



1 Introduction

1.1 Fertilizers Europe

1.1.1 Role of Fertilizers Europe

Fertilizers Europe represents the majority of fertilizer manufacturers in Europe. Its members account for more than 70% per cent of the region's nitrogen fertilizer production capacity and more than 60% per cent of phosphate fertilizer production.

1.1.2 Mission

The mission of the European fertilizer industry is to respond to the needs of agriculture and society by providing, in accordance with the principles of Responsible Care, a dependable and competitive supply of high-quality mineral fertilizers. Fertilizers Europe's Product Stewardship program covers the objectives and principles of Responsible Care.

The industry encourages the adoption of best agricultural practices in the use of plant nutrients, thus stimulating farmers and growers to produce high-quality crops in an economically and environmentally sound manner.

The mission of Fertilizers Europe is to identify, promote and manage the common interests of its members by:

- *promoting the role of mineral fertilizers in European agriculture and horticulture;*
- *anticipating and preparing for upcoming issues that may affect the industry;*
- *being the industry's spokesperson and sounding board;*
- *providing its members with a wide range of statistical information and studies.*



1.2 The Core Values of Fertilizers Europe

Responsibility as Provider of a Life Essential Product

As provider of a life essential product we recognize our responsibility towards all our stakeholders, customers, shareholders, employees, society at large and future generations. We are committed to act accordingly.

Sustainable Delivery of Value

We deliver optimum value to our customers, suppliers, shareholders and employees in a sustainable manner.

Sustainable Performance in Matters of Health, Safety, Environment and Security

We strive for the highest safety, health, environmental and security standards. Subscribing to the principles of Product Stewardship, we conduct all our activities in a manner which contributes to the goal of sustainable development.

Science and Innovation

We base our activities on sound science. We strive for innovation and continuous improvement.

Free and Fair Trade

We believe in, adhere to, protect and promote the concept of free and fair trade.

Ethical Conduct

Our conduct is ethical and honest, open and transparent.

1.3 Fertilizers Europe Product Stewardship Program

The members of Fertilizers Europe continuously strive to improve the safety, health, environmental (SHE) and security aspects associated with the production, storage, distribution and use of fertilizers. As a part of this Fertilizers Europe launched a Product Stewardship (PS) program in 2003 with the following objectives:

- Taking responsibility for products through the value chain from raw materials to end-use
- Meeting expectations for openness and communication

- Sharing experiences and knowledge
- Providing a good structure for setting up PS on a company level.

The Product Stewardship (PS) program is mandatory for members of Fertilizers Europe. As part of the program, members of Fertilizers Europe subscribe to and embed its philosophy and objectives in their organizations. They initiate several activities on Company level as well as jointly in Fertilizers Europe that go beyond what is necessary to fulfil legal requirements.

The PS program of Fertilizers Europe provides:

- Guidance on how to establish a PS program on a company level
- SHE and security standards of Fertilizers Europe relating to production, distribution, storage and use of fertilizers
- Reference to EU legislation, industry practices and best available techniques.

Fertilizers Europe provides a detailed description of its PS program on its web site www.productstewardship.eu. The web site also contains guidance on how to implement the program in fertilizer companies. In addition, the best practice documents of Fertilizers Europe are made available on the web page.

The PS program applies to mineral fertilizers, their raw materials and intermediates products. It covers the whole life cycle of a product from its development to application, as shown in the diagram below.





The PS program is based on the following elements:

- Management of Product Stewardship
- Product life cycle
- Risk management
- Communication
- Partnership

In this Standard, all the Requirements are addressed in two clauses:

- Management of Product Stewardship
- Product life cycle

The Standard makes reference to the extensive guidance provided by Fertilizers Europe as part of the Product Stewardship program including more detailed information concerning:

- Risk management
- Communication
- Partnership

The Fertilizers Europe Product Stewardship program includes specific guidance for each element covering:

- Legal Requirements
- Requirements of Fertilizers Europe
- Guidance on how to implement.

