

Quality Assurance (QA) in Oilseeds

Today's increasingly sophisticated markets demonstrate much greater interest in high quality, safe food that can be traced back through the production process from the supermarket shelf to a farmer's paddock and even beyond, in the case of GM seed, to the seed source.

Simultaneously, growers and processors as individuals and groups are seeking new production opportunities, through value adding for markets that pay higher prices for higher quality. National industries are promoting the establishment of best practice to assist their members in this quest. Quality Assurance (QA) systems offer mutually acceptable methods for both customers and suppliers to achieve their goals.

This Fast Facts paper has been developed to provide a timely introduction to Quality Assurance (QA) for the Australian oilseeds industry.

What is Quality Assurance?

A QA system is a framework of checks, measurements and documentation of processes at critical steps in the production chain. It is highly effective for verifying consistency and quality of product, promoting best management practices and compliance with legislation, such as chemical application and storage.

Good business practice is an underpinning principle of QA systems.

Individuals, groups or whole industry sectors such as growers or processors can implement a QA system. An operator generally becomes a "certified QA operator" according to the QA system adopted. Certification requires written commitment and training in the designated procedures. It may or may not require equipment and facilities upgrades. For many growers, QA formalises and upgrades what they are doing already.

External verification provides independent and objective proof to customers that a certified operator is complying with the system and hence assurances on the quality of the product.

There are a number of QA systems available that have been developed specifically for the Oilseeds industry, including Great Grain, Grain Care and SQF 1000.

Are Quality Assurance Systems New?

The implementation of formal Quality Assurance systems on broad acre grain farms in Australia is relatively new. It is estimated that less than twenty per cent of Australian grain growers currently use a formal QA system. In five to ten years time the reverse could be true. Many food processors and "fresh to market" product growers such as dairy farmers and orchardists have implemented QA systems for a number of years.

QA systems for the grain industry are undergoing apparent and constant change. Both the detail of the systems, the owners and the trainers are changing.

Standards

An early form of QA could be considered to be quality standards. Standards generally specify the quality of an end product or service, supported by end product testing, while a QA system also informs the customer of the process and inputs used to derive the product. QA systems and standards can be considered technical tools and measures to establish norms for product quality and management procedures.

A Standard has been defined as “a published document which sets out specifications and procedures designed to ensure that a material, product, method or service is fit for its purpose and consistently performs the way it was intended to”, (source Standards Australia). Many standards were developed during the 20th Century.

The Australian Oilseeds Federation has an agreed set of standards for oilseed industry products listed in “Australian Oilseeds Federation Technical and Quality Standards Manual” and codes of practice relating to specific activities in the supply chain.

Quality Assurance Systems

QA systems adopted by whole industries provide a common reference framework, or a common technological language between suppliers and customers, that facilitates trade and transfer of technology.

Both “Standards Australia” (AS prefix) and “The International Organisation for Standardisation” (ISO) have developed quality assurance systems. ISO 9000 is a well-known system that provides a generic framework for “quality management” throughout the processes of producing and delivering products and services.

ISO 9000

ISO 9000 specifies what an organisation does to enhance customer satisfaction by meeting customer and applicable regulatory requirements as well as continually improving its' own performance.

More than half a million organisations worldwide either have or are implementing ISO 9000.

SQF (Safe Quality Food)

SQF 2000^{cm} was developed by the Western Australian Department of Agriculture in 1995 in consultation with internationally accepted guidelines and is based on HACCP (Hazard Analysis and Critical Control Points) principles. SQF was a response to demands for regulatory criteria on food safety and commercial quality and aims to provide a simple, flexible and cost effective QA system. At the end of 2002 some 3400 businesses worldwide had gained SQF certification. The US based Food Marketing Institute (FMI) recently took over SQF. FMI plans to add innovations but will also operate SQF as before.

SQF 1000^{cm} was developed for farmers and is well suited to low risk non-perishable products such as grain.

HACCP Principles

SQF and many other systems in the food industry now refer to being based on HACCP Principles (Hazard Analysis and Critical Control Points). HACCP is a set of principles developed as a foundation for managing food safety by the US National Advisory Committee on Microbiological Criteria for Foods. The US Food and Drug Administration and US Department of Agriculture adopted it in 1997.

