



Canadian Fertilizer
Products Forum

Forum Canadien sur
les produits fertilisants

RESEARCH REPORT

INDUSTRY STANDARDS

Prepared for the
Canadian Fertilizer
Products Forum



THE CANADIAN FERTILIZER PRODUCTS FORUM

The Canadian Fertilizer Products Forum (CFPF) was launched in the fall of 2006 to provide a forum for stakeholder input into the regulatory process for fertilizers and supplements. The CFPF brings together producer groups, industry representatives, non-governmental organizations and regulatory officials from across the country to provide recommendations to improve the regulatory system.

The CFPF recognizes that fertilizers and supplements are the most important crop input. Agricultural producers in Canada spend about \$3 billion on fertilizers and supplements per year, more than on pesticides, seeds, fuel, or any other crop inputs.

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Agriculture and Agri-Food Canada (AAFC) is pleased to participate in this project. AAFC is committed to working with industry partners to increase public awareness of the importance of the agriculture and agri-food industry to Canada. Opinions expressed in this document are those of the Canadian Fertilizer Products Forum and not necessarily those of AAFC.

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PROJECT OUTLINE

One of the reports envisioned under the Canadian Fertilizer Products Forum's aegis includes a review of new standards on fertilizer quality. The key elements of the project have been identified as:

- ☀ to review the relevance and application of voluntary standards on the fertilizer and supplement industries;
- ☀ to review new industry standards on fertilizer quality; and
- ☀ to assess their utility and impact on the Canadian fertilizer industry, labeling and packaging of products

The mission of the Canadian Fertilizer Products Forum (CFPF) is to:

1. **Recommend improvements to the regulatory system** and policies for fertilizers and supplements to encourage innovation, economic and environmental sustainability, and international leadership;
2. **Enhance the reputation** of the industry and confidence in its products via communications to a broad range of stakeholders;
3. **Plan for the future** by analyzing emerging opportunities, new technologies and strategies on how agricultural producers can remain competitive.

INTRODUCTION

The fertilizer industry, like many others, faces increased marketing challenges as consumer, customer and societal demands not only rise but shift towards ‘guarantees’ of safety, quality, security, environmental sustainability and corporate social responsibility.

The Marketplace Monitoring and Labeling Work Group of the Canadian Fertilizer Products Forum (CFPF) stated in its November 2007 report that: *‘With a robust quality assurance/monitoring system in place, the industry could develop a marketing program with supporting materials such as a brand campaign with brochures, labels, and logos explaining the program and promoting it to customers. The industry can choose to promote the certification system to increase its value to participants and customers.’* These benefits have been identified by the fertilizer industry in other countries and already by the compost industry in Canada. The Work Group also noted that addressing the challenges facing the broad fertilizer industry is compounded by the variety of products included in the fertilizer category.

This document reviews a number of fertilizer programs covering multiple commodities and several including quality assessment processes managed and delivered by third parties. It also identifies a number of Canadian programs where the Canadian Food Inspection Agency (CFIA) has designated third parties to deliver and/or issue certifications that have official standing. The examples discussed from Canada are the Fertilizer Safety and Security Council and the 3R Environmental Stewardship initiative endorsed by the Crop Nutrients Council in Canada. From outside of Canada the voluntary schemes cover quality, security, transportation, handling safety, etc and include programs from New Zealand, Australia, the United States, the United Kingdom and the European Union.

The identification of voluntary programs must also include International Organization for Standardization (ISO) management system standards (ISO 9001 - quality, ISO 14001 - environment, ISO 22000 – food safety) and the Good Manufacturing Practices, Good Laboratory Practices and Hazard Analysis and Critical Control Point (HACCP) processes that are used in some businesses especially those involved in the production of inoculants and supplements. These programs frequently use third party audit and certification combined internationally recognized accreditation. However, they do not necessarily have Canadian government acceptance from the point of view of fertilizer quality.

In all of the above-mentioned cases, the development and implementation of mandated or voluntary standards and practices were undertaken to fulfill a perceived need to provide some surety and reassurance to the customer – large or small – that appropriate action was being taken by the industry at large. The challenge of creating commitment amongst the industry partners to develop and maintain the standards is largely one of ensuring that the need and the cost must approach the benefit.

This being said, given the regulatory regime under which all fertilizers companies operate in Canada, and the existence of a number of voluntary codes and Best Management Practices in the sector, the development of a fertilizer quality code or scheme would not likely be an onerous initiative. As with all such undertakings, the specific and ongoing costs of compliance are borne by the individual manufacturer or processor and must be left up to the individual to determine whether or not it is of benefit to participate in the scheme.

This paper is divided into sections addressing:

- ☀ Overview of standards
- ☀ Fertilizer programs in Canada and abroad
- ☀ Analysis

Further details on the programs and schemes reviewed are provided in the Annexes.



OVERVIEW OF STANDARDS

One of the three primary objectives of this report is to “review the relevance and application of voluntary standards on the fertilizer and supplement industries”. To initiate this discussion, it may be useful to begin with a review of standards and the roles that they can play for industry users, customers and governments.

The use of voluntary standards in a range of products and processes has grown almost exponentially over the past decade. Indeed, it could be argued that modern society is living in an “Age of Standards”.

Standards have a direct impact on all most all aspects of society and commerce from the expectations of grade 3 students in reading and mathematics to the interfacing of mobile telephones and computers to the increasing expectation of value chain responsibility, particularly in the food related arena.

ISO by early 2008 had more than 17,000 standards in its portfolio, an increase of 32 percent in just five years and it is producing or revising more than 100 standards every month. But this is just the tip of the iceberg. In 2005, it was reported that the Perinorm database held approximately 650,000 public and private standards. In 2008, this same database includes over 1.1 million standards from 23 countries, including most of the EU members, Canada, Japan and the US.

Thus the approach that has existed for decades in the manufacturing sector either formally or informally is now being implanted throughout society and other sectors of the economy, including primary production in agriculture – the primary consumer of fertilizer related products.

This section of the report provides a brief introduction to the role of standards, the benefits they provide to industry and to government and the role that conformity assessment has in ensuring their credibility. It is based on the significant and growing body of published work – reports, journal articles and guidance documents published by governments and others – on these matters and in particular on the following recent works:

Economic Value of Standardization – A report produced for the Standards Council of Canada by The Conference Board of Canada (Standards Council of Canada – 2007)

Standards, innovation and the Australian economy (Standards Australia – 2007)

2005 WORLD TRADE REPORT – Exploring the links between trade, standards and the WTO (WTO – 2005)

The Empirical Economics of Standards (UK Department of Trade and Industry – 2005)

Key Considerations in the Development and Use of Standards in Legislative Instruments – Understanding the Partnership of the Regulatory and Voluntary Standards Systems (Standards Council of Canada – 2006)

An Overview of Conformity Assessment in International Trade (UNCTAD/WTO International Trade Centre – 2005)

2.1 Definitions

The Canadian Oxford Dictionary recognizes eleven (11) definitions for the noun “standard” ranging from a flag (#4) to a song of “established popularity” (#9). However, first and foremost it defines the word as “an object or quality or measure serving as a basis or example or principle to which others conform or should conform or by which the accuracy or quality of others is judged”.

The definition used by the international standards community (e.g. International Organization for Standardization (ISO) and the International Electrical Commission (IEC)) and by national standards bodies (e.g. The **Standards** Council of Canada is a “document, established by consensus and approved by a recognized body, that provides, for common and repeated use, rules, guidelines or characteristics for activities or their results, aimed at the achievement of the optimum degree of order in a given context”.

2.2 Types of Standards

Standards originate from several sources and are usually classed as being either public or private. However, these distinctions mask the true complexity of situation. Public standards are usually seen as having an origin with government. Yet quasi-public bodies play a large role in their development. In most countries the bodies responsible for the national standards system, for example the Standards Council of Canada (SCC) or the British Standards Institute (BSI) or the American National Standards Institute (ANSI) have a statutory basis. These in turn are members of ISO and other international bodies. Their standards, national or international, are sometimes described as public and sometimes as private. Civil society, particularly the community of non-governmental organizations (NGOs), is also contributing to this growth in standards. They have led the development of standards in new areas such as FairTrade and social accountability where SA8000 addresses workers rights. In the private sector, we also see a blurring of the lines of demarcation. There are truly private or proprietary standards – those held closely by a particular business and used only with its suppliers and customers. And, there are also more broadly accessible, voluntary standards developed by industry associations at the local, national or international levels, to serve their members and customers. Several of the fertilizer standards reviewed below fit into this category. Finally, there are standards that may be private in origin but recognized by the public sector. The on-farm food safety programs recognized by CFIA and the identity preserved programs recognized by the Canadian Grain Commission are Canadian examples of this type.

2.3 Product or Process

The mass of standards noted above focuses on wide range of requirements for products, services, processes, systems, persons or bodies. In the context of fertilizer, with one notable exception, they deal with either products or processes, including management systems.

Product standards specify the characteristics of a product such as its design, size, weight, chemical composition, safety, energy and environmental performance, interoperability, material, and even the process of production.

Process standards set out the characteristics of a production process or a management system or in some cases both. The World Trade Organization (WTO) study notes that “multilateral trade law, which



traditionally deals with goods and not their process of production, finds it difficult to deal with process standards”. This debate is not just confined to the matter of technical barriers to trade (TBTs) but has, in the case of standards related to food safety and other environmental concerns, also become a matter of considerable discussion within the WTO’s Committee on Sanitary and Phytosanitary Measures (www.wto.org).

2.4 Voluntary or Mandatory

Standards can also be characterized as being either voluntary or mandatory. Private standards, whether developed by industry or NGOs are by definition voluntary. Public standards can be either voluntary or mandatory. However, ‘voluntary’ can have different meanings in different arenas. It may mean that a company can choose to participate in a program or not and continue to operate and sell into the market with no downside or penalty at all. Or, it may mean that a company by not participating will be at a disadvantage because it cannot use a mark or participate in a marketing campaign. And, finally and perhaps most importantly, it may mean that the program is only ‘voluntary’ in name and that by not participating the company and or its products are not recognized as being legitimate and may be shut out by other participants in the value chain – effectively removing it from the marketplace.

2.5 Benefits to Industry

The Conference Board report summarizes the broad economic value of standards and standardization as follows:

Compatibility or network externalities. These are the benefits that one firm or customer receives from the use by others of the same standard. The benefit does not depend just on the quantity or the quality of the product but also includes the availability and variety of complementary goods and depth of the market for the product or service. Adherence to these standards can solve co-ordination problems in industry, improve interoperability, increase market efficiency and consumers’ welfare and facilitate national and global trade. And, as noted above, the failure or inability to adhere can reduce access to markets or have other “anti-competitive” effects.

Minimum admissible attributes. The establishment of minimum quality or safety standards can help eliminate the “lemon problem” and lower transaction costs for the customer who no longer has to investigate the quality characteristics of a product as thoroughly.

Provide information and product descriptions. The use of “technical reference standards” or a clearly defined set of requirements for an item, material, component, system or service can also enhance access to the market and reduce transaction cost.

Reduce variety. Although counterintuitive on the surface, the establishment of clear product standards can assist manufacturers by permitting them to operate on a larger more efficient scale and to reduce costs. It can also provide these firms with greater certainty about the future of the marketplace and reduce both the risks and the costs of research and development. Costs can also be reduced when management systems standards are used. Here “one certification, accepted by all” can replace the multiple audit requirements of many customers.



The UK study's conclusions are very similar. It states that standards:

Encourage innovation by shaping “the way sectors work by sharing knowledge and creating effective synergies that accelerate the speed to market for products and services”.

Increase profitability by “improving business efficiency and reducing costs, increasing consumer confidence and providing a foundation for growth”.

Provide better access to markets and facilitate trade by promoting “competition in the market place by helping industries capture knowledge, share insight and, with it, reduce risk”.

The Conference Board study also interviewed participants in the standards development process and users about the benefits. Some of their comments are particularly relevant to the situation in the fertilizer industry and provide deeper insight into the generic points made above. For example, several interviewees noted that standards enable “businesses who want to provide a safe product that is ethically produced, to operate successfully knowing that domestic or international competitors are required to follow the same rules”. Other interviewees, following this same line of thought, indicated that standards “level the playing field” or “apply equally to everyone”. While small business respondents noted that standards developed for large companies can be difficult for micro or small enterprises to implement, they do have the advantage of providing clarity and a value in the “stamp of approval” that certification brings.

These interviews also highlighted the benefits of standardization and the adoption of the continuous improvement approach can bring. Most frequently cited are those related to better documentation, the implantation of systematic review and follow-up and the opportunity to drive costs and waste levels down while improving product quality and customer satisfaction. It should be noted, however, that some interviewees also indicated that some costs do go up when standards are adopted and 3rd party certification is engaged.

2.6 Benefits to Government

There are also benefits to the governments if they use or reference an externally developed standard in a regulation. The SCC's guidance paper for Canadian governments identifies seven (7) advantages many of which were articulated by a group of United Nations experts in a 1973 report. A referenced standard can:

- ☀ *Fulfill the identified need* and, if developed in a consensual manner, meet the expectations of the majority of the stakeholders addressed by the regulation.
- ☀ *Be verified*, if subject to 3rd party certification, and enhance confidence in a product or a system and positively support the regulatory requirement.
- ☀ *Meet government requirements* and provide access to the knowledge of a broader expert pool than the one which the regulatory authority has access to.
- ☀ Foster uniformity of requirements if produced in collaboration with representatives of several jurisdictions, or we might add several departments within one jurisdiction, thereby eliminating unnecessary trans-border barriers and favoring the exchange of goods and services.