1.4 Security

In response to the increased concerns regarding terrorism and misuse of fertilizers, Fertilizers Europe has addressed security in production, storage, transportation and sale of fertilizers in the PS program. Fertilizers Europe has decided to apply security measures to all fertilizers containing nitrogen (N).

In order to prevent terrorists from gaining knowledge of the recommended security measures, Fertilizers Europe has restricted access to these documents. Access is only available to members of Fertilizers Europe and, on request, to the European Commission and National Authorities.



1.5 Scope

1.5.1 General

This Standard specifies requirements for PS management of solid and fluid mineral fertilizers, their raw materials and intermediate products.

For the fertilizer industry, Product Stewardship is ensuring that fertilizers and their raw materials, additives and intermediate products are processed and manufactured, handled, stored, distributed and used in correct and responsible ways with due regard to health, occupational and public safety, environment, and security.

This Standard applies to product stewardship processes that the organization identifies as those which it can control and those which it can influence.

This Standard specifies requirements where a member of Fertilizers Europe wishes to:

- a) establish, implement and maintain a *Product Stewardship Program*
- b) *assure itself of conformity with* the Fertilizers Europe PS program and with the required SHE and security standards.
- c) demonstrate conformity with this Standard by seeking certification under the Product Stewardship Compliance Scheme for members of Fertilizers Europe.

1.5.2 Application

All requirements of this Standard are intended to be applicable to all members of Fertilizers Europe.

Where any requirement(s) of this Standard cannot be applied due to the scope of activities of an organization, the products it produces, or the services it provides, this can be considered for exclusion. Such exclusions are limited to those that do not affect the organization's responsibility to comply with applicable requirements.

1.6 Disclaimer



The information and guidance presented in this Document are given in good faith. Fertilizers Europe, its consultants, its member companies and their staff accept no liability for any incident, loss, damage or any other consequences arising from the use, misuse, practical application of or reliance on the information given in this document and the PS program.

The Fertilizers Europe PS program is limited to EU legislation and UN based transport legislation; it does not cover any specific national legislation or other similar requirements. Users should always check their national legislation.

1.7 Terms and definitions

For the purposes of this document, all terms and definitions are the same as those defined in the ISO 14000 and ISO 9000 series of standards.

1.7.1 Audit

Systematic, independent process for obtaining evidence and evaluating it objectively to determine the extent to which audit criteria are fulfilled
[ISO 9000]

1.7.2 Corrective action

Action to eliminate the cause of a detected **non-conformity** or other undesirable situation
[ISO 9000]

1.7.3 Non-conformity

Non-fulfilment of a requirement
[ISO 9000]

1.7.4 Preventive action

Action to eliminate the cause of a potential **non-conformity** or other undesirable situation
[ISO 9000]

1.7.5 Procedure

Specified way to carry out an activity or a **process**
[ISO 9000]



1.7.6 Process

Any activity or set of activities that uses resources to transform inputs to outputs

[ISO 9000]

1.7.7 Product life cycle

Period that starts with the development of a product and ends with its application on the land

[Fertilizers Europe]

1.7.8 Product stewardship

Ensuring that fertilizers and their raw materials, additives and intermediate products are processed and manufactured, handled, stored, distributed and used in a safe way with regard to health, occupational and public safety, environment, and security. This includes supplying plant nutrients which satisfy society's requirements to safe food production and animal feed

[Fertilizers Europe]

1.7.9 Product stewardship management system

Organization's PS policy, PS objectives, PS program, and the processes and organizational arrangements necessary to establish, document, implement, maintain and continually improve them

[Fertilizers Europe]

1.7.10 Product stewardship objectives

Specific and measurable level of performance required for safety, health, environment and security, and

Specific and measurable outcomes for implementation of the PS management system

[Fertilizers Europe]

1.7.11 Product stewardship program

Management plan including objectives, tasks, responsibilities and timing for implementing the PS management system and achieving the PS objectives



1.7.12 Record

Document stating results achieved or providing evidence of activities performed

1.7.13 Responsible care

Responsible Care is the global chemical industry's unique voluntary initiative to continuously improve its health, safety and environmental performance, and to communicate with stakeholders and through the supply chain. It enables the chemical industry to make a strong contribution to Sustainable Development.

