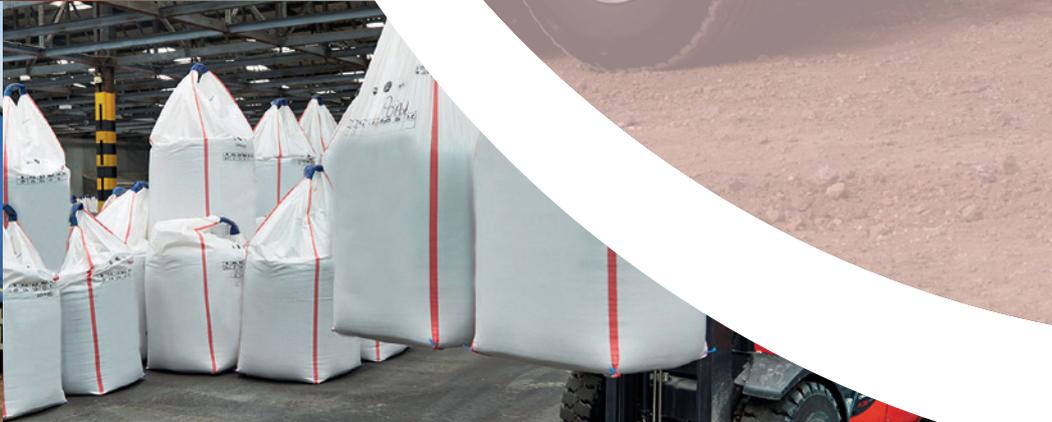
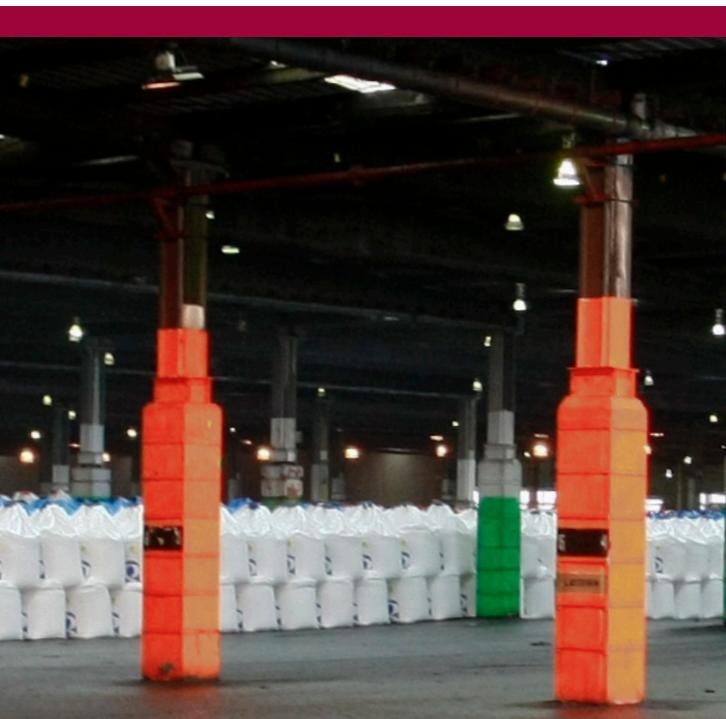


TRANSPORT AND STORAGE STANDARD

Effective from **February 2016**

**Fertiliser Industry
Assurance Scheme**



Fertiliser Industry Assurance Scheme – Transport and Storage Standard

All rights reserved. No part of this publication may be reproduced or transmitted in any material form or by any means, mechanical, electronic, photocopying, recording or otherwise, or stored in any retrieval system of any nature, without the written permission of the copyright owner except in accordance with the provisions of the Copyright, Designs and Patents Act 1988.

WARNING: The doing of an unauthorised act in relation to copyright may result in both a civil claim for damages and a criminal prosecution.

AIC and its officers, employees, agents and subcontractors accept no liability whether in contract, tort (including negligence), breach of statutory duty or otherwise for any loss (including indirect or consequential losses) by a participant or other third party arising under or in connection with the scheme and its administration.