- ☀ *Enhance marketplace compliance*, by combining marketplace and regulatory expectations.
- ☀ *Increase efficiency*, if used by firms to meet market needs and regulatory needs it will be more effective and efficient where both are concerned.
- ☀ *Create resource savings* for government.

The SCC document also sets out six (6) options that governments can employ if they are considering the use of standards or parts of standards by reference. These are:

- ☀ *Complete Reference*: All of the contents of the standard are included by reference in the regulation.
- ☀ *Qualified Reference*: Selected portions (i.e. specific clauses) of the referenced standard are deleted as being inappropriate for the intended purpose, however, the retained balance of the standard is included in the regulation.
- ☀ *Partial Reference*: Here only selected portions or clauses of the referenced standard are included in the regulation.
- ☀ *Reference as Good Practice*: This is described as using the referenced standards a guide to permit conformance to, for example, "good manufacturing practice". This approach does not require compliance with the referenced standard, but indicates its existence and acceptability.
- ☀ *Reference as an Alternate*: Here, standards are referenced as examples whereby compliance will ensure that certain performance requirements will be satisfied or where compliance will allow the user to substitute certain actions for others.
- ☀ *Inclusive Reference to Standards*: The selected standard itself references one or more other standards (e.g. a reference to one ISO standard in a series, such as ISO 9001:2000 Quality Management Systems – Requirements would also bring with it reference to the definitions set out in ISO 9000:2005 Quality Management Systems – Fundamentals and Vocabulary).

The 2004 report of the Smart Regulations External Advisory Committee supported the use by government of externally developed regulations – both industry based and arising out of the national or international standards systems. The 2007 federal *Cabinet Directive on Streamlining Regulation* requires departments and agencies to select the appropriate mix of government instruments for use in federal, federal/provincial or international contexts to make use of all or parts of relevant national or international standards, consensual standards, guidelines, etc as a basis for technical regulations and for conformity assessment procedures "when they fulfill intended policy objectives".

It should be noted that the Canadian Food Inspection Agency (CFIA) does not currently have the authority to incorporate any standards by reference. Bill C-27, *Canadian Food Inspection Agency Enforcement Act*, which was given 1st reading in November 2004 and died on the order paper with the 2005 prorogation of Parliament, contained such a provision. Its Clause 57 would have authorized the



Agency under *any* of the Acts it enforces to incorporate by reference “externally produced materials, reproduced or translated materials, materials jointly produced with a government or another government agency, and internally produced technical or explanatory materials”. In their testimony before Parliament officials indicated that this new authority would cover standards, guidelines, methods and procedures. The officials also noted the value of this approach, given the evolving nature of standards and did not appear to restrict its use to national or international standards opening the door to voluntary standards produced by industry associations and may become more commonly used.

Looking ahead, there are indications that this provision or one quite similar to it may be included in the expected legislative package associated with the Canadian Food and Consumer Product Safety Action Plan announced by the current government in December 2007. And, as discussed later in this report, CFIA has history of outsourcing conformity assessment and other government departments have considerable experience with both referencing standards and outsourcing conformity assessment. The concepts are, therefore, well established within the Government of Canada.

2.7 Conformity Assessment

In the above studies, frequent reference is made to the importance of 3rd party certification as a key factor in the credibility of standards. Indeed, for several of the identified fertilizer programs, it is undeniably critical. However, 3rd party audit and certification is but one of the several types of conformity assessment used in conjunction with private and public standards

The term ‘conformity assessment’ covers a wide range of activities, which are performed either at the supplier’s end of the chain or at the buyer’s end or by regulators to check whether the product or management system meets the expected requirements. “Conformity assessment” is defined in the WTO Agreement on Technical Barriers to Trade (TBT) as “*any procedure used, directly and indirectly, to determine that relevant requirements in technical regulations or standards are fulfilled*”. These procedures include: sampling, testing and inspection; evaluation, verification and assurance of conformity; and, registration, accreditation and approval as well as their combinations. ISO defines conformity assessment as “*demonstration that specified requirements relating to a product, process, system, person or body are fulfilled.*”

The objectives of conformity assessment are:

- ☀ To verify that a product, process or management system meets a given requirement.
- ☀ To provide explicit or implicit information about characteristics and/or performance of the product or activity;
- ☀ To increase the confidence of users and regulators; and
- ☀ To help to substantiate a company’s, a person’s or a body’s claims regarding itself or its products, services, processes and systems.

The assessment of conformity can be achieved in several ways. For example:

First-party assessment is carried out by the business itself. Usually it is in the form of a supplier’s declaration of conformity or self-assessment. The approach is widely used in commercial transactions, generally proves to be efficient, in terms of time and cost, and does not require a producer to disclose information considered as commercially sensitive.



Second-party assessment is carried out by a customer or by his appointed inspectors/auditors on the supplier. This type provides a more reliable indication, particularly in technically complex areas, that a product is being produced in accordance with the customer's specified requirements.

Third-party assessment is performed by a body that is independent of the supplier, the customer or another interested party such as a government department. Examples include certification of a quality management system by an independent certification or registration body against the requirements of ISO 9001 or 3rd party product certification such as that provided by the Canadian Standards Association (CSA) or Underwriters Laboratory (UL) or a similar organization.

Each of these approaches to conformity assessment can work with any type of standard, private or public. However, 2nd party and 3rd party assessments are more commonly used in the private sector and public standards are mostly subject to either inspection or audit by the regulator or competent authority.



REVIEW OF FERTILIZER PROGRAMS IN CANADA AND ABROAD

Around the world, there are a number of fertilizer programs already operating. These utilize internationally recognized approaches such as quality management systems and frequently set out control measures or check points within the production, packaging, transportation systems, etc. that are tailored to the specific product in question. Efficacy can be included in the list of specifications as well through the incorporation of ingredient requirements or production methodologies.

Different countries have taken different approaches to the regulation and management of fertilizers. All regulate content but enforce their regulations in different ways. This has led to the creation of industry led or industry delivered approaches: in some quality is the main concern, in others it is security. The role of government in the development of these programs has also differed. In most cases government has contributed funds, but perhaps more importantly, industry compliance with government requirements has been an essential component or objective of the programs.

In all of the programs reviewed outside of Canada third party delivery is the method of choice. Canada's main fertilizer program is, of course, delivered by the federal government, while the compost and the fertilizer security programs are third party delivered.

The following subsections summarize the fertilizer programs reviewed for this study. Additional details and the location of material on the Internet are provided in the Annexes.

3.1 Canada

All types of fertilizer product, including compost and inoculants must meet the requirements of the *Fertilizers Act*. As of 2008, there are two government recognized fertilizer quality related programs operating: the Canadian Fertilizer Quality Assurance Program (CFQAP) and the Canadian Compost Standards program. The voluntary programs that are used in the inoculants sector are broader in scope in that they relate to the manufacturing process as it leads to a final product.

The CFQAP program is a mandatory program run by CFIA. It supports the fertilizer regulations. However, it is under review and likely to be revised as it is no longer viable under present day resource requirements and availability.

The Compost Standards program is a voluntary third party process run by the Canadian Compost Council. The program backs up the regulatory requirements. In its current form, it is a stand alone program. However, its outcomes could be incorporated under a broader umbrella program that would include other fertilizer products meeting appropriate standards, including the regulations, and having recognition by CFIA.

Inoculants also have to meet regulatory requirements. Most firms in this industry sub-sector use ISO 9001 and/or a combination of Good Manufacturing Practices (GMP), Good Laboratory Practices (GLP) and HACCP programs in the manufacture of their products. These tools are voluntary and they illustrate



other approaches to quality assurance which are equally founded in internationally accepted manufacturing process systems. They too could be incorporated under a broad 'quality' umbrella that would recognize the differences in fertilizer types but foster a consistent quality standard.

3.2 New Zealand

New Zealand has been a world leader in the development of industry led initiatives. Fertmark and Spreadmark were both developed in the 1990's to assist those involved in the fertilizer business to meet government regulatory standards and industry expectations or goals. Both are mandatory third party delivered programs that are recognized by the New Zealand government. The Fertmark program addresses quality in the manufacture of a number of fertilizer types, applying appropriate standards to the particular product type. It is the meeting of the standard that permits the company to use the Fertmark logo. The same quality management approach is used for the Spreadmark initiative which covers the application of fertilizers on farmers.

3.3 Australia

Australia is also a leader in the development of third party delivered programs that run through the food value chain. The *Fertcare* program differs from the other approaches to quality assurance discussed in this report. It is primarily a wide ranging training and competency certification program for the fertilizer industry. As such, it is part of a much broader Australian government initiative on industry training run by the Australian Department of Education, Employment and Workplace Relations.

All participants in the fertilizer related sector must be trained according to federal standards. The training, quality assurance and personnel certification activities are included in the *Fertcare* Accreditation program. The program licenses businesses to use the *Fertcare* logos based on their compliance with the program targets for training, quality assurance and certification. As the fertilizer industry is regulated at the state level, the federal approach to quality assurance is by definition an umbrella approach.

3.4 European Union

Fertilizer regulation in the EU falls to individual country governments which themselves must abide by guidelines or directives from the European Commission. Significant trade among European countries made the development of an EU standard approach important to ensure that customers had confidence that different products meet the same standards. The result is the European Fertilizer Manufacturers Association's own program the Product Stewardship Program that deals with aspects of quality as well as the safety of the product. Unlike some of the North American programs it is not primarily concerned with the security of the product.



3.5 United Kingdom

The Fertiliser Industry Assurance Scheme (FIAS) has been developed largely to address security concerns but in doing so also addresses issues of fertilizer content and consistent manufacturing processes. While it was established as a ‘voluntary’ scheme, after 1 June 2008, companies in the UK should only trade with

FIAS-Certified participants or companies they have risk assessed/audited themselves to comply with FIAS standards. Companies that do not trade in accordance with this will be given a non-conformance by FIAS and the Agriculture Industries Confederation. The FIAS web site quotes John Kelley, Managing Director of AIC Services Ltd. As follows: “FIAS was created to cover the whole fertiliser supply chain and this is another step in the process of delivering the security which government demands. It is vital if it is to avoid more cumbersome and costly legislation to meet Government demands.” Thus the program will only be voluntary in that a company can participate in the program and participate in the industry – or they may choose not to participate in the program and not be permitted to participate in the industry.

The British Standards Institute's Publicly Available Specification for Composted Materials (BSI PAS 100) certification scheme was introduced in 2002 to provide a baseline quality standard for compost. The scheme ensures that compost producers are manufacturing a product that is consistent, safe and reliable, and provides the foundation upon which producers can further develop their products.

This specification covers the entire process by which compost is produced: from raw materials and production methods, through to quality control and lab testing. The Composting Association Certification Scheme is the only UK scheme providing third party assessment of conformity with BSI PAS 100. The process is reassuringly rigorous and compost producers are inspected annually.

In 2007, in response to the 2006 EU Waste Framework Directive, which had inhibited the development and manufacture of these products, the recycling of waste and the diversion of waste from landfills, the UK government and stakeholders in the waste conversion sector developed a Quality Protocol. This is intended to:

- ☀ clarify the point at which waste regulatory controls are no longer required;
- ☀ provide users with confidence that the compost they purchase conforms with an approved standard; and,
- ☀ protect the environment (including soil) and human health by describing acceptable best practice for the use of quality compost on land used for agriculture or soil-grown horticulture.

Use of the Quality Protocol is voluntary and eases the regulatory burden for manufacturers and increases the opportunity for marketing their products. For farmers in England and Wales, purchase of these products also reduces the regulatory burden, effectively removing the ‘waste tag’ from compost and eliminating the need to apply for a waste management license exemption. Conformity with the Quality Protocol is demonstrated in conjunction with the BSI PAS 100 standard.



3.6 United States

The American situation is different from that of most countries examined. It is largely the result of the historical and constitutional division of powers in the U.S. for the various aspects of agriculture production and the environment, and fertilizer quality and use is largely regulated by state governments. Similar types of quality regulations exist at the state level which exist federally in Canada. And, most states also have environmental protection related Best Management Practices and Product Stewardship Programs for fertilizer use on farms.

Compost is the only type of fertilizer that has specific quality standards with specifications that must be met. These are addressed through a third party oversight system. The United States Composting Council operates its Seal of Testing Assurance program which is not a compost specification, per se, but according to the USCC a testing and information disclosure program.

In addition, The Fertilizer Institute (TFI) operates a set of voluntary programs including:

- ☀ Product Testing Program: Comprehensive product toxicity testing research that demonstrates that products pose no harm to industry workers, the community or the environment.
- ☀ Risk Assessment Program: Establishes safe limits of non-nutritive elements in fertilizer.
- ☀ America's Security Begins with You Campaign: Includes posters, brochures and window stickers to remind those who handle ammonium nitrate to be vigilant and keep the product out of harm's way.



ANALYSIS

In the “Age of Standards”, the development of standards and their associated conformity assessment schemes is likely to have a positive impact on the Canadian fertilizer industry. This conclusion has already been articulated by the CFPF Marketplace Monitoring and Labeling Work Group and is evident from the increasing use of standards and certification by fertilizer products manufacturers and their industry associations in other countries.