[CEFIC www.cefic.org]

1.7.14 Risk

Combination of the likelihood and consequence(s) of a specified hazardous event occurring

1.7.15 Risk assessment

Overall process of estimating the magnitude of risk and deciding whether or not the risk is tolerable

[OHSAS 18001]

1.7.16 Risk management

Coordinated activities to direct and control an organization with regard to risk

[ISO/IEC Guide 73]

1.7.17 Top management

Person or group of people who directs and controls an organization at the highest level

[ISO 9000]

1.7.18 Sustainable development

Enduring, balanced approach to economic activity, environmental responsibility and social progress

[BS 8900]



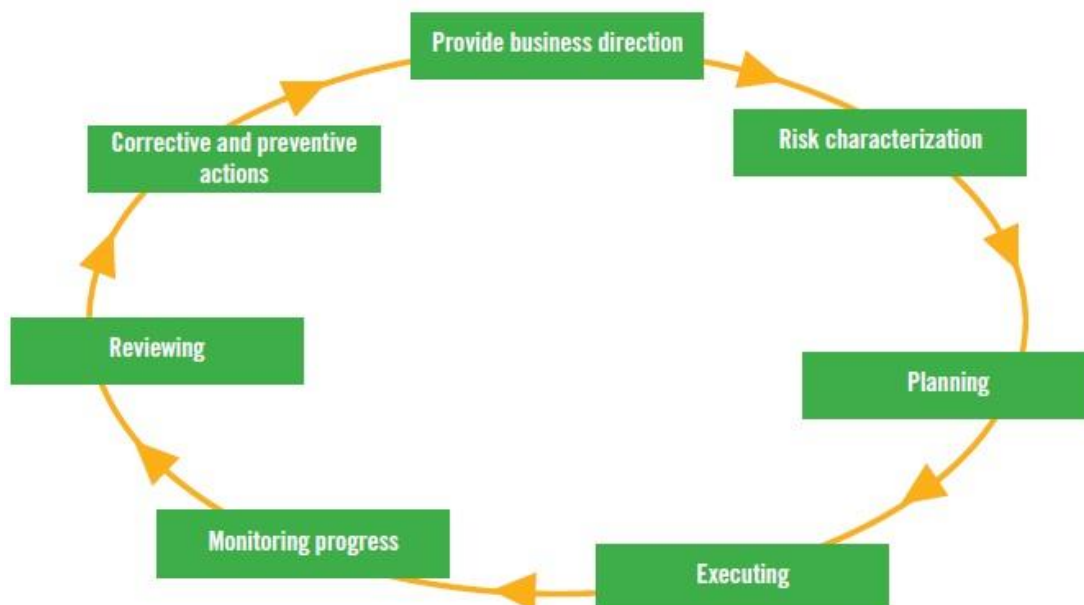
2 Product Stewardship – requirements.

2.1 Management of Product Stewardship

The organization shall establish, document, implement, maintain and continually improve a PS management system covering all elements of the Management Cycle.

The organization shall define and document the scope of its PS management system, including any excluded requirements (see 1.5.2)

Product Stewardship Management Cycle



The organization shall:

Management element	Cycle	Requirement
Business direction		a) demonstrate commitment from senior management and establish a PS program
Risk Assessment		b) determine an inventory of SHE and security risks related to the properties, production, distribution storage and use of fertilizers



Planning	c) develop a PS management system for operation and control of processes that are associated with significant SHE and security risks
Execution	d) implement PS through the entire product lifecycle, based on the risk assessment and relevant requirements of Fertilizers Europe
Monitoring	e) analyse relevant data and report performance measures against PS objectives and targets
Review	f) ensure that the PS management system is maintained and regularly reviewed in a manner consistent with these principles.
Corrective and preventive actions	g) take corrective and preventive actions as necessary

2.2 Business Direction

2.2.1 Leadership and commitment

2.2.1.1 Policy

Top management shall define the organization's PS policy and ensure that it:

- a) Is appropriate to the scope and potential SHE & security impacts of its activities, products and services
- b) Includes a commitment to actively promote, continuously improve, and act in accordance with the core values of Fertilizers Europe in all activities; to implement the PS Program and to comply with the PS standards including applicable legal requirements
- c) Is documented, implemented and maintained
- d) Is communicated to everyone working under the control of the organization
- e) Is available to the public and other stakeholders where appropriate
- f) Is used to establish and regularly review the PS objectives and targets.