Table of Contents

Table of Contents.....	1
1. Introduction.....	3
1.1 The Fertiliser Industry Assurance Scheme (FIAS).....	3
1.2 Basis of the Scheme.....	4
2. Management Systems.....	5
2.1 Commitment to FIAS.....	5
2.2 Legislation.....	6
2.3 Risk Assessment.....	6
2.4 Procurement.....	7
2.4.2 Supplier Approval.....	8
2.5 Personnel and Training.....	10
2.6 Internal Audits.....	10
2.7 Document Control & Record Keeping.....	10
2.8 Management of Incidents and Emergencies.....	11
2.9 Non-conformance and Corrective Action.....	11
2.10 Customer Complaints.....	12
2.11 Security.....	12
3. Not Applicable to this Standard.....	13
4. Not Applicable to this Standard.....	13
5. Handling of Fertilisers 16% Nitrogen or greater.....	13
5.1 Building Construction and Design.....	13
5.2 Fire Precautions.....	13
6. Storage.....	14
6.1 Storage Facilities.....	14
6.2 Storage Operations.....	14
6.3 Material Receipt and Intake.....	15
6.4 Material Loading and Despatch.....	16
7. Not Applicable to this Standard.....	17

Fertiliser Industry Assurance Scheme – Transport and Storage Standard

8.	Transport	17
8.1	Transport Instructions.....	17
8.2	Collection	18
8.3	Safety and Security	18
8.4	Delivery	19
9.	Product Recall	20
	Appendix 1 Legislation.....	21
	Appendix 2 Codes of Practice and Guidance Documents	22
	Appendix 3 Definitions	23
	Appendix 4 Records.....	26
	Appendix 5 Contact Details	27
	Anti-terrorist Hotline	27
	Appendix 6 Risk Assessment Decision Tree.....	28
	Appendix 7 Guidance for compliance with the Dangerous Substances (Notification And Marking Of Sites) (NAMOS) Regulations	29

1. Introduction

1.1 The Fertiliser Industry Assurance Scheme (FIAS)

FIAS covers the assurance of all fertilisers intended for agriculture, horticulture, forestry, amenity and any other such commercial use. It does not apply to fertilisers packaged for home garden use. The issues and the risks vary according to the type of fertiliser and it is for this reason that the entire scheme has adopted a “Risk Assessment” approach to achieving the necessary level of assurance.

The Fertiliser Assurance Scheme has been developed in a joint exercise between the UK Government and the UK Fertiliser industry in order to:

- Give regulators confidence in the product stewardship exercised by the fertiliser industry
- Ensure the supply of fertiliser is managed such that products can only be used for legitimate purposes

FIAS is a scheme that has been devised to ensure that fertiliser is managed throughout the UK supply chain with regard to the environment, public safety and security.

The scheme covers the entire supply chain of fertiliser and assures compliance of each stage process to the following principles;

Legislation	Specific product and environmental legal compliance
Security	Prevention of unauthorised access to and/or removal of the product, and ensuring that fertiliser is only supplied to legitimate businesses.
Traceability	Identification of batches of raw materials to origin Identification of batches of finished product to customer
Safety	Product complies with the legislative safety requirements
Good Practice	Effective management controls to ensure that the requirements of this standard, environmental measures and relevant industry Codes of Practice are implemented.

All companies certified under FIAS will be subject to an external audit of their compliance with the standard under a scheme accredited to the international product certification standard ISO 17065.

1.2 Basis of the Scheme

The scheme is broken down into separate standards for:

- Manufacture and packing
- Merchanting
- Transport and Storage

Applicants will be assessed to the requirements of all standards that apply to their business for the activities that fall within the scope of the scheme.

Each module requires an Applicant to undertake a formal and structured Risk Assessment study and implement the controls that are determined necessary by the study. Therefore the extent and robustness of the controls exercised by a company will be directly related to the safety and security risks associated with the fertiliser under their control.

Independent assessments will be carried out to determine whether companies involved with the supply of fertiliser comply with the scheme requirements and have introduced adequate measures to deal with the risks associated with the products.

FIAS standard must be read in conjunction with the FIAS “Scheme Manual” – also available from AIC.

This document contains the general or “management” requirements of the scheme.

In the context of this standard “the company” is the organisation seeking certification.

2. Management Systems

2.1 Commitment to FIAS

FIAS Requirements		Guidance
2.1.1	<p>The company shall prepare a policy statement that commits the company to comply with FIAS.