The Marketplace Monitoring and Labeling Work Group’s report notes the following benefits for companies vis-à-vis their customers, the farmers and with other stakeholders, such as the regulators:

- ☀ Selling benefit to the farmer includes:
 - Confidence in knowing that certified blenders have sound quality assurance systems in place that provide a guarantee of quality
 - Ability to promote the industry as open and honest
 - There is an opportunity to show farmers that the fertilizer industry is working with them to get access to the products farmers are looking for to improve productivity

- ☀ Selling benefits to the blender:
 - A system that helps companies to comply, the opportunity for education through inspectors exists. The system is designed to improve business process rather than policing, as is the current system.
 - Way to ensure all employees, even new ones, are following quality protocols and standards
 - Opportunity to promote the industry jointly, which may be particularly important during time of increasing input costs
 - May create opportunities for companies to reduce their costs by avoiding over-blending

This section of the report will explore the implications of adopting a standards and conformity assessment approach in further detail. Section 5, which follows provides some conclusions.

4.1 Quality Standards

In Section 3 we have reviewed the use of standards by the fertilizer industries in Europe, including the United Kingdom, New Zealand, Australia and the United States, in addition to the programs currently available in Canada. Several of these schemes are focused on “quality”, others are focused on security or other attributes. All are a response to drivers that are either market-based or regulatory in origin.

Other sectors of industry are experiencing similar pressures to introduce standards. In the Annexes to this report we detail a significant number of standards or schemes from outside the fertilizer industry. These and several of the foreign fertilizer schemes provide models for how the Canadian sector might respond to the challenges it faces in meeting government and customer expectations.



The industry participants in this project raised concerns about the practicality of establishing a quality standard that could meet the needs of the various segments of the industry. Of foreign fertilizer schemes considered, only the New Zealand program – Fertmark – is currently designed to accommodate a range of fertilizer types and has demonstrated uptake across the range. Outside of the fertilizer sector, other standards frameworks have achieved this objective. The Canadian EcoLogo program provides a framework for setting over 300 standards for products and services that are "environmentally preferable" by using a consensus based process and a set of clear, high level criteria. The emerging Canadian food safety "standards", both the commodity-specific programs being established from use on-farm and the sector specific programs for non-farm activities are another example of a common framework being used to develop consistent standards for a range of products. Indeed, in some cases, the Packaging Association of Canada's PacSecure program is an example, the scheme covers its own range – flexible plastic, rigid plastic, paper, metal and glass – all within a set of related standards and a common audit and certification scheme.

Based on these examples, and others that could be noted, it is clear that the Canadian fertilizer industry as a whole could develop a set of quality standards that would provide the benefits listed by the Work Group. This system would involve an umbrella quality code that recognizes the different quality attributes of different products and, to have market and regulatory credibility, it would also require the industry to accept an accredited testing, audit and certification regime.

4.2 Voluntary versus Mandatory

The fertilizer and other programs reviewed indicate that a quality scheme of this scope and nature could be either voluntary or mandatory. Indeed, most of the programs discussed in Section 3 and in the Annexes are voluntary.

These programs have elements in common, a primary one being the significant background work that has gone into their development. Standards, processes and enforcement procedures all had to be developed. In the case of the EFMA program the cost was borne by industry and in the case of Canadian compost standard the cost was largely borne by governments. The variation reflects the different situations surrounding the program development. In New Zealand the government was changing its role and agreed to work with the industry to provide a third party option; in the EU the industry (primarily large fertilizer companies) identified a public confidence issue as well as a health and safety one that encouraged program development; in the case of Canadian compost, industry and government identified a need for a program and process that would create consumer confidence in a 'new' product.

Voluntary programs can and do work in numerous areas of industry and can be very effective in providing assurance to consumers. The process related EcoLabel program, noted above, is another example of a truly voluntary program that, while developed by Environment Canada, is now operated by a private third party on a fee for service basis. This type of system works well when there is a range of choices that the consumer can make among similar products so that quality program assists in differentiating one set of products from another.

Where there are fewer choices and perhaps less to differentiate among them and a recognized concern or interest in the quality or value of a product, there is a greater push among sector participants for recognition of the attributes of the product. This has been the case in relation to the on-farm food safety programs as well as, in particular the post farm gate in horticulture products. At the outset these programs



were considered to potentially provide added value to primary producers. In some sectors participation fairly quickly became a condition of sale to processors despite the fact that all products already had to meet government regulatory standards. Thus, what remain voluntary programs have effectively become mandatory from a value chain point of view.

It is not clear that this situation would occur concerning fertilizer in Canada. As mentioned above, it is possible that a voluntary quality program could be developed in Canada for the Canadian market. As the market and public opinion continues to change, e.g. crop value chain quality assurance systems become important, there may indeed pressure from customers to adhere to a quality assurance scheme that focuses both on the processes – safety, environmental, etc - used on the farm and on assurances about the inputs – chemicals, fertilizers, etc – applied on the land.

Mandatory quality systems do exist for fertilizer. The New Zealand Fertmark program is an example of a fertilizer quality program that is mandatory. The Australian Fertcare is also, in a different way, a mandatory program. The UK Fertilizer Industry Assurance Scheme in the process of being converted from voluntary to “market mandatory”. Industry participants have agreed that certified firms will only deal with other certified firms as of 1 June 2008 all within the context of a government expectation for compliance or the imposition of a truly mandatory system which the industry as identified as being substantially more expensive.

It is recognized that the market situation in these countries is different than that in Canada but other sectors have moved in this direction despite North American market pressures. The AWAC program is an example of a non-regulated mandatory program that was put in place to provide assurance to regulators and especially the general public as well as to limit liabilities.

4.3 Standards and Third Party Delivery

Canada has a number of schemes which operate within the agriculture industry and which could be used as models of development and delivery. The programs reviewed indicate that it is indeed possible to create a third party delivered and managed program that would meet the requirements of CFIA as well as of the fertilizer industry.

In most of the models outlined, the program is voluntary but based on first having met regulatory requirements. Choosing not to participate in a voluntary program may not legally prevent an industry participant from participating in the market but it may indeed leave the industry participant outside of the mainstream in terms of marketing, especially if buyers begin to demand the additional assurances that meeting program specifications provide.

In relation to the designation of authority to third parties, there are a number of examples. In The On-Farm Food Safety Recognition Programs that CFIA is in the process creating, the Agency ‘recognizes’ meaning that it has judged the measures being implemented on farm as ‘technically sound and the conformity assessment schemes ‘administratively effective’. These programs provide market assurance to customers and do not replace regulatory oversight by CFIA.

In two other cases, the Canadian Seeds Institute programs and the Canadian Cattle ID program, CFIA has accredited the programs to undertake assessments and provide approvals on its behalf. These programs provide regulatory oversight by third parties and are themselves scrutinized by the CFIA on a regular basis. The EcoLogo program on the other hand, is an entirely voluntary third party delivered program and the Agrichemical Warehousing Standards Association Certified Warehousing Standards represents a united and co-operative effort by the crop protection industry itself that is effectively mandatory and third party developed and delivered.



CONCLUSIONS

Implications for the Canadian Fertilizer and Supplements Industry:

- ☀ to assess their utility and impact on the Canadian fertilizer industry, labeling and packaging of products.

As can be seen from descriptions and analysis above and in more detailed program descriptions in the Annexes, there are many options available to the Canadian fertilizer and supplements industry. A simple assessment is that the state of play in the standards arena at this point in time is such that the industry can choose the impact it wants and be able to find a model to launch from.

It is important to look at where industries like the fertilizer industry, regulatory agencies and standards are heading in the near future.

It is clear from the growing attention paid to environmental issues from a regulatory point of view, (e.g. nitrate and phosphate run off) as well as security issues (e.g. ammonia storage, transportation, etc.), that the industry is headed for greater regulatory oversight rather than less. It is also clear, at least from a Canadian point of view that the CFIA's resources are limited and that strategic decisions on resource allocation will increasingly be made around food safety issues. This leaves a potential conundrum as well as an opportunity for sectors like fertilizer that can be addressed by standards and third party delivery.

The 'newer' entrants into the fertilizer world, compost and micronutrients, have adopted this approach as a way of promoting credibility and confidence in the products. The compost sector has accomplished this through the use of an 'updated' standards approach and the micronutrients sector through the use of ISO 'standards'. In both cases the approach has been successful in providing confidence to the purchaser – and to the regulator - that the products can meet the specifications claimed. The oversight scope that CFIA has to concern itself with is therefore smaller and more specific – thus allowing the shift of resources away from basic testing, etc.

Given the willingness of CFIA to accept oversight of a number of third party delivered programs outside of the fertilizer area and its admission that resources will not permit any significant improvements in resource allocation from within the Agency, it would appear that a move towards a third party standards development and enforcement approach in the fertilizer industry would be a prudent consideration.

Moving towards a third party standards based system could allow CFIA to concentrate on those areas that only CFIA can undertake, i.e. product registration and leave testing and monitoring to others who meet criteria agreed to by CFIA. This approach could also be expanded to include the third party review of labels for artwork, addresses, etc. leaving the basic registration and content approval to CFIA.

Development of a third party approach for the range of fertilizer products may seem daunting but it is clear from examples of other sectors that it is indeed doable. Different approaches for applying the existing fertilizer regulations are used already. The fertilizer industry as a whole, working with CFIA, could establish the 'rules', 'indicators', 'critical control points' that an accredited third party could enforce by category on a product by product basis.



The work involved in such an undertaking is not small and requires the buy in of the industry as a whole. The industry has already done a considerable amount of this work by having to think through and put into place the sanctioned by government third party approach for security and safety for fertilizers. Even the cost factor of additional costs to cover audits, reviews, etc. must be weighed against potentially faster registrations and label approvals and shorter delays in getting to market. Additionally, certain types of third party delivered standards approaches can be amended to include other attributes which may have additional market value. Finally, the possibility of having a common ‘mark’ or certification that can be used to promote the positive attributes of the fertilizer products can provide greater customer certainty, loyalty and greater sales.



ANNEXES

The Annexes that follow provide snapshots of programs related to fertilizer quality in Canada and abroad, of programs related to fertilizer security and safety in Canada and abroad and Canadian programs where the CFIA has designated a third party to manage or implement the regulatory requirements related to the product or where CFIA provides official oversight to industry developed programs that complement or go beyond regulatory requirements.

Annex 1 – Canadian Fertilizer Programs

- ☀ Canadian Fertilizer Quality Assurance Program
- ☀ Canadian Compost Standards
- ☀ Ammonia Standards Program
- ☀ Micro Nutrients

Annex 2 – New Zealand Programs

- ☀ Fertmark
- ☀ Spreadmark

Annex 3 – Australian Programs

- ☀ FertCare

Annex 4 – European Programs

- ☀ European Fertilizer Manufacturers Association
- ☀ UK Fertilizer Industry Assurance Scheme

Annex 5 – US Programs

- ☀ TFI - Best Management Practices
- ☀ TFI – Risk Management Program
- ☀ United States Composting Council – Seal of Testing Assurance Program
- ☀ Chemical Security Assessment Tool

Annex 6 – Other Canadian Programs

- ☀ Traceability programs for livestock
 - Canadian Cattle Identification Program
- ☀ Food safety programs
 - Commodity Specific Programs On-farm Food Safety Programs
 - National On-farm Food Safety Recognition Program
 - FeedAssure



- ☀ Programs in the grains and oilseeds industry
 - Canadian Seeds Institute
 - CSI Standard
 - CSI Authorized Importer
 - CSI /CFIA Phytosanitary Certification Program for Seed
 - CSI Integrated Seed Quality Management System
 - Canadian Grain Commission
 - Canadian Identity Preserved Recognition System
- ☀ Crop Protection Programs
 - Agrichemical Warehousing Standards Association Certified Warehousing Standards
- ☀ Product Certification Programs
 - Ecolabel
 - Organic Certification
- ☀ Canadian Medical Devices Conformity Assessment System



ANNEX 1 – CANADIAN FERTILIZER PROGRAMS

www.cropnutrients.ca

www.cfi.ca

Canadian Fertilizer Quality Assurance Program

All fertilizers and supplements that are **imported** and/or **sold** in Canada are regulated by the CFIA. The manufacture, proper use and safe disposal of these products are controlled by provincial and municipal rules and regulations. Products must also be properly labeled. Products include farm fertilizers, micronutrients, lawn and garden products as well as supplements such as water holding polymers, microbial inoculants, and composts.

Background

Safety evaluators from CFIA examine all ingredients in a fertilizer or supplement. The CFIA also examines unintended and potentially adverse effects. This includes bystander and worker exposure (e.g. retailer, farmer, home owner), safety of food crops and ecosystem effects. In Canada efficacy is also subject to regulation.

All products submitted to the CFIA for registration or approval undergo a thorough label verification to ensure that displayed information is in compliance with the standards prescribed by the Fertilizers Act and Regulations. Evaluators verify that requisite information such as guaranteed analysis, directions for use, company/manufacturer contact information, appropriate units of measurement, and mandatory cautionary statements correctly appear and are clearly legible on the label. The assessment process also verifies that labels only convey true and accurate information.

The CFIA also monitors fertilizer and supplement products that are already available in the marketplace to verify their compliance with the prescribed standards with CFIA inspectors visiting facilities, sample products and review labels. These efforts are focused on verifying that products meet label guarantees and satisfy the safety standards for biological and chemical contaminants (pathogens, heavy metals, pesticide residues, etc.).

