporary issue. By any objective assessment AQIS, and the meat industry to which it provides an inspection service, can be proud of the AQIS record. Since its establishment in 1982 as an export inspection service, during a period of major rebuilding and modernisation, its achievements have included:

- the establishment of a strong, decentralised management system
- the introduction of new ante and post-mortem inspection procedures for the major classes of livestock
- overall cost containment and a 28 per cent reduction (in real terms) in on-going function costs
- introduction of a comprehensive staff training program
- implementation of a quality control approach to inspection
- the passing back to industry of greater responsibility for its own affairs
- maintaining and widening industry access to the world's markets
- the establishment of a national inspection service which delivers domestic inspection as well as export services in most of Australia
- a revised and modernised legislative base for AQIS functions
- putting in place a range of measures to satisfy concerns over residues
- the integration of livestock export certification and animal quarantine to ensure a co-ordinated approach and facilitate prioritisation
- expanded safe access to foreign sources of new breeding material
- development of safe ways to more extensively utilise private enterprise resources in the import of new breeding material.