Great Grain

Great Grain is a flexible on-farm quality management program combining an agreed standard with independent verification, allowing producers of cereals, oilseeds and pulse crops to demonstrate to customers and consumers that they are growing crops safely and responsibly. The Quality Wheat CRC, AOF, GRDC and Pulse Australia developed Great Grain with advice from various grains industries. Further information is available from Pulse Australia.

Grain Care

The Grains Council of Australia, other grains industry bodies and GRDC produced Grain Care. Its' 13 elements establish a minimum quality standard for grain production, with key elements including paddock selection and preparation, crop management, persistent chemicals in soil, paddock, crop and grain treatment; and obtaining and storing chemicals. For further information contact the Grains Council of Australia.

Why implement a Quality Assurance system?

The quality of Australian oilseed crops and derived products is critical to maintaining access to preferred markets, especially in times of over supply. The key elements driving a shift to formal QA systems include:

- Consumer demand for safe, clean food and greater choice, resulting in tighter specifications on quality, processes, residue levels and other food safety issues
- Consumer demand for greater consistency in products purchased
- Companies seeing the opportunity to use the status of "Certified QA Company" as a marketing tool
- Industries aiming to reduce costs by moving from end point inspection
- Industries or sector organisations wanting to create minimum standards/ codes of practice
- Producers wishing to participate in or continue to access higher value markets
- Regulatory pressures and requirements
- Producer demand for protection against potential product liability

"A benefit reported by producers implementing QA systems has been the improvement in efficiency and/or reduction in costs through the identification of inefficient production and business management processes."

Industry Developments and Possible Implications

The implications of adopting QA systems are significant. In recent years, food safety incidents have resulted in significant losses to regional or national food industries. By adopting QA systems, industries can increase product quality and also track problems. If operators or industries delay implementation external parties could force adoption of QA systems designed by others through market demand or regulation.

An important decision for oilseed growers is when to adopt a formal QA system? By acting early, a grower may obtain advantage in a specific market requiring identified traits or build a higher quality product 'image'. There is a prediction by some marketers that QA will become the 'ticket to play' in the future. However, for the bulk commodity oilseeds, demand for quality is yet to translate into either market access or price benefits.

A decision as to when to adopt QA will be influenced by:

- Opportunities to create or capture benefits through improved practices and improved decision making
- Markets supplied and the ability to differentiate higher priced products using a QA System
- The urgency of being prepared when QA becomes a regulatory requirement.

Steps to Initiate a Quality Assurance System for Growers

STEP 1

Contact your direct customer(s) and together consider QA programs - they may already have their own proven system that could accommodate your operation. A proactive customer is likely to assist you to become a Quality Assured grower.

While your customers are in the best position to advise you on which QA system is compatible with their operations and the likely handling and market / price implications, be sure to maintain flexibility in the system adopted to meet emerging and alternative markets.

STEP 2

Decide on the QA system that is best for your product / process, can be efficiently adopted and will have the most benefits for your business.

STEP 3

Consider and decide on the best and most cost effective method of becoming accredited for the chosen QA system. This may involve a training program or hiring a consultant to assist with building a QA program into your operation. This process could take three to twelve months.

Further advice on QA can be sourced from:

- Grain-handling organisations
- Grain marketing organisations
- Department of Agriculture
- Federal Department of Agriculture
- Industry organisations
- QA system providers
- QA and Identity Preservation consultants
- Farm management consultants

Key Points

Pressure for the industry to adopt QA is growing. Exciting new opportunities such as specialty oilseeds, GM crops and industrial oilseeds will hasten the adoption of formal QA systems.

The global market is becoming more competitive and consumers more demanding, which may lead to the need for Australia to further differentiate its products. QA systems offer an opportunity to achieve a unified approach and consistent production of "Australian Oilseeds".

QA is a new concept for many in the broad acre oilseeds industry. QA systems currently available are subject to change, hence growers or processors considering QA are well advised to work with their customers and the supply chain to adopt a system that suits them and is flexible.

Producing quality assured oilseed products for the domestic or export market requires commitment from everyone in the value chain. Proof of commitment to quality can be supplied through accurate and auditable processes, measurements and recordings, the basis of QA.

Visit the AOF website for more information on Australian oilseeds – www.australianoilseeds.com