Participation

Mandatory – all products are subject to regulation

Costs

Sampling costs are borne by fertilizer companies. Fees are also paid to CFIA on the basis of the following schedule:



	Column 1	Column 2
Item	Service, Right, Product, Privilege or Use	Fee
Registration		
1.	(1) Subject to subsection (3), for the consideration of an application in respect of a registration or temporary registration of a fertilizer or supplement made under section 5 of the Regulations	
	(a) in the case of an application for registration or temporary registration	\$350
	(b) in the case of an application for the renewal of a registration	\$250
	(c) in the case of an application to amend a registration or temporary registration in respect of one or more of the following	\$50
	(i) the name or address of the registrant	
	(ii) the colour or format of the label	
	(iii) the product name	
	(iv) the declaration of net contents	
	(d) in the case of any other application to amend a registration or temporary registration	\$350
	(2) Subject to subsection (3), if an assessment of the safety or the efficacy of a fertilizer or supplement is necessary to consider an application referred to in subitem (1), the following fees, in addition to those set out in that subitem, are payable for those assessments	
	(a) in the case of a safety assessment	\$500
	(b) in the case of an efficacy assessment	\$250
	(3) The maximum fee payable for the consideration of an application	\$1 000
Release of novel supplements		
2.	(1) For the evaluation referred to in section 23.3 of the Regulations	
	(a) if an assessment of the safety of the supplement is necessary	\$500
	(b) if no such assessment is necessary	\$250
	(2) For a subsequent evaluation for the purposes of a renewal of authorization referred to in section 23.3 of the Regulations	\$100

Compliance

Each participant submits at least the minimum number of samples required based on a statistically valid sampling plan.

- ☀ To obtain accurate results, take samples according to the CFIA's official sampling instructions.
- ☀ Samples are analyzed by a laboratory accredited and monitored by the CFIA.
- ☀ The CFIA receives a copy of all results from official CFQAP samples directly from the accredited laboratory. The laboratory simultaneously sends a copy of the results to the company concerned.
- ☀ The CFIA receives results by November 30 of each year.
- ☀ The CFIA verifies the accuracy of all results of official samples with the company submitting the samples.
- ☀ A plant rating is established for each blender/manufacturer that has submitted a sufficient number of samples*.
- ☀ In March of each year all plant ratings are published and made widely available. These ratings are based on samples taken in the previous year.



- ☀ All those not submitting samples or submitting an insufficient number of samples are clearly identified in the publication.

*** Minimum Sampling: Blended Products**

Annual production samples/year

Small (0 to 600 T/yr) 3

Medium (601 -4 800 T/yr) 5

Large (over 4 800 T/yr) 8

*** Minimum Sampling: Basic Materials**

Annual production samples/year

Small (0 to 50 000 T/yr) 3

Medium (50 001 -120 000 T/yr) 5

Large (over 120 000 T/yr) 8

Canadian Compost Standards

www.cog.ca

<http://www.compost.org/ccmMSWCompost.htm>

www.compostingcouncil.org

http://www.cwwa.ca/cbp-pcb/databases/other_e.asp

Background

The quality of compost in Canada is monitored through the Compost Quality Alliance (CQA) program, a voluntary program established by the Composting Council of Canada and its compost producing members. CQA utilizes standardized testing methodologies and uniform operating protocols to ensure product quality in order to improve customer confidence in compost selection and utilization.

Key Elements of the program include: standardized product sampling Uniform laboratory testing, appropriate product attributes and usage guidelines.

The compost industry is subject to standards outlined by three organizations: Bureau des normes de Quebec, the Canadian Council of Ministers of the Environment and Agriculture and Agrifood Canada. They are all very similar if not identical to each other and are based on the same four criteria:

- ☀ **Maturity:** BNQ/CCME/AAFC standards use the same indicator tests & CCME guidelines add optional criteria for some provinces.
- ☀ **Sharp Foreign Matter Content:** The safety criteria similar across the BNQ, CCME and AAFC standards.
- ☀ **Trace Elements:** The similarities are significant.
- ☀ **Pathogenic Organism Content:** Again all 3 standards identify that the pathogenic organism content must not exceed the same limits

Participation

The program is open to all compost producers. The CCC formally shares the identity of Licensees of the CQA program in good standing with the Canadian Food Inspection Agency.



Costs

There is an annual cost to be a member of CQA; for a yearly period of September 1st to August 31 the annual licensee fee is presently \$700 for CCC members and \$1,000 for non-members. Laboratory testing charges are borne by the individual companies.

Compliance

CQA is focused on product rather than process and is designed to support regulatory compliance.

Participants follow a procedure which is the basis of the annual licensing arrangement to use the CQA mark and logo on packaging and product promotion.

A company pays a licensing fee to the CCC and is issued a certificate in respect to a specific compost product that has been manufactured, blended or distributed by the Licensee. The certificate confirms that the licensee is a participant in CQA and that the product of the licensee has been determined, as of the date of the certificate, to be in compliance with the CQA program.

Within a compost facility individual products are tested on the basis of annual production volume ranging from 4 to 12 times per year. Product samples are submitted to CQA-accredited laboratory which tests for regulatory requirements as well as agronomic parameters.

Results are reported back to compost producer and the Composting Council of Canada. If the tests show compliance with standards, the company is permitted to use the logo. If the compost product sample fails to meet analytical requirements, the producer has the right to rework and resubmit for further testing. Inability to achieve satisfactory analytical results would lead to non-compliance.

Licensees may also be only packagers or distributors of the compost product. Distributor Licensees who have sourced compost products from another CQA licensee may request that the CCC accept the analytical reports acquired by CQA from the CQA producer Licensee to satisfy the obligations of the Distributor Licensee under the program.

Reports of quantities sold of individual compost products must be made on an annual basis to the CQA program administrator.

Issues

The CQA also participates in a North American laboratory accreditation program. Participating CQA-laboratories across Canada and the United States are involved in the CAP (Compost Analysis Proficiency) program, a laboratory quality assurance program to calibrate procedures and evaluate inter-lab method performance. The Test Methods for Examination of Composting and Compost (TMECC) forms the basis of the analytical test methods. Only testing results from accredited laboratories are accepted by CCC.

Ammonia Standards Program

www.fssc.ca

The Fertilizer Safety & Security Council was established by the fertilizer industry in Canada to promote the safe and secure manufacturing, handling, storage, transportation and application of commercial fertilizer products. The Council in turn is developing the Ammonia Standards Program to be an industry run initiative with government oversight. The implementation schedule is:



- ☀ 2007 – 2008 -Two years for awareness and pro-active compliance, voluntary audits
- ☀ 2009 – 2010 - An audit will be required during this two years. Compliance is still voluntary
- ☀ January 1, 2011 - Compliance enforced, manufacturers will not ship ammonia to firms not in compliance after January 1, 2011

Background

The program provides a code of practice that is an auditable collection of standards covering the manufacture, transportation, and use of Agricultural Anhydrous Ammonia. The major principles of the Code of Practice include:

- ☀ Safety of workers and the public of primary importance
- ☀ Based on regulations and proven risk management practices
- ☀ Supported by science and practical experience
- ☀ Balance risk against economic realities
- ☀ Integrate the principle of equivalent level of safety
- ☀ Incorporate best practices
- ☀ Phase-in approach for implementation

Participation

The intent is to have all operations involved in the life cycle of agricultural anhydrous ammonia stakeholders meet Code standards with an initial focus on transportation and distribution.

Costs

Costs are intended to be borne by participants and are under consideration.

Compliance

The program follows basic process management principles in that individual operations must develop a plan based on the code of practice. Auditors accredited by the Agrichemical Warehousing Standards Association (AWSA), with whom the Council has partnered, using the same audit process are used.

Control points are fall into two categories - either mandatory or to be scored. Audit fails if any mandatory item not passed, or less than 80% of points scored in any section.

Ammonia stakeholders must contract with an auditor to have an audit performed on a two year cycle opportunity given to achieve compliance.

The Council will review the audit reports and provides the certification.

Issues

The program was developed to address the increase in public concern about ammonia incidents, the math problem, and terrorism as well as the push by regulators to establish standards and a program that would reduce the requirement for an onerous regulatory system. The program also has a goal of harmonizing standards across the county for the industry. A positive benefit for industry is that participation provides demonstration of due diligence and managing liabilities.



Micro Nutrients

Background

This category covers a range of largely proprietary products that are relatively new comers to the fertilizer world and that are produced and used in considerably smaller quantities than other fertilizers or composts. These products are most often produced in very controlled environments. Many of the makers of the micro nutrients use ISO standards in their plants to both assist in quality and cost control for the makers and to provide assurance to the customer.

Participation

The use of ISO standards is voluntary.

Costs

Costs are based on the level of assistance required to meet the various stages of the ISO program and paid to the third party providers of the services. Audit costs are generally based on the size of the operation and are determined by the certification body. An example of audit costs is:

☀ up to \$200,000	app. \$1600
☀ \$500,000 - \$2,000,000	app. \$2,500
☀ \$5,000,000 - \$10,000,000	app.\$3,300

Compliance

As with other similar programs, the certification to an ISO standard requires:

- ☀ Application
- ☀ Pre-Audit Assessment
- ☀ Audit Assessment
- ☀ Registration and Certificate and
- ☀ Continual Assessment

These stages are accomplished through a combination of self assessment and third party assessment. The use of the ISO designation is closely monitored contributing to the high level of compliance to the requirements and the trust in products produced under its aegis.

Issues

The ISO certification is a company specific. The cost, complexity and the positive branding of the ISO designation makes the use of the ISO participation valuable in and of itself. Because of the business approach necessary to be an ISO certified company many of these companies also participate in other branding type programs.



ANNEX 2 – NEW ZEALAND PROGRAMS

www.fertqual.co.nz

Fertmark and Spreadmark – The New Zealand Fertilizer Quality Council

The New Zealand Fertilizer Quality Council was incorporated in 2001 combining both the Fertmark and Spreadmark initiatives. The schemes were created by the New Zealand Farmers Federation.

Background

Fertmark is a fertilizer quality assurance scheme which was established in 1992 after the New Zealand government withdrew from fertilizer auditing. It is aimed at ensuring that fertilizer materials purchased by New Zealand farmers and growers meet specified quality criteria. The scheme includes an audited system that allows successful applicants to carry the distinctive Fertmark tick. As of 2007 there were 71 fertilizers entitled to use the Fertmark logo.

Spreadmark is a fertilizer spreading quality assurance scheme that is operated by the New Zealand Groundspread Fertilizers Association. The Spreadmark logo is presently used by over 105 companies throughout New Zealand. Being Spreadmark accredited assures farmers that the fertilizer is applied at an even rate and distribution pattern. The drivers are also fully trained and certified. The Council is funded by levies based on sales and its spending on operations. Unspent levies are credited to the participating companies' following year assessments.

The two programs have been brought together under the banner of the Fertilizer Quality Council – a non profit corporation - as a single approach to fertilizer management in New Zealand. Together the programs address quality, environmental stewardship and food safety. The Fertilizer Quality Council has launched a hard-hitting advertising campaign to encourage farmers to use only Fertmark approved fertilizers with Spreadmark qualified operators. The campaign uses illustrations from research undertaken by private and government research teams to show that money is lost by the use of sub-standard fertilizers and by faulty spreading.

Participation

Membership in the FQC is open to anyone with an interest in the fertilizer industry while the makeup of the Fertilizer Quality Executive Committee is as follows:

‘Membership of the Executive Committee shall be restricted to representatives of members who are users of fertilizer and/or persons schooled in the technology of fertilizer and/or fertilizer placement. The AGM shall have an unfettered discretion to co-opt such persons with the requisite technical knowledge to the Executive Committee as it believes fit.’

The majority of companies supplying N.P.K. products are committed to the Fertmark scheme. Most of these products are straight lines, rather than mixes due to the high degree of variability that can occur, both due to segregation and product testing procedures. Compost fertilizers are also covered and use of the mark has been granted to at least one composter.



Costs

The FERTMARK fee structure is given below. Note should be taken that ISO certified plants pay a lesser fee.

(GST Exclusive)	Non ISO (\$)	ISO (\$)
Manufactured and Bulk Products		
(where site auditing applies)		
Initial Registration Fees		
Company/Site Charge	1200	900
Additional Sites	1050	787
Per Product Charge	400	300
Annual Monitoring Fees		
Per Product Charge	620	400
Site Audits		
Two Yearly Re-audits - One site	2250	1500
- Additional sites	2050	1300

Compliance — use of logo

With Fertmark registered products, heavy emphasis is given to those products meeting declared chemical and/or physical specifications and originating from a quality controlled system. With both manufactured and imported lines, there is the potential for products to fall outside of the normal Fertmark specifications and tolerances. This protocol is not concerned with deviations, such as over specification, where there is no detrimental effect to the customer from the change in specification.

Licenses are granted to applicants who satisfy the Fertmark quality auditors that the products meet Fertmark Product Classification Standards, undertake to comply with the Fertmark Code of Conduct and pay the prescribed fee.

Issues

Protocols for compliance

Early on it was recognized that addressing the issue of mixes would be more difficult than so called 'straight line' products. An expert panel was established to determine protocols for mixed products.

The Protocol for Mixing Plants states:

'Mixes have primarily not been registered due to the high degree of variability that can occur, both due to segregation and product testing procedures. Because the components used in special mixes may segregate during transport, obtaining a representative sample may be difficult, if not impossible, once the mix has been loaded into a truck, railway wagon or conveyance, or dumped on a farm.'

The Fertmark Council has created an expert panel to examine the issue of certification of mixing plants and to provide recommendations for examination by both the Executive and Council.



