



Australian Government

Australia's National Programme of
Action for the Protection of the Marine
Environment from Land-Based Activities

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case study 8: fertilizer industry federation of australia

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introduction

FIFA is the fertiliser industry association representing manufacturers, importers, blenders, retail distributors or agents, and contract applicators. All Australian manufacturers import significant quantities of manufactured fertilisers.

The Australian fertiliser industry sold 6 million tonnes of product worth \$2.5 billion in 2004. This included 1,056,527 tonnes of elemental nitrogen, 487,362 tonnes of elemental phosphorous and 214,814 tonnes of elemental potassium (Drew, 2005). The significant size of the fertiliser market and the coexistence of farmland and natural ecosystems mean that there is a clear risk that fertilisers may contribute to adverse environmental impacts.

Eutrophication of inland and coastal waterways is the issue of greatest concern, which also can lead to adverse impacts on marine environments. There is particular public and scientific concern about these effects on the Great Barrier Reef and adjacent coastal environments, but the issue has received public attention throughout the Murray Darling Basin and in the catchment of the Peel Estuary in Western Australia. However, the eutrophication issue appears to be even more widespread, as in more than 80 per cent of Australia's catchments containing agricultural land, nutrient levels have been found to exceed the desired water quality levels necessary for environmental health (Australian Government (2001) cited in Drew (2005)).

The decision to adopt an integrated approach to the key environmental issues facing the fertiliser industry arose directly from earlier success in working co-operatively with key stakeholders. FIFA was an active member of the National Cadmium Management Committee, which developed strategies that successfully reduced cadmium inputs to Australian agriculture by 75 per cent.

In December 2002 FIFA signed an "Eco-Efficiency Agreement" with the Australian Government which detailed a strategy for reducing the ecological and human health impacts resulting from through the manufacture, storage, distribution and use of the industry's products. FIFA agreed to provide \$605,000 for implementing the strategy, while the Australian Government provided \$200,000.

the fertcare accreditation program

Fertcare is the accreditation program that has been developed as a result of the "Eco-Efficiency Agreement". It is the centrepiece of the industry's commitment to managing environment and food safety issues. The Fertcare program includes training, quality assurance and certification.

Fertcare trains industry staff in the competencies required to meet their direct responsibilities for food safety and environmental risk management, and in particular, the competency to warn, advise, and/or refer customers to information about the risks and how to manage them. It also develops awareness of occupational health and safety issues associated with fertiliser and soil ameliorant products.

Fertcare has developed into a three-level national training program tailored to the needs of each major sector within the fertiliser industry and delivered by registered training organizations. The "Level A" course is focused on the logistics side of the industry, which includes transport, storage and spreader operators. The "Level B" course is provided for agricultural sales staff and staff in related agriculture and environment roles, including government and research institutions. The "Level C" course is for crop and pasture nutrition advisors and consultants who are providing detailed plan nutrition advice based on soil and plant testing. These courses incorporate the latest adult learning methods and provide leading-edge information, support and practical advice to improve professional competency.

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Fertcare meets national competency standards under the Australian Qualifications Framework so that individuals can attain certificates of competency through successfully completing the course. These may be used as part of a formal qualification (e.g. Certificate Level 3 in Rural Operations).

To maintain accreditation under the Fertcare program, all trained personnel are required to participate in a biennial refresher process that provides updates on technical knowledge and reminders of key issues. There also are specific quality assurance measures for advisors and for premises that store bulk fertiliser.

In addition, the Fertcare Accu-Spread program assesses the width and uniformity of distribution of fertiliser spreading equipment. By ensuring that the appropriate amount of fertiliser is broadcast for a particular crop in a specific area, economic efficiency is maximized while environmental impacts are minimized.

The industry is committed to achieving 100 per cent coverage of eligible staff, premises and contract spreading equipment by June 2008. "Eligible staff" are those directly involved in providing advice on fertiliser and soil ameliorant use, either in sales or an advisory role, as well as those involved in the storage handling, transport and application of fertilisers and soil ameliorants.

progress to date

A fertiliser Industry Environment Report was produced annually from 2002-2004. These reports are publicly available and contain an annual assessment of the environmental performance of the industry based on information supplied from annual surveys of industry members. Each of the reports has been independently assessed by SMEC Australia. The consultants review the accuracy of the data collection, interpretation and reporting methods and assess the report against the Global Reporting Initiatives 2002 Sustainability Reporting Guidelines.

FIFA also produces an extensive on-line quarterly newsletter, *The Fertilizer*, to keep industry members and the public up to date on the Fertcare program and other industry activities.

FIFA members have begun to employ a suite of environmental management tools to instil a culture of eco-efficiency in their organizations. For example, by the end of 2004 most companies (84 per cent of respondents) had adopted environmental policies, plans, procedures and management systems to guide their environmental aims and activity. Nearly half of the industry staff (47 per cent) had environmental performance objectives included in their employment contracts.

More than 60 fertiliser sites across Australia are licensed to operate under state environmental protection regulations. During 2004, four respondents reported a total of 36 breaches to their license conditions (down from 152 in 2003) and subsequently undertook mitigation measures.

Member companies also invested more than \$2 million in research to improve processes, products and systems to minimize any potential adverse environmental impacts.

In August 2004 FIFA convened an international conference to discuss significant developments in environmental management and Australian importation protocols. Over 350 people from 17 countries attended the conference and it was used as the venue to present the inaugural industry environment awards. These are available in four categories to acknowledge the efforts of different sized companies and individuals to improving the environmental performance in fertiliser production, supply and use.

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FIFA estimates there are 3000 staff eligible for training within the Australian industry. There also are at least 1000 contract fertiliser spreading trucks in Australia. A total of 1007 personnel had successfully completed training by March 2006 and 12 businesses and 31 premises had been licensed to use Fertcare logos in promoting their businesses. In addition, 220 spreader trucks had been Fertcare Accu-Spread certified by November 2005.

In late 2005, FIFA received \$100,000 from the Australian Government to promote soil testing and nutrient planning in the catchments of the Great Barrier Reef. Best practice fertiliser use is a target activity under the Reef Water Quality Protection Plan.

references

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