2.2.1.2 Product Stewardship program

The organization shall establish, implement and maintain a program with objectives, tasks, responsibilities and timing for implementation of the PS management system

The organization shall:

- a) Define roles, responsibilities and authorities for PS functions within the organization
- b) Ensure the availability of adequate staff and resources
- c) Establish appropriate channels of communication throughout the organization
- d) Ensure that everyone involved in implementing the PS program is competent on the basis of experience, education, training, guidance or other activities needed for different personnel categories in implementing the program.

Note: Detailed information on this requirement is provided in Fertilizers Europe Product Stewardship Program – Section 5 Communication.

Note: Fertilizers Europe recommends its members to collaborate widely and actively with all external parties involved in supplying, handling and using fertilizers and with authorities and the scientific community. Detailed information is provided in Fertilizers Europe Product Stewardship Program – Section 6 Partnership

The program shall include:

- 1) Objectives and targets for SHE and security performance
- 2) Objectives and targets for implementation of the PS management system.
- 3) Arrangements for system maintenance activities which are necessary for the effective operation of the PS management system.

The organization shall ensure that all personnel have suitable knowledge and understanding of the program. All personnel shall receive an introduction to the program appropriate to their involvement and responsibilities within the program.

2.2.1.3 Documentation

Documents and data required by the PS management system and this standard shall be controlled. Records shall be maintained to demonstrate compliance with the PS system and the requirements of this standard.



The organization shall ensure that all such documents and data are approved, correct versions are available to relevant personnel and that they are reviewed and updated as necessary.

2.2.1.4 Competence, training and education

The organization shall ensure that everyone involved in Product Stewardship is competent on the basis of experience, education, training, guidance or other activities needed for different personnel categories in implementing the program. Records of competence shall be kept.

2.2.2 Sustainability

The organization shall take into account the sustainability commitments to which it subscribes when defining its PS policy and establishing and reviewing its objectives. These will include:

2.2.2.1 Supporting the sustainable development goals of the wider community:

- a) Providing fertilizers to support efficient and environmentally correct farming, in order for farming to be profitable and provide affordable food.
- b) Contributing to food security on a local level, and thus contributing to poverty alleviation and human development.
- c) Helping prevent and correct soil degradation to meet local and global environmental objectives, such as combating desertification.
- d) Ensuring that negative environmental impacts of fertilizer production and use are eliminated where possible or otherwise minimized.

2.2.2.2 Taking measures to ensure that fertilizers are produced and used in ways which contribute to those goals:

- a) Developing improved products with greater nutrient efficiency.
- b) Utilizing processes which remove harmful impurities and, where possible, identifying new uses which turn such waste products into valuable resources.



- c) Working to ensure that the entire fertilizer value chain, down to retailers, is involved in proving knowledge, training and guidance on the correct use of fertilizers.
- d) Communicating correct information about fertilizers and their benefits and possible negative impacts, in order to create a common understanding with stakeholders and further develop science-based regulations.

2.2.3 Risk Management

The organization shall establish and maintain appropriate methodology and assign competent personnel to carry out ongoing aspects and hazard identification, risk assessment and risk control measures.

- a) Identify and document potential SHE and security aspects and hazards at each stage of the product life cycle
- b) Prioritize and document significant SHE and security risks by estimation of severity and consequences, taking into account applicable legal requirements
- c) Determine appropriate controls including process controls, procedures, critical limits and actions to be taken if critical limits are not met
- d) Implement controls necessary to reduce significant risks to an acceptable level, taking account of necessary activities to manage the change process

Note: Detailed information on this requirement is provided in Fertilizers Europe Product Stewardship Program – Section 4 Risk Management.