ANNEX 3 – AUSTRALIAN PROGRAMS

www.fifa.asn.au/

Fertcare

Fertcare is a program of the Australian Fertilizer Services Association (AFSA) and the Fertilizer Industry Federation of Australia (FIFA). It is a national training and accreditation initiative for all fertilizer and soil ameliorant industry businesses and staff covering importing, manufacturing, storing, handling or distributing fertilizers as well as sales and the provision of advice and recommendations for fertilizer use. A stated purpose of Fertcare is to assist in the meeting of regulatory initiatives. While the program itself is not identified as mandatory, certain elements, training in particular, are mandatory thus imposing requirements on companies involved in the fertilizer business.

Background

Fertcare's goal is to reduce risks and improve the efficiency of use of fertilizer inputs by addressing two components: training and quality. The two components work together in that specialized training is provided to workers from the manufacture to sales and application creating a process continuum that assures quality of product and service throughout the value chain. The Quality Assurance program permits branding aimed at providing consumer assurance with principles to:

- ☀ Assist companies to manage environment, food safety and occupational health and safety risks associated with fertilizer and soil ameliorant products.
- ☀ Ensure compliance with regulations relating to fertilizer and soil ameliorant products.

Participation

Fertcare Accreditation

The training, quality assurance and certification activities are both included in the Fertcare Accreditation program. The program licenses businesses to use the Fertcare logos based on their compliance with the program targets for training, quality assurance and certification. The industry is committed to achieve 100% coverage of eligible staff, premises and contract spreading equipment by the end of 2008. Eligible staff is those involved in providing advice on fertilizer and soil ameliorant use, either in a sales or advisory role and those involved in the storage, handling, transport and application of fertilizers and soil ameliorants.

Costs

The program is run on a cost recovery basis with a small margin to fund maintenance of course materials. Delivery is by commercial organizations and prices are subject to normal commercial processes. A typical Fertcare training course will cost the participant around \$500 and will involve a full day at a regional location plus around 20 hours of preparation, research or on the job assessment. Costs for accreditation are currently \$50 per premise and Fertcare Accu-Spread certification costs \$500 per machine. The costs for Level C ROPC and audit and for premises audit are not available. It is recognized that these represent significant costs to fertilizer businesses which range between multi-million dollar companies and single-spreader operators.



Compliance

Fertcare has a comprehensive compliance regime that includes the training of personnel and audits of premises.

Fertcare Quality Assurance

Personnel

Training is conducted at three levels, aimed at logistics providers, sales staff and agronomic advisers. It is delivered by registered training organizations (RTO's) that meets national competency standards under the Australian Qualifications Framework.

Level A training involves developing a basic understanding of fertilizers and soil ameliorants, such as physical identification, understanding product labeling, storage and handling characteristics and the main environmental and food safety risks.

A more advanced course for sales staff, Level B, provides basic training in plant nutrition and gives participants more knowledge about the environment and food safety issues associated with fertilizers.

Level C training is aimed at agronomists. The course covers environmental issues, environmental stewardship practices, regulations and label requirements, sampling and food safety issues. With recognition of prior competency, agronomists can become fully accredited Fertcare advisers.

To maintain accreditation under the Fertcare program all trained personnel are required to participate in a biennial refresher process. This will include updates on technical knowledge, reminders of key issues and self assessment of how the Fertcare skills and knowledge have been applied. In addition, there are specific quality assurance measures for advisors and for premises that store bulk fertilizer.

Premises

Premises that store bulk fertilizer are required to undergo a biennial audit that assesses the management of environmental risk and product specific occupational health and safety. Premises managers are required to develop a management plan following a simple risk assessment process and the audit assesses the plan and its implementation.

Fertcare Certification

Accu-Spread is a key component of the Fertcare initiative. The Fertcare Accu-Spread program assesses the width and uniformity of distribution of fertilizer spreading equipment. Accu-Spread is a testing and accreditation program that ensures a spreading machine can apply fertilizer evenly across the paddock – maximising productivity and minimising environmental damage. It allows operators to determine how wide and how evenly their machinery is spreading. If necessary, adjustments can be made to ensure an even and efficient spread pattern.

Once a machine has been tested and accredited, certificates showing the spread pattern are issued and are available to customers



Accreditation program

The description below of the program is taken from the Fertcare Handbook Executive Summary. It is important to note that the accreditation program itself has three objectives of which the latter two are particularly relevant to the Canadian situation.

1. To encourage uptake of training and product stewardship activities throughout the industry. This is the major thrust of the industry's intention to manage food safety and environmental issues. The intention is to ensure that we are managing the issue appropriately and to use this commitment to ensure full involvement in public policy development and implementation.
2. To provide a mechanism on which any future regulation or co-regulation regime can be based. It is anticipated that either internal or external pressures will result in a need for greater regulation of the fertilizer industry to ensure that environment and food safety issues are being appropriately managed. The intention is to ensure that the Fertcare accreditation system is robust and effective and implemented at a rate that will make it impossible to ignore as the key mechanism for any additional regulation.
3. To develop a strong brand that is widely understood by public policy makers and agencies, by the fertilizer industry, and by end-user customers. Communication of the Fertcare program to a range of stakeholders is a critical part of ensuring that the reputation of the industry for credible and responsible involvement in managing issues is maintained and strengthened.”

Issues

It was recognized by the government and industry at the outset that in order to gain acceptance amongst a range of stakeholders the program had to be developed in consultation with stakeholders, as well as using significant input from external organizations and individuals with relevant expertise and high credibility.

The speed of development of materials and programs was significantly aided by funding support from the Australian Government. It is also recognized that government support added credibility and reinforced the decision to pursue a cooperative industry approach to the issues.

In addition, the training programs for each Fertcare level have been ‘mapped’ to new and existing national competencies, under the Australian Qualifications Framework. Fertcare is delivered by appropriately qualified third parties under the control of Registered Training Organizations. The RTOs also ensure course participants are independently assessed and fully meet the competencies required.

The cost of the program development was a significant consideration but the public commitment by the industry to achieve 100% compliance with the accreditation program was a factor in giving all participants the confidence to make the necessary investment. The decision to use an external qualifications framework with the accompanying quality controls, record keeping and approvals processes gives the program instantly recognized credibility.



ANNEX 4 – EUROPEAN PROGRAMS

www.fertilizer.org

European Fertilizer Manufacturers Association

EFMA represents the major fertilizer manufacturers in Europe. Its web site states that the issues that the industry devotes its attention to are those prompted by concern within the industry itself as well as those that have arisen in other sectors of society in connection with the production or use of fertilizers. It deals directly and often with the European Commission and its policy directives.

EFMA's Commitment to Product Stewardship is stated as follows:

- ☀ Make and sell safe products
- ☀ Operate plants based on best manufacturing practices
- ☀ Store and distribute our products under rigorous control
- ☀ Work together with others in the supply chain to ensure the efficient, safe and environmental correct manufacturing, distribution and use of fertilizers
- ☀ Openly share our knowledge on Health, Safety and Environment for our products with the community at large
- ☀ Use scientific facts and risk-based assessments to contribute to the development of regulations
- ☀ Work together as members of EFMA to succeed with our Product Stewardship program

Background

EFMA took action with the support of its members after a major fertilizer related accident in Toulouse, Spain, in 2001. As a result of that situation the industry decided to pull the various program elements which existed throughout the EU together, to make one comprehensive program in which the participation of all members would be mandatory, where their performance is audited and where concrete steps and actions must be taken to continuously improve the auditing score.

One of the programs that EFMA created and managed is the Product Stewardship Program. The EFMA web site states that:

“Product Stewardship is to make sure that fertilizers their raw materials, additives and intermediate products are processed and manufactured, handled, stored, distributed and used a safe way with regard to health, occupational and public safety, environment, and security. “

Participation

Participation is compulsory for members of EFMA.

Costs

Costs of implementing the program are the responsibility of the companies themselves.



Compliance

Compliance is mandatory and verified by an independent outside auditor and concrete steps for improvement need to be demonstrated and audited in areas where members have not achieved an appropriate score. There are three main components to measuring compliance.

☀ Self assessment

Self-assessment is done under the responsibility of the company. EFMA has developed a questionnaire for use by companies in conjunction with Det Norske Veritas, a world-wide recognized independent third part specialist. The questionnaire enables companies to determine where they stand in relation the program. The self assessment questionnaire is signed off by the CEO and sent to EFMA for further review.

☀ Inspection

The audit is undertaken by an accredited third party. EFMA, together with an independent third party has developed 5 inspection check lists to validate that day-to-day operations are in conformance with EFMA's Product Stewardship Program. The inspection check lists cover the areas in the Product Life Cycle most vulnerable as regards to possible accidents:

- 1) Inspection of storage.
- 2) Transportation
- 3) Inspection of contractor management at manufacturing sites.

The inspection assessment must be sent to EFMA.

☀ Reviewing

The result of the audit-inspection of each member company will be scored against minimum EFMA requirements. Those companies that do not meet the minimum requirements have to comply within a given period.

Issues

The issue of safety and security of fertilizer components have recently become important issues in the EU. EFMA has decided that it will develop a voluntary program based on the elements of the security approach taken by the UK. EFMA describes the approach can be described as a “know your customer” approach.

EFMA makes it very clear that the minimum requirements, the scope of the self-assessment and inspection, as well as the compliance system itself, are subject to review and change or extension to other areas in the Product Life Cycle, given member interests and government requirements.

UK Agricultural Industries Confederation – Fertilizer Industry Assurance Scheme (FIAS)

www.agindustries.org.uk

This fertilizer scheme is intended to protect the integrity of the fertilizer industry supply chain. The areas covered include are storage/ports, transport, retail, manufacturing and importing. FIAS has been



developed largely to address security concerns but in doing so also addresses issues of fertilizer content and consistent manufacturing processes. While it is a ‘voluntary’ scheme, after 1 June 2008, companies in the UK should only trade with FIAS-Certified participants or companies they have risk-assessed/audited themselves to comply with FIAS standards. Companies that do not trade in accordance with this will be given a non-conformance by FIAS and the Agriculture Industries Confederation. The FIAS web site quotes John Kelley, Managing Director of AIC Services Ltd. as follows: “FIAS was created to cover the whole fertilizer supply chain and this is another step in the process of delivering the security which government demands. It is vital to meet its targets if it is to avoid more cumbersome and costly legislation to meet Government demands.” Thus the program will only be voluntary in that a company can participate in the program and participate in the industry – or they may choose not to participate in the program and not be permitted to participate in the industry.

Background

FIAS is a voluntary initiative, designed by the Agricultural Industries Confederation (AIC) with the assistance of the UK government and developed in conjunction with the fertilizer sector of the agricultural inputs industry largely to address security concerns within the fertilizer industry supply chain.

It covers the areas of fertilizer assurance, security and traceability in the fertilizer industry supply chain. The scheme was launched in January 2006 and applies to all fertilizer uses except home garden uses. AIC does not deliver the programming itself but uses a number of accredited organizations to deliver training for assessors, etc. At this point in time the program uses the services of Product Authentication International as the third party delivery entity for auditing and certification.

Participation

The program is voluntary and open to any company involved in the manufacture, importing, transport or storage and payment of fee to the AIC. The company must agree to certification through an audit by an accredited certification body.

Costs

The scheme has two fees: a FIAS Registration Fee which covers the management, administration and development of the scheme and the Audit and Certification Fee which covers the audit and certification of the participant’s business.

Both costs are based upon the size of the organization and the number of standards the company is audited against, i.e. for smaller businesses, participating in one standard the cost is lower. The program also makes an effort to dovetail FIAS with existing audits and codes of practice. It is possible to run audits concurrently to save both money and time. After an audit a company receives an audit report which lists any areas of non-compliance against the standards. The company has thirty days from the audit to submit proposed corrective actions, and a further 30 days (total sixty days from audit) to correct them. On correcting the non conformances and payment of the relevant fees the company is permitted to use the designation of “FIAS Participant”. This list of participants is updated weekly on the FIAS website.

Compliance

FIAS recognizes that the risks associated with each type of fertilizer are different and therefore, the program uses a risk assessment approach rather than a prescriptive one. FIAS has used the HACCP critical control point approach as a model. The assessment approach and standards (for manufacturing, importing, transport, storage and retail) are developed by fertilizer industry members of AIC, thus ensuring the development of a program that is usable by the fertilizer industry.



Comments

Government has made it clear that it needs to see significant progress in FIAS uptake as soon as possible otherwise the industry could face onerous and costly legislation. Government is monitoring the uptake of FIAS and will report back to the industry on progress made.

An additional interesting note is that until overseas countries have signed up to a fertilizer assurance security scheme that is considered to be equivalent to the FIAS scheme, UK companies that purchase fertilizers from overseas will have to show evidence that an adequate risk assessment has been carried out that follows the FIAS codes.

A difference in the UK system is that it does not directly or indirectly include a fertilizer spreader component. This may be due to the scale of agriculture in the UK.

UK Compost Standards

www.bsi-global.com

www.compost.org.uk

Composting Association BSI PAS 100 – Certification Scheme

Background

The British Standards Institution's Publicly Available Specification for Composted Materials (BSI PAS 100) certification scheme was introduced in 2002 to provide a baseline quality standard for compost. The scheme ensures that compost producers are manufacturing a product that is consistent, safe and reliable, and provides the foundation upon which producers can further develop their products.