The organization shall ensure that the risk management activities are implemented, maintained and reviewed as part of the PS management system covering all elements of the Management Cycle as described in section 2.1 above.

2.3 Risk Assessment

2.3.1 Product characteristics

Select raw materials, energy sources, additives, coating material, chemicals and other materials used in the manufacturing processes, based on requirements for:



- Nutrient demand
- Product quality (dust formation, caking, particle strength and size, colour, and specific customer demands)
- Legal requirements, such as control of impurities in fertilizers and the safety of agricultural food products and animal feedstuff
- Process safety of production
- Occupational safety of production
- Wastes and emissions from production
- SHE aspects of the final product
- Security considerations

Note: Guidance of Fertilizers Europe contains further advice relevant to product assessment

2.3.2 Product use

Collect relevant information from the market, (e.g. suppliers, the industry and customers) related to the use of the product.

2.3.3 Aspects and hazard identification and risk assessment

Identify aspects and hazards and assess risks related to SHE and security aspects for each stage in the product life cycle including:

- Legal requirements in the countries of destination, including import restrictions, impurities of fertilizer products, safety testing
- Product's fitness for purpose, including suitability and efficiency for intended crops
- Processing risks, including clogging, dusting, foaming
- SHE risks when manufacturing, including risk of fire/explosion, occupational risks, environmental aspects and waste management
- SHE risks of handling the product in transport and storage
- Occupational risks for the farmer including inhalation, physical contact, manual handling, lifting operations
- Environmental risks when applying the product.
- Application methods in the countries of destination and spreading requirements.
- Suitability of packaging materials and waste packaging management
- Possibility of misuse, including excessive application, animal or human ingestion, wilful emission to waterways, acts of terrorism.



2.3.4 Risk prioritization and control

Prioritize risks and identify those that are to be reduced or controlled.

Implement a risk reduction program based on the level of risk, feasibility, costs and efficiency in risk reduction.

Consider the results of these assessments when setting PS objectives, establishing a PS program and implementing suitable controls.

Determine whether product(s) should be manufactured and distributed, and in which countries they should be made available, taking into account legal requirements and company acceptance criteria.

Note: Guidance for hierarchy of risk reduction is:

- 1 Elimination
- 2 Substitution
- 3 Engineering controls, materials, product and packaging properties
- 4 Signs and administrative controls
- 5 Personal protective equipment/ environmental protection equipment

2.4 Planning

The organization shall establish and maintain its PS program based on the results of ongoing risk assessment and prioritization. Decisions shall be taken at the appropriate level in the organization based on the company's defined roles, responsibilities and authorities.

The organization shall identify and plan those operations and activities that are associated with identified risks, as follows:

2.4.1 Assess alternatives and select solutions

Consider each part of the product life cycle (see section 3).

Identify and assess alternatives (e.g. type of raw materials to be used, type of transport, type of storage) taking into account cost, quality, safety, environment, security, capabilities of operations and other relevant issues. Select specific solutions.

Note: The assessment can vary from simple qualitative assessments to in-depth quantitative analyses, depending upon the decision to be taken.



2.4.2 Design and implement controls

Design and implement the controls necessary to eliminate or reduce risks to an acceptable level at each step in the product life cycle.

Stipulate operating criteria including critical limits which must be met to verify conformance with requirements.

Establish and maintain procedures for the handling of incidents and non-conformance.

2.5 Executing

The organization shall ensure that all stages of the product life cycle within its scope of activities are carried out under specified conditions, based on its risk assessment and planning.

Note: Section 3 identifies the stages of the product life cycle and provides detailed requirements.

2.6 Monitoring

2.6.1 Monitoring Progress

The organization shall establish and maintain procedure(s) to regularly monitor and measure performance, operational control and PS compliance relevant to their products, customers and operations.

The procedure(s) shall include:

- a) Analysis of the measures and include SHE monitoring reports, inspection reports, test reports and incident investigation reports.
- b) Initiation of action to modify controls as necessary and follow up to ensure that control actions are being implemented
- c) Verification of compliance with regulatory requirements concerning process safety, occupational health and safety and emission and discharge permits.

2.7 Reviewing



The organization shall ensure that PS systems are maintained and regularly reviewed.

2.7.1 Self-assessment and auditing

2.7.1.1 Fertilizers Europe PS Compliance System

The organization shall comply with the PS Compliance System of Fertilizers Europe for members of Fertilizers Europe. The compliance system includes:

- Preparation for auditing by the organization including self assessment
- Auditing by an independent third party
- Evaluation of compliance with action on non-conformance.

Note: Fertilizers Europe has developed an audit handbook (questionnaire) to assist the members of Fertilizers Europe in identifying gaps and possible improvements to be made in their current PS activity.

2.7.1.2 Internal audit

The organization shall establish and maintain procedure(s) for internal audits of the PS management system. The procedure shall include:

- a) Establishment of an audit plan including criteria, scope and frequency.
- b) Training and qualification requirements for product steward(s) and those assisting the audit
- c) Responsibilities and methods for conducting audits
- d) Action on non-conformance, improvement opportunities and follow-up activities.

The audits shall be carried out in accordance with the audit plan and the results of the audits shall be documented. Corrective and preventive action shall be assigned to the personnel having responsibility in the area audited.

2.7.2 Management review

Top management shall review the PS management system at regular intervals to ensure its continuing effectiveness. Improvement action plans shall be established where considered necessary. Inputs to the review shall include the results of audits to assist in the identification of areas in need of improvements and in the prioritisation of actions.



2.8 Corrective and preventive actions

Corrective and preventive actions shall be taken if necessary following review of PS management systems.

Note: Specific requirements for dealing with nonconforming products or materials, incidents and emergencies are contained in Clause 3

2.8.1 Action program

The organization shall establish and maintain procedure(s) for taking corrective and preventive action. The procedure(s) shall define requirements for an effective action program including:

- a) Prioritization of risks
- b) Clearly defined tasks with targets
- c) Management responsibilities
- d) Resources including funding and competent people
- e) Tasks timing, stages and decision points

2.8.2 Management of actions

Senior management shall regularly review the action program to ensure progress. The review will take into account new findings, knowledge and requirements and will adapt priorities accordingly.

Senior management shall ensure the effective management of change and take ownership of the activities required. They will regularly monitor the implementation of management system and operational activities. Such activities shall be initiated by and reported to the senior management. Clear feedback of such reviews shall be communicated to the organization.

3 Product lifecycle

3.1 Implement controls throughout the product life cycle

The organization shall identify and plan operations that are required during all stages of the product life cycle, consistent with its PS policy, objectives and targets, taking account of:

- a) Applicable legal requirements
- b) Industry standards and requirements of Fertilizers Europe
- c) Guidance of Fertilizers Europe including industry practices and best available techniques



- d) Activities which are associated with significant SHE and security risks, based on its risk assessment and planning.

The organization shall ensure that these operations are carried out under controlled conditions by establishing, implementing and maintaining procedures and requirements and communicating these to everyone working under its control.

This requirement must be applied to all operations contained in Section 3 unless they are excluded from the organization's scope of activities (see section 1.5.2).

Note: detailed information on industry standards of Fertilizers Europe, requirements and guidance is provided in [Fertilizers Europe Product Stewardship Program](#) for each of the operations in this section, under the same numbering system.

3.1.1 Sourcing of raw materials, intermediates, additives and Third Party Products (TPP)

The organization shall:

- 3.1.1.1 Establish and maintain controls for purchasing and product sourcing of raw material and chemical substances.
- 3.1.1.2 Implement procedure(s) for selection, evaluation and management of suppliers.
- 3.1.1.3 Implement procedures for verifying safety and product quality of Third Party Products.



3.1.2 Research and product development.

The organization shall:

- 3.1.2.1 Carry out product assessment to confirm that the product is acceptable before proceeding to manufacturing, marketing and sales.
- 3.1.2.2 Prepare safety data sheets (SDS) for all products classified as hazardous and provide these to all those who handle or use the product.
- 3.1.2.3 Establish a product dossier for every fertilizer product.
- 3.1.2.4 Evaluate the SHE and security impacts on the business and implement suitable action plans.