This specification covers the entire process by which compost is produced: from raw materials and production methods, through to quality control and lab testing. It means that the composts certified by The Composting Association are quality assured, traceable, safe and reliable. The Composting Association Certification

Scheme is the only UK scheme providing third party assessment of conformity with BSI PAS 100. The process is reassuringly rigorous and compost producers are inspected annually.

Participation

Use of and certification to BSI PAS 100 has been mandatory in Scotland since at least 2006. Since the BSI PAS 100 certification scheme was introduced, more than 100 producers have joined and together they produce more than 1.1 million tonnes of quality compost at production sites across the UK.

For complete listings of BSI PAS 100 suppliers visit www.wrap.org.uk/composting and follow the link for WRAP's online searchable producer database.

Costs

These costs are approximate for illustrative purposes only as each situation will be different.

- ☀ First year
- ☀ License Fee - £745
- ☀ Where required: Pre-Audit Gap Analysis - £400**Includes all expenses (travel, subsistence, hotels etc.)



These charges include all of the costs for the ongoing assessment program we manage throughout the year.

Costs for subsequent years

Only the license fee of £1500 is payable for second and subsequent years, again this includes all of the costs for the on-going assessment program throughout the year.

Compliance

The composting process and resulting composted product shall comply with the requirements of the British Standards Institution's Publicly Available Specification for Composted Materials (BSI PAS 100) or another equivalent quality standard proposed by the Contractor and accepted by the Council. Compliance with BSI PAS 100 or another equivalent quality standard accepted by the Council shall be independently verified on an annual basis by a suitably qualified third party organisation satisfactory to the Council in its absolute discretion (e.g. The Composting Association).

Quality Protocol for Compost

http://www.wrap.org.uk/composting/quality_protocol.html

http://ec.europa.eu/agriculture/qual/organic/index_en.htm

Background

The 2006 EU Waste Framework Directive created regulatory and marketplace confusion over what constituted materials produced from waste which 'could be used beneficially without damaging human health and the environment'. This inhibited the development and manufacture of these products, the recycling of waste and the diversion of waste from landfills.

In response, the UK government and stakeholders in the waste conversion sector developed Quality Protocol, published in 2007:

- ☀ to clarify the point at which waste regulatory controls are no longer required;
- ☀ to provide users with confidence that the compost they purchase conforms with an approved standard; and,
- ☀ to protect the environment (including soil) and human health by describing acceptable best practice for the use of quality compost on land used for agriculture or soil-grown horticulture.

The Protocol's criteria for producing compost from waste include, inter alia, that the manufacturer must:

- ☀ use input materials from the positive list and ensure that they are source-segregated;
- ☀ meet the process and other requirements of the standard; and,
- ☀ identify the appropriate use for its compost and sell in only in those markets (e.g. land restoration and soft landscape operations; horticulture (this includes domestic use); and, agriculture and soil-grown horticulture).

The Quality Protocol applies in England and Wales and provides a clear framework for the production and supply of quality compost. It clarifies which waste materials can be used in quality compost production. Permitted inputs must be biodegradable materials that have been separately collected from non-biodegradables and that have not been mixed, combined or contaminated with other potentially



polluting wastes, products or materials including invasive species. The detailed list includes 19 categories with many subcategories and extensive language concerning inclusions and exclusions. Some examples of included categories are waste from:

- ☀ agriculture, horticulture, aquaculture, forestry, hunting and fishing;
- ☀ the preparation and processing of meat, fish and other foods of animal origin;
- ☀ fruit, vegetables, cereals, edible oils, cocoa, coffee, tea and tobacco preparation and processing,
- ☀ conserve production, yeast and yeast extract production, molasses preparation and fermentation;
- ☀ the dairy products industry;
- ☀ the baking and confectionery industry;
- ☀ the production of alcoholic and non-alcoholic beverages (except coffee, tea and cocoa);
- ☀ wood processing and the production of panels and furniture, pulp, paper and cardboard;
- ☀ aerobic and anaerobic treatment of solid wastes;
- ☀ municipal wastes (household waste and similar commercial, industrial and institutional wastes)
- ☀ including separately collected fractions; and
- ☀ gardens, parks (including cemetery waste) and markets.

Participation

Manufacturers and users are not obliged to comply with the Quality Protocol. But if they do not, the compost will be considered to be a waste and waste regulatory controls will apply to its handling, transport and application. The use of the Protocol eases the regulatory burden for manufacturers and increases the opportunity for marketing their products.

For farmers in England and Wales, the Quality Protocol also reduces the regulatory burden, effectively removes its 'waste tag' from compost and eliminates the need to apply for a waste management license exemption. Farmers do, however, need to analyse their soil for potentially toxic elements and track any changes over time by keeping records of where compost was used, how much was applied, and when. These records are to be shared with the compost supplier.

Compliance

Conformity with the Quality Protocol is demonstrated in conjunction with the BSI PAS 100 standard. Certification requires implementation of the protocol and the standard, rigorous recordkeeping of contracts of supply (inputs) and marketed product (contracts of supply), and an annual audit. Bodies granting certification must agree to the scheme rules and be accredited on an annual basis but the United Kingdom Accreditation Service (UKAS) to BS EN 45011: 1998 General requirements for bodies operating certification systems.



ANNEX 5 – US PROGRAMS

<http://www.ams.usda.gov/nop/indexNet.htm>

www.ers.usda.gov

Best Management Practices

Background

The Best Management Processes work both backwards and forwards in the value chain. The farm based BMP program is complementary to the product stewardship approach that The Fertilizer Institute (TFI) promotes for its members, which, according to the TFI web site: ‘relies on the balance of the economic, social and environmental goals of farm groups, researchers, conservationists, government officials, industry members and communities across the country.’ The industry makes use of certified crop advisors or agronomists in the implementation of BMPs on farm. The approach of third party planning and the emphasis on the implementation of BMPs as proof of environmental stewardship as a prerequisite for eligibility for support payments creates an expectation that fertilizer is as advertised and will perform as expected. Thus, the development of the voluntary programs at the farm level can be used by farmers to promote environmental sustainability to its customers and consumers but also oblige fertilizer manufacturers to ensure that their products meet certain specifications that can be relied upon by the third parties involved in the implementation on farm.

Examples of TFI joint product stewardship efforts include:

- ☀ Product Testing Program: Comprehensive product toxicity testing research that demonstrates that products pose no harm to industry workers, the community or the environment.
- ☀ Risk Assessment Program: Establishes safe limits of non-nutritive elements in fertilizer.
- ☀ America’s Security Begins with You - Campaign: includes posters, brochures and window stickers to remind those who handle ammonium nitrate to be vigilant and keep the product out of harms way.’

Participation

The Product Testing Program, the Risk Assessment Program and the America’s Security Begins with You- Campaign are voluntary in that they are guidelines that do not have compliance requirements set out for them and are aimed at assisting with compliance with state or federal regulation.

Costs

There are no mandatory costs to use of the guidelines. A company undertaking any action identified in the guidelines would bear the costs.

The development of the guidelines is borne in part by TFI through membership fees.

Compliance

There are no compliance requirements for the programs listed above by TFI.

TFI participates in two other fertilizer programs that bear a greater similarity to those running in other countries than those mentioned above.



United States Composting Council – Seal of Testing Assurance Program (STA)

www.compostingcouncil.org

Background

The composting sector of the fertilizer industry does have a stringent assessment, testing and certification program that requires the product to meet certain standards. Nevertheless, the United States Composting Council is clear that its Seal of Testing Assurance program is not a compost specification, per se. The USCC refers to the program as a testing and information disclosure program.

Participation

The STA Program is open to all compost manufacturers.

Costs

Participants in the program pay an annual STA Program application fee of \$650 per product. Participants who are USCC members will receive an application fee discount of \$150 per product (\$500). This discount reflects the extent to which USCC members' dues underwrite the development and management of the STA Program. Costs of the laboratory testing are also borne by the participant.

Compliance

The Compost Council states that compost producers are obliged to regularly sample and test product, using STA Program approved labs, for chemical, physical and biological properties. All of these labs must use the same standardized testing methodologies. The properties are those regulated by the federal or state government as well as those determined by the Council itself.

The frequency of testing is based on the volume of production of each composting facility and follows a schedule as indicated below:

Compost Quantity	Frequency
1 - 6250 tons	1 per quarter
6251 - 17500 tons	1 per 2 months
17501 tons and above	1 per month

Upon receipt of the laboratory test data, fees and other required program information, the Compost Council will certify the program participant's compost as "STA certified compost" and permit the use of the STA logo on all literature and bagged product.

The Composting Council has requirements for customer information to be placed on the product bag or literature, or by using the Seal of Testing Assurance's Compost Technical Data Sheet as follows:

1. The Seal of Testing Assurance logo, accompanied by the following written statement:

"This compost product has been sampled and tested as required by the Seal of Testing Assurance Program of the United States Composting Council (USCC). Test results are available upon request by calling (Licensee Name) at (Telephone Number). The USCC makes no warranties regarding this product or its contents, quality, or suitability for any particular use."



2. Directions for product usage.
3. An ingredient statement

Issues

The STA program does not place numerical standards on the actual test results (outside of health/safety standards, and any applicable state and federal regulations) but allows only an indication that the compost has been properly tested. Certification does not require laboratory analysis for particle size. The participant must simply report the screen size in which the product passes during screening.

The USCC cites landscape architecture design specifications for compost use as requiring compost certified by the STA.

The Fertilizer Institute

www.tfi.org

The Risk Management Program

The Fertilizer Institute (TFI) worked with the Environmental Protection Agency to develop a Web-based compliance assistance tool for the implementation of the rules under the authority of section 112(r) of the [Clean Air Act](#). The [Chemical Accident Prevention Provisions](#) require facilities that produce, handle, process, distribute, or store certain chemicals to develop a Risk Management Program, prepare a Risk Management Plan (RMP), and submit the certified RMP to EPA. Thousands of facilities in the U.S. are impacted by the section. The program is run using a basic hazard analysis – quality management system.

Participation

The Risk Management Program of the TFI is also a set of guidelines that assist companies to meet the mandatory requirements of the EPA's Chemical Accident Prevention Provisions of the Clean Air Act.

Compliance with the Risk Management Provisions of the EPA is mandatory.

Cost

N/A No fees are presently assessed for the EPA.

Compliance

Self- assessment is used in the initial review which is then submitted to the appropriate government department. Assessments and audits can then be carried out by government officials, accredited consultants and an appointee of the industry participant depending on the circumstance.

EPA undertakes facility inspection and enforcement of the RMP supporting the Chemical Accident Prevention Provisions. The oversight of these components are, as mentioned in the Risk Management Program regulations, completeness checks, reviews, audits, and inspections.



TFI Chemical Security Assessment Tool

TFI also worked with the Department of Homeland Security (DHS) through the Chemical Sector Coordinating Council (CSCC) to develop the risk based Chemical Security Assessment Tool that facilities are required to fill out to be in compliance with the Chemical Security Anti-Terrorism Standards. These standards and their implementation are new and evolving and will impose increased risk management type activities on those involved in the fertilizer industry.

Participation

Mandatory

Costs

While the program does not now require fees to be paid by the registrants but the DHS is contemplating the application of different fees, including filing fees, fees for inspections and audits, and fees for screening of individuals against the Terrorist Screening Database. Any costs incurred by the industry in the course of preparing for assessments and/or making required adjustments are the responsibility of the industry.

Compliance

If a facility possesses a chemical that is on DHS's Chemicals of Interest list at or above the Screening Threshold Quantity for any applicable security issue, the facility must complete and submit a 'CSAT Top-Screen' assessment to DHS. After analyzing a facility's Top-Screen information, DHS will make a preliminary determination whether a facility presents a high level of security risk and therefore must comply with additional requirements of CFATS including audits.



ANNEX 6 – OTHER CANADIAN PROGRAMS

This Annex provides information about Canadian programs where either CFIA or another government department or agency works with third parties to deliver regulatory programs. The programs described include:

- ☀ Traceability programs for livestock
 - Canadian Cattle Identification Program
- ☀ On-farm food safety programs
 - Commodity Specific Programs
 - National On-farm Food Safety Recognition Program
 - FeedAssure
- ☀ Programs in the grains and oilseeds industry
 - Canadian Seeds Institute
 - CSI Standard
 - CSI Authorized Importer
 - CSI /CFIA Phytosanitary Certification Program for Seed
 - CSI Integrated Seed Quality Management System
 - Canadian Grain Commission
 - Canadian Identity Preserved Recognition System
- ☀ Crop Protection Programs
 - Agrichemical Warehousing Standards Association Certified Warehousing Standards
- ☀ Product Certification Programs
 - Ecolabel
 - Organic Certification
- ☀ Canadian Medical Devices Conformity Assessment System

Traceability Programs for Livestock

The Canadian Cattle Identification Program – Canadian Animal ID Program

www.canadaid.com

Background

The Canadian Cattle identification Program is an industry initiated and established trace back system designed for the containment and eradication of animal disease. The Canadian Animal ID program is the extension of the cattle ID program to other species, concentrating on ruminants. In Quebec, Agri-tracabilite runs a comprehensive program that is regulated and paid for by the provincial government. On-trace has recently been established in Ontario as an arms length organization to develop a gate to plate system with a regulatory basis in the federal system for animal ID and a provincial regulatory basis for premises identification.

The Canadian Cattle Identification Agency (CCIA) is led by a Board of Directors made up of representatives from all sectors of the cattle industry: the Canadian Cattlemen's Association, Livestock Marketing Association of Canada, Canadian Meat Council, Canadian Veterinary Medical Association, Dairy Industry, The Canadian Bison Association, Alberta Beef Producers, Alberta Cattle feeders



Association, Livestock Order Buyers of Canada, Manitoba Cattle Producers Association, Ontario Cattlemen's Association and ATQ. The Canadian Food Inspection Agency and Agri-Food Canada are ex officio members.

CCIA is responsible for setting the standards with respect to tags, operates the national database and provides industry leadership with respect to animal identification, premises identification and traceability.

The program began January 1, 2001. All cattle, sheep and bison must be tagged with an approved CCIA ear tag upon leaving their farm of origin. Full enforcement of the program by the Canadian Food Inspection Agency, with monetary penalties, began on July 1, 2002.

Participation

A CCIA Approved tag is applied to the ear prior to leaving the farm of origin.

All tags are visually and electronically imbedded with a unique identification number that is allocated from the national database and then distributed to producers through authorized tag dealers.

The national tag distribution network securely reports all tag issuance records directly to the national database.

Costs

Participants are responsible for the cost of the tags, the tagging of the animals and maintenance of the records.

At the outset, the Government of Canada through AAFC programs covered the costs of administration. The price of the tags has been established to partially cover the administration costs.

Compliance

Regulations pertaining to the Canadian Cattle Identification Program are contained within the Federal Health of Animals Act and Regulations.

The Canadian Food Inspection Agency (CFIA) enforces the cattle, sheep and bison ID programs with penalties for non-compliance beginning at \$500 and going as high as \$4,000. Early payment can reduce the fines by as much as 50%. The need for assessing penalties will be minimal as all industry sectors will be aware of the requirements and will be expecting compliance from their suppliers.

Comments

When purchasing tags, producers are required to provide their name, telephone number, address and postal code, the producer is then assigned a Personal Identification Number (PIN) which he or she will have the option of using to speed up tag purchases. No other information is recorded.

CCIA controls access to the information stored in the CCIA database. CCIA will provide information to CFIA at CFIA's request in the event of a health or safety concern. Any other request for access, including government departments other than CFIA, is made through a legal process with the petitioner requiring justifying the need for access.



Animals that lose tags in transit are to be re-tagged at the next point of arrival. Beyond the farm of origin new owners are expected to keep a record of the re-tagged animal's tag number and any information available about its origin in the event of a later trace back.

Canadian Food Safety Programs

Commodity-specific On-farm Food Safety Programs

www.onfarmfoodsafety.ca

Background

National producer organizations, particularly in the poultry sector, began the development of on-farm food safety programs in the late 1980's in response to food safety crises outside of Canada. By 1996, a consensus amongst the commodity groups and general farm organizations had been reached and work began with government to establish a consistent approach to on-farm food safety based on HACCP and directed at the development of national programs that would be recognized by governments (i.e. CFIA) and auditable. As of 2008, HACCP-based programs have been developed by nineteen (19) commodity groups for approximately 99 percent of primary agriculture. The federal, provincial and territorial governments, working with farm groups, have established a recognition program for these national programs (see below). Delivery of audit and certification services is in most cases being undertaken by the commodity groups at either the national or provincial level. Some groups are exploring the use of accredited party certification bodies.

Participation

With some exceptions, the national on-farm food safety programs are designed to be voluntary and market responsive. Several commodity groups, particularly in the supply managed sector (poultry, eggs and dairy) have set target dates for mandatory implementation on farm. These decisions are taken at the provincial board level and enforced through quota regulations.

Buyers in several sectors, including hogs and horticulture (e.g. potatoes for processing, fresh produce to retail), have indicated that they will collectively seek mandatory implementation as a condition of market access.

Costs

Some federal government funding under the 2003 Agriculture Policy Framework is available to assist producers to implement on-farm food safety programs. It covers some of the costs of training and minimal equipment cost purchases. The total per farm is \$1050. Recent information on implementation costs suggests a wide variance by commodity – with some sectors such as horticulture requiring significant investment in hygiene and storage facility improvements. Audit and certification costs are the producer's responsibility. These are averaging between \$400 and \$600 per farm/audit. The audit frequencies are still being established and range for annual audits to once every four years with the use of producer declarations and off-site record reviews.

Comments

The development of on-farm food safety programs in Canada has led to the development of programs by input suppliers such as commercial feed manufacturers (see ANAC FeedAssure program below) and the Canadian Trucking Alliance in response to market demands from primary agriculture and /or from the whole food supply chain for assurance that firms have in place HACCP-based food safety management programs. In future, there may be additional demands on other input suppliers to meet this requirement.



CFIA Official Recognition Program - On Farm Food Safety Program

<http://www.inspection.gc.ca/english/fssa/polstrat/reco/recoe.shtml>

Background

The Canadian Food Inspection Agency's Official Recognition Program of On-Farm Food Safety Programs began with the Ministerial Agreement in Whitehorse in 2001. It is the world's first government recognition process for on-farm food safety programs and is led by CFIA, with participation by the Provincial and Territorial governments.

Participation

Most national on farm food safety programs have started the CFIA recognition process and many have completed Technical Review Part 1 – a vigorous assessment of the programs technical soundness.

Costs

Costs of the CFIA Official Recognition Program are borne by CFIA. Costs of the OFFS systems are shared with farmers and farm organizations. In the development period, both CFIA and the farm groups have been supported by funds from AAFC under the 2003-2008 APF.

Comments

CFIA Official Recognition Program consists of three stages which National Commodity Groups must successfully complete in order to have their On Farm Food Safety Program (OFFSP) recognized by the Canadian Food Inspection Agency (CFIA). These stages are:

- ☀ Technical Review (Part One – Government Review HACCP-based Program, and Part Two – Government Review of the Management System)
- ☀ OFFSP Implementation and Third-Party Audit
- ☀ Implementation Assessment by Government

In addition to recognizing the National Commodity Group's On-Farm Food Safety Programs, CFIA will perform a Post-Recognition Ongoing Monitoring (PROM) component. The PROM consists of two components. The first is a partial system assessment of the OFFSP with CFIA reviewing sections of the existing program and monitoring systems 18 months following recognition by CFIA of the OFFSP. The second component is a full-system assessment by CFIA 5 years following recognition.

Animal Nutrition Association of Canada - FeedAssure™ Program

Background

In 1999, commercial feed manufacturers through their national association (Animal Nutrition Association of Canada) responded to the expected demands from the poultry and livestock sector and governments for greater feed safety assurances by introducing a voluntary certification program. FeedAssure™ requires the commercial feed manufacturer to implement prerequisite programs and a site-specific HACCP program. The implemented program must also meet regulatory requirements. ANAC has contracted with SGS Certification to provide the audit and certification services. The certificate is issued by ANAC and SGS. ANAC also offers training programs for FeedAssure™ members.

Participation

Participation in FeedAssure™ is voluntary. As of early 2008, approximately 70 percent of commercial feed manufacturers participate in the program.



Costs

Audit and certification costs are borne by the commercial feed manufacturers.

The cost of FeedAssure certification has two components - the annual License Fee and the cost of the auditor (daily rate plus expenses) for the annual audit as follows:

- 1) The license fee is \$500/year for ANAC members and \$1,000/year for non-members.
- 2) The cost of the audit itself depends on the complexity of the system and where the facility is in the audit cycle. We have a 3-year audit cycle, so for a med/large facility the audit lengths are 3.0 days for a full audit (which is actually 2.5 days on site plus 0.5 days for report review) and 1.75 days for the subsequent two annual maintenance audits (which is actually 1.5 days on site plus 0.25 days for report review). The SGS audit rate is currently \$1,000/day, but that increases to \$1,050 as of May 1, 2008. The average auditor travel expenses in 2007 were \$471/audit, with a range of \$0 to \$1,800.

Therefore, the average cost of an audit for a med/large feed mill = $(3.0 + 1.75 + 1.75)/3 = 2.167 \times \$1,000 = 2167 + 471 = \$2,638$.

If you add on the license fee, the cost is \$3138 (ANAC member) or \$3638 (non-member).

Cost to ANAC for the program itself includes insurance, website hosting, translation, promotional materials, certificates and staff time. All but the latter costed ANAC around \$12,000 in 2007, however the biggest cost is staff time. There are currently two ANAC staff that work on this program (a manager and an admin person), and it is estimated that the time spent on this program is probably equivalent to one full time staff person. ANAC also holds annual training sessions which tend to be marginal money makers. They are held if they at least break even.

Other costs which didn't factor in to 2007 costs are the cost of legal advice, a management system (not yet formalized), technical reviews and program updates. Additionally, if the program is incorporated separately, costs would be added (e.g. financial audits, legal fees, board meetings, etc.).

Comments

ANAC and CFIA are currently in discussions concerning the integration of the FeedAssure™ program with the regulatory inspection regime. As feed manufacturers and fertilizer manufacturers are subject to similar regulatory requirements (registration, quality, labeling, etc), CFPF should monitor these discussions carefully.

Programs for Grains and Oilseeds

Canadian Seeds Institute Programs

www.csi-ics.com

The CSI is a not-for-profit organization founded in 1997 by the Canadian Seed Trade Association (CSTA), the Canadian Seed Growers' Association (CSGA) and the Commercial Seed Analysts Association of Canada (CSAAC).



Background

The Institute uses independent assessors to evaluate seed establishments using the CSI standard. CSI regularly reviews industry performance through quality system audits and product sampling.

Participation

Participation is mandatory for those involved in the seed industry.

Costs

Costs are borne by the industry.

Compliance

The Canadian Seed Institute (CSI) delivers accreditation and monitoring programs for the Canadian seed industry. Recognized by the Canadian Food Inspection Agency, CSI has been given the mandate to be the single point of contact for all seed establishments, seed laboratories, operators and graders seeking registration, licensing or accreditation.

CSI monitors over 1300 Canadian seed establishments, authorized importers and accredited seed testing laboratories.

CSI accredited seed establishments meet the minimum regulatory requirements.

The application of CSI standards confers the right to use the Canada grade name certification mark and enhances Canada's reputation for seed quality. CSI's standards are developed to harmonize with other countries in order to eliminate many technical barriers faced with international trade.

CSI Authorized Importer (AI)

Background

CSI is accredited under CFIA to conduct authorized importer (AI) assessments, ensuring your facility imports and releases seed into the domestic market that meets the requirements of the *Seeds Regulations*. Authorized importers can import seed on minimum documentation, and are responsible to report imports to CFIA.

Participation

Mandatory for seed importers.

Costs

Costs are borne by participants.

Compliance

The Seed Import Release Agent (SIRA) of the AI conducts examinations of seed testing reports issued by domestic or foreign seed testing laboratories for the purpose of determining if the imported seed lot is eligible for release in Canada.

There are three main requirements to becoming registered as an Authorized Importer – for businesses that import seed products:

- ☀ Certification of Personnel
- ☀ Quality Assurance Manual
- ☀ On-Site Assessment



Certification of Personnel

In order for CSI to recommend any facility for CFIA registration, an individual on staff must be a licensed operator. This is accomplished by the individual passing the AI evaluation to ensure the *Seeds Regulations* are understood.

All AIs must have or make use of an accredited grader for the examination of domestic seed analysis reports or a SIRA for the examination of foreign seed analysis reports.

Quality Assurance Manual

The manual must be written based on the current practices and activities of your facility, and must address all of the elements of the CSI AI quality management system standard. A template is available to simplify the process for participants.

Once the manual is complete, it must be assessed by any CSI accredited assessor.

Upon successful review the assessor will recommend to CSI that the facility be registered by CFIA with the understanding that an on-site assessment will take place after the first lots have been imported; but not later than three months after initial accreditation.

On-Site Assessment Background

The on-site assessment must take place to ensure that the practices as described in the manual are being implemented.

Subsequent to the on-site assessment the assessor will write an assessment report and send copies to the CSI and to the client. Pending positive results from the on-site assessment, the assessor will also provide to CSI another recommendation for continuing CSI accreditation and CFIA registration.

The CSI accreditation package is sent including the certificate, and in the case of a new facility, the CFIA registration number will be communicated by the CSI office.

In order to maintain CSI accreditation includes having an assessment every two years and informing CFIA of seed imports.

CSI / CFIA Phytosanitary Certification Program for Seed (CPCPS)

Background

Canadian seed exporters have four options to meet U.S. import requirements for seed, obtain a:

- ☀ Phytosanitary Certificate issued by the CFIA
- ☀ USDA PPQ form 925
- ☀ CFIA form 5289
- ☀ CFIA seed export label 5309

The CFIA seed export label is a relatively new option, introduced and developed specifically for Canadian seed exporters shipping numerous small shipments of seed (e.g. mail orders) to the U.S. It can only be used by facilities which are certified in CPCPS.

Participation

Mandatory for those wishing to use CFIA seed export label 5309.



Costs

Costs are borne by users of the system.

Compliance

The Canadian Seed Institute (CSI) has been recognized by the Canadian Food Inspection Agency as their approved inspection body for CPCPS – a quality system to ensure that companies shipping seed to the United States are complying with their phytosanitary import requirements.

In order to become registered as an approved seed exporter under the CPCPS, the exporting facility must develop a quality system and submit an application to CSI along with its quality system manual for review and approval.

Integrated Seed Quality Management System – Canadian Seeds Institute

The Integrated Seed Quality Management System program is an industry-driven, quality management, third party audited program run by the Canadian Seeds Institute. It was originally designed to be an add on program for those involved in the Registered Seed Establishment program run by the CSI.

Background

The ISQMS covers the seed industry from seed production to retailing. As with other quality assurance type programs it is an approach tailored for each company or facility from a generic set of standards. It addresses the process of production not the quality of individual lots or shipments. In this case quality of product is addressed by the Registered Seed Establishment program.

Participation

Open to any seed production business.

Cost

Costs of the writing of the quality assurance manual, of the assessor's review, site visit and report to CSI and well as the CSI review and maintenance of accreditation status are the responsibility of the seed business.

Compliance

In order to obtain CSI Accreditation under the ISQMS, a seed business must write a quality assurance manual, addressing the elements of the standard set by CSI. As with most such programs a template is used to simplify the process of writing the individual company manual.

The manual must be reviewed by a CSI accredited third party assessor against the appropriate standard. Subsequently an on-site assessment must take place to ensure that the practices described in the manual, are being implemented at the facility.

The assessor sends CSI a recommendation concerning accreditation with CSI in the form of an assessment report. The report is reviewed by CSI and if the results of the assessment are positive, the CSI will grant accreditation and a recommendation for initial or renewal of facility registration is forwarded to CFIA.

It is the responsibility of the seed business to maintain CSI accreditation.



Canadian Grain Commission Programs

Canadian Identity Preserved Recognition System.

The Canadian Identity Preserved Recognition System Standard was developed by the Canadian Grain Commission to provide third party certification of the processes they are using to deliver the specific quality attributes their domestic and international buyers are demanding and to oversee and officially recognize those programs in order to maximize their acceptance in global markets. These systems provide full documentation and traceability from seed to export vessel or domestic end-user. The Certificate of Recognition is the buyer's assurance that the Identity Preserved process is operating as it should, and that it meets the CIPRS Standard.

Identity preservation systems are used to maintain unique traits or quality characteristics of a crop or product right from production through transportation, handling until processing.

Background

CIPRS is based on quality management systems which document and itemize processes to control production from farmer right through to labeling and shipping and ensures a company's quality management system meets the Standard created by the Canadian Grain Commission (CGC). The Standard is designed to be compatible with quality management systems such as ISO.

Participation

Participation is open to any crop producer or grain or oilseed company that can meet the compliance requirements.

Costs

Costs are borne by the participants.

Compliance

A producer or company must develop an Identity Preserved quality management system in line with the CIPRS Standard. The system and the facilities will be subject to conformity assessment in other words be audited by an independent Canadian Grain Commission-accredited auditor who will submit an audit report to the Canadian Grain Commission (CGC). With a successful review of the audit report the CGC will provide a certificate of recognition for the operation and documentation will be provided that can be used with customers.

Comments

The CGC website describes the standard that on which CIPRS is based as follows: 'The CGC Standard for IP Programs is a national Canadian standard that can be applied to all crop types distributed through any Canadian supply chain. It provides the measuring stick against which IP programs can be assessed. If the IP program measures up, it will be recognized by the CGC with an official certificate. This CGC Certificate of Recognition brands Canadian IP programs that can deliver on what they promise.'

The Canadian Grain Commission accredits organizations to conduct third party audits on its behalf. The standards that Accredited Service Providers (ASP) must meet are international ones allowing them to offer assessments not only of CIPRS but also HACCP, IP, ISO which are often required by customers.



The Canadian Seed Institute was the first service provider accredited by the Canadian Grain Commission to offer auditing services for the program.

Crop Protection Programs

The Agrichemical Warehousing Standards Association (AWSA)

<http://www.awsacanada.com/>

Background

The development of the Agrichemical Warehousing Standards Association Certified Warehousing Standards represents a united and co-operative effort by the crop protection industry to safeguard the future. It is a proactive industry initiative designed to minimize the risks of chemical warehousing to employees, the public and the environment. The Standards also serve as a blueprint for governments planning to update their warehousing legislation.

The Agrichemical Warehousing Standards Association (AWSA) was founded, and is managed by warehouse operators, manufacturers, distributors and governments working together. Its mission is the continuous improvement of agrichemical warehouse performance in Canada through the establishment of standards to improve environmental protection, working conditions and business risk.

In Canada pesticides are stored for sale by a dealer network comprising independent dealers and local representatives of larger multi-branch retail organizations, approximately 1,400 facilities nationwide.

Participation

The system operates on a strict system of no compliance – no shipping. All facilities must participate and be in compliance to be permitted to store and ship chemicals.

Cost

Costs of the system, registration, audits and changes required to be in compliance are the responsibility of the facility owner or operator.

Compliance

Compliance is accomplished by ensuring that crop protection products are stored in certified warehouses. Warehouses are audited every two years by auditors who are specially trained and certified. The Standards are enforced through the diligent issuing and withdrawing of certificates by AWSA.

Agrichemical manufacturers will not ship product to uncertified warehouses. In addition AWSA informs, educates and communicates with stakeholders and provides other services as required.

Crop protection products will not be shipped to distributors or retailers unless they have complied fully with the Standards by the date required. To ensure compliance, the AWSA has established a process for strict enforcement of the Standards involving follow-up visits to the site and withdrawal of certification for facilities not meeting the Standards. The AWSA has a trained a field force of 25 Auditors to conduct bi-annual audits of all certified warehouse locations. Facilities can select any of the auditors listed below. The onus is on the warehouse operators to contact and book audits.



Comments

Structural requirements incorporate the National Fire Code, National Building Code and Canadian Electrical Code, established standards that must already be met by agrichemical dealers. In addition, if provincial or municipal governments have more rigorous codes, bylaws, regulations or legislation, then these standards would supersede the AWSA's Warehousing Standards.

Product Labeling Programs

EcoLogo

www.ecologo.org

EcoLogo is North America's most widely recognized and respected certification of environmental leadership. An interesting aspect of the EcoLogo program is that it sets standards and certifies products in more than 120 categories ranging from Automotive Related Products & Services, Building & Construction Products, Cleaning & Janitorial Products, Consumer Products, Containers, Packaging, Bags & Sacks, Electricity Products, Events, Fuels, Lubricants & Related Products, Marine Products, Office Furniture, Equipment & Business Products, Printing Products & Services, Pulp & Paper Products, and Services. There are currently more than 7,000 EcoLogo-certified products from hundreds of manufacturers.

Background

EcoLogo was launched by the Canadian federal government in 1988. It is the only North American standard accredited by the Global Ecolabeling Network as meeting the international ISO 14024 standard for Type I (third-party certified, multi-attribute) environmental labels. The EcoLogo program is managed by TerraChoice Environmental Marketing, Inc. The EcoLogo website states that:

'For buyers, EcoLogo is a tool to find, understand, and trust genuinely "green" products. For marketers, EcoLogo is a third-party endorsement, a sales tool, and a marketing program. By helping the buyers and sellers of genuinely green products find one another, EcoLogo rewards environmental leaders and helps shift the marketplace toward sustainability.'

Participation

Voluntary

Costs

Total costs depend on the specific product or service and the licensing package.

- ☀ Initial verification and audit:
Variable, typically \$1,500 – \$5,000. Price depends on type and number of products.
- ☀ Subsequent verification for additional products / services:
Variable, typically \$250 - \$2,000. Price depends on type and number of products.

In addition there are annual license fees which are 0.5% of product sales, with a minimum \$1,200 charge. EcoLogo also offers marketing assistance to licensees at additional costs through EcoLogo Plus! \$20,000, EcoLogo Premium! \$35,000.



Compliance

The EcoLogo criteria development process follows the principles and practices identified in the ISO 14024 standard for Environmental Labeling. Criteria are developed that identify better environmental choices by setting criteria levels so that approximately 20% of the products / services in that a category can achieve certification. Criteria are regularly reviewed and updated to ensure they represent current environmental leadership.

The process is as follows:

An application form is submitted form along with required supporting documentation. The application is reviewed by EcoLogo internally followed by an independent third-party auditor to assess the documentation and conduct an on-site audit. The timeline for the procedure is approximately 30 days. Based on the documentation review and on-site audit, the results will be reviewed and a decision made. Successful applicants will be sent a license for signature. The timeline for this phase is approximately 30 days.

Organic Standards – Canadian Standards and Regulations

www.pwgsc.gc.ca/cgsb/on_the_net/organic

<http://canadagazette.gc.ca/partII/2006/20061221-x6/html/extra-e.html>

Canada has had a national organic standard in place since 1999. In preparation for the federal regulations which were promulgated in late 2006, the organic sector worked with the Canadian General Standards Board to update the national organic standard to provide the basis for regulatory standards and compliance processes. Part I (Organic Production Systems General Principals and Management Standards; CAN/CGSB-32.310-2006) details the agricultural practices that are acceptable in organic agriculture production systems, while Part II (Organic Production Systems Permitted Substances Lists; CAN/CGSB-32.311-2006) lists substances that are permitted for use in organic systems. It should be noted that there are concerns about the relationship of the standards for fertilizer products.

Background

The regulations will require mandatory certification to the revised National Organic Standard (*Canadian Organic Production Systems Standards: General Principles and Management Standards* and the *Permitted Substances Lists*) for agricultural products represented as organic in import, export and inter-provincial trade, or that bear the federal organic agricultural product legend (or logo).

Participation

The use of the logo is voluntary. All products that bear the logo must comply with the federal regulations.

Products bearing organic claims for inter-provincial and international trade, or who wish use the federal organic logo will be required to be compliant with the regulations. Certification to the revised standard for organic agriculture also will be mandatory for such products.

Costs

An example of fees charged on the basis of sales.

\$ 0 to \$24,999	\$1,000
\$ 25,000 to \$49,999	\$1,200
\$ 50,000 to \$99,000	\$1,500
\$100,000 to \$249,999	\$1,800



\$250,000 to \$499,999	\$2,750
\$500,000 to \$749,999	\$3,750
\$750,000 to \$999,999	\$5,000
\$1,000,000 and above	\$6,250

Compliance

The Canada Organic Regime is based on a third-party service delivery model:

- ☀ The CFIA is the competent authority providing oversight to the system.
- ☀ Existing accreditation bodies will be authorized by the CFIA provided they meet criteria set out in the regulations and established by the Canada Organic Regime.
- ☀ Agreements will be formed with accreditation bodies following an evaluation and verification that they meet these criteria.
- ☀ Authorized accreditation bodies will, in turn, assess certification bodies to determine if they meet the established criteria prior to recommending that they be accredited by the CFIA.
- ☀ On-farm and facility organic production system verification will be conducted by third-party verification officers employed by accredited certification bodies.
- ☀ Compliance verification and enforcement activities will be carried out by the CFIA.

It should be noted that the Centre for System Integration of the Canadian Seeds Institute is one of the accredited certification bodies.

On January 8, 2008, the Canadian Organic Office of the CFIA released the most recent version of the Quality Management Standards manual which describes the administration and enforcement of the organic regulation. The QMS manual will be updated on an annual basis and is going through a public review process, prior to implementation of the enforcement regulations in December 2008.

Health Canada – Canadian Medical Devices Conformity Assessment System

www.hc-sc.gc.ca/dhp-mps/md-im/index_e.html

Background

Health Canada has responsibility for evaluating the safety, efficacy and quality of diagnostic and therapeutic medical devices so that consumers and health care professionals can use them with confidence and for the licensing and monitoring of approved products. Its Medical Devices Program is managed through the Health Products and Food Branch of Health Canada. Working with a budget of just over \$11 million and approximately 150 full-time employees (2005/6). The program combines pre-market review, post-approval surveillance and quality systems in the manufacturing process for the over 60,000 licensed medical devices governed by the regulations administered under this program.

The monitoring of on-going quality is undertaken in collaboration with the Standards Council of Canada and accredited certification bodies. It also involves considerable international collaboration through such initiatives as the Global Harmonization Task Force (GHTF) which works to create a harmonized regulatory system for medical devices for use by all countries and through bilateral initiatives with the United States, Australia and other countries focused on developing a partnerships where both jurisdictions



could utilize multi-purpose quality systems audits conducted by one auditor to cover the regulatory requirements of both jurisdictions or to provide for mutual recognition of QMS certifications.

Health Canada and other national jurisdictions have referenced ISO 13485:2003 (CAN/CSA- ISO 13485-03) *Medical Devices -- Quality management systems -- Requirements for regulatory purposes* as the basis for the certifying the quality systems of medical device manufacturers.

Participation

Health Canada requires manufacturers of certain classes of medical device as one of the conditions of receiving a license for their product, to have in place a certified ISO 13485:2003 management system. This certificate will be evidence of compliance to the appropriate regulatory quality system requirement.

Costs

Medical device manufacturers bear the full costs of certification by accredited registrars. The registrars bear the costs of accreditation.

Compliance

Health Canada only accepts certificates that have been issued by special third party auditing organizations called Canadian Medical Devices Conformity Assessment System (CMDCAS) recognized registrars. The registrars (certification bodies) must be accredited by the Standards Council of Canada.

The SCC has responsibility for accrediting the registrars against requirements set by Health Canada. These requirements are based on the criteria established by the Global Harmonization Task Force in its guidance document *GHTF/SG4(99)28 : Guidelines For Regulatory Auditing of Quality Systems of Medical Device Manufacturers, Part 1: General Requirements : 1999*

Accredited certification bodies are responsible for conforming to the terms and conditions of their accreditation. Monitoring is undertaken by the SCC. Certification bodies must use qualified auditors, the requirements for which have been set by Health Canada. Technical experts play a significant role in the QMS audits, given the highly specialized nature of many medical devices.