3.1.3 Product manufacture

The organization shall:

- 3.1.3.1 Establish product specification, raw materials specification and specification for additives.
- 3.1.3.2 Establish best practice production standards.
- 3.1.3.3 Establish best practice safety management covering the safety management principles of Fertilizers Europe.
- 3.1.3.4 Review changes to manufacturing processes for impact on aspects and risks. Manage changes in process design, equipment and operations.
- 3.1.3.5 Assess risks and establish emergency plans in compliance with applicable legal requirements.
- 3.1.3.6 Establish and maintain controls to ensure product safety including classification and labelling of products, development and issue of safety data information, risk management for intended use and foreseeable misuse of products. (See 3.1.5.3)
- 3.1.3.7 Establish and maintain controls for bulk blending of fertilizer material taking into account safety aspects and compatibility data.



3.1.3.8 Establish and maintain procedure(s) for contractor sourcing and management including qualification, training, safety permits, contact persons, communication arrangements and inspection of contractor work sites.

3.1.3.9 Provide appropriate training and keep records for company employees and contractors including:

- a) Handling of spills and non-conforming materials
- b) Correct product handling
- c) Loading of trucks, rail wagons and ships for dangerous cargoes and non-dangerous AN-based fertilizers

Training needs and provision shall be reviewed at least annually including:

- a) Work procedures
- b) SHE and security procedures and emergencies.

3.1.3.10 Establish and maintain controls for security in production, storage, transportation and sales of fertilizers (refer to documentation of Fertilizers Europe– restricted access).



3.1.4 Storage and packaging on site

The organization shall:

- 3.1.4.1 Establish best practice for safe loading and filling.
- 3.1.4.2 Establish source batch traceability for all product batches.
- 3.1.4.3 Assess risk in storage and manage storage operators including:
 - a) Storage, handling and transportation of solid mineral fertilizers
 - b) Handling and use of non-conforming fertilizers and related materials
- 3.1.4.4 Select and control packaging in transit and use including classification, labelling and packaging.
- 3.1.4.5 Establish Best Practice warehouse standards.
- 3.1.4.6 Establish processes for re-use and recycling of primary and secondary packaging by producers and users. (See 3.1.9)
- 3.1.4.7 Provide appropriate training: as 3.1.3.9
- 3.1.4.8 Establish and maintain controls for security: as 3.1.3.10



3.1.5 Product marketing and sales

The organization shall:

- 3.1.5.1 Classify and label products for supply.
- 3.1.5.2 Develop and supply safety data sheets and product safety literature.
- 3.1.5.3 Assess risks related to the intended use and foreseeable misuse of products.
- 3.1.5.4 Provide information to customers including SHE and security information provided to distributors and farmers and to the general public.
- 3.1.5.5 Establish and maintain procedure(s) for product complaints, product recall and incidents.
- 3.1.5.6 Conform with customers and regulatory requirements on product quality.
- 3.1.5.7 Establish and maintain controls for security: as 3.1.3.10

3.1.6 Product transport and delivery

The organization shall:

- 3.1.6.1 Classify and label products for transport.
- 3.1.6.2 Establish guidance for transport of raw materials.
- 3.1.6.3 Ensure that risk assessment for distribution activities includes transportation methods, transport operator, loading and discharge, transport documents and emergency preparedness.
- 3.1.6.4 Assess and select transport operators including assessment of their SHE performance. Instructions to the transport operator shall specify requirements for:

a) Transport equipment

b) Procedures and protective equipment during loading and discharging



- c) Competence
- d) Emergency preparedness and response
- e) Security

- 3.1.6.5 Develop information for transport, including dangerous goods notes and advice to drivers. Provide this to hauliers and their drivers so that they can transport a product by road correctly, and so that they can take suitable action in the event of an emergency.
- 3.1.6.6 Appoint a dangerous goods safety adviser.
- 3.1.6.7 Ensure that persons, whose duties concern the carriage of dangerous goods, receive training in the requirements governing the carriage of such goods appropriate to their responsibilities and duties.
- 3.1.6.8 Assign responsibilities for providing guidance on emergency handling during product loading, transport and discharge. Provide an emergency number to transporters for contacting the company in case of an emergency. Establish and maintain a procedure to respond to emergency calls. Ensure that procedure(s) for reporting and investigating incidents include those occurring during loading, transport and discharge.
- 3.1.6.9 Establish and maintain procedure(s) for sea transport of fertilizers and chemicals including safe loading/discharge, transportation and emergency actions. Provide product related SHE and security information to the vessel captain before departure.
- 3.1.6.10 Establish and maintain procedure(s) for safe loading/discharge of fertilizers and chemicals based on the SHE and security risk assessment. Drivers shall identify themselves before access to Company sites is allowed. Provide product related SHE information to drivers / railway operators before departure.
- 3.1.6.11 Establish and maintain controls for security: as 3.1.3.10

3.1.7 Product storage at distributor

General: In order to prevent disasters in warehouses, such as fires, decomposition or explosion of AN based fertilizers, distributors shall:

- Store their product according to best practices warehouse standards.



- Have good knowledge on the safety environmental aspects of their products and non-conforming material
- Assess risk in storage
- Take measures to prevent accidents
- Have an emergency plan in place in coordination with relevant authorities.
- Manage storage operators including arrangements for information and training
- Maintain good house-keeping
- Maintain good book-keeping

3.1.7.1 Establish best practice warehouse standards including construction and maintenance.

3.1.7.2 Distributors shall assess risks involved in storage and implement suitable control measures including:

- a) Assessment and control of storage operators (as 3.1.4.3)
- b) Provision of safety data sheets and guidance of Fertilizers Europe
- c) Product identification including procedure(s) for book-keeping to enable batch traceability of product and the management of non-conforming or off-spec material
- d) Responses to incidents and emergency situations
- e) Regular documented inspections of company owned and rented warehouses for compliance with product quality, SHE and security instructions.

Operators shall be aware of the safety and environmental aspects of the product and the procedures for storage and handling and shall be trained accordingly.



3.1.7.3 Product safety and quality: as 3.1.5.2

3.1.7.4 Ensure that re-use and recycling of non-conforming materials and packaging is carried out in compliance with applicable guidance of Fertilizers Europe for producers and for distributors respectively.

3.1.7.5 Establish and maintain controls for security: as 3.1.3.10

3.1.7.6 Distributors shall establish an emergency response plan in coordination with relevant local authorities. Responsibility for providing guidance on emergency handling during storage shall be assigned and training shall be carried out in cooperation with external emergency services regularly.

3.1.8 Customer service, application at the farm

3.1.8.1 Ensure that product storage and handling information, including product safety information, is made available to farmers. Make arrangements with distributors to provide this information to farmers where appropriate.

3.1.8.2 Ensure that mineral fertilizer demand information is made available to farmers and advisors. Make arrangements with distributors to provide this information to farmers where appropriate.

3.1.8.3 Ensure correct product application information is made available to farmers and advisors. Make arrangements with distributors to provide this information to farmers where appropriate.

3.1.8.4 Establish and maintain procedure(s) for handling product safety complaints, product recall and incidents. (See 3.1.5.5)

3.1.8.5 Provide appropriate support material and training programs for fertilizer handling and use. Make arrangements with distributors to provide this information and training to farmers where appropriate.

3.1.8.6 Establish and maintain controls for security: as 3.1.3.10



- 3.1.9 Re-use, recycling and/or disposal of waste, packaging materials and left-overs.**
- 3.1.9.1 Identify the environmental and safety aspects of all components, impurities and waste.
- 3.1.9.2 Establish and maintain procedure(s) for waste management including waste minimization and disposal.
- 3.1.9.3 Provide appropriate advice to customers and product users on the disposal of packaging, waste product and end-of-life product.
- 3.1.9.4 Establish and maintain procedure(s) for non-conforming fertilizers and related materials. (See 3.1.4.3 and 3.1.7.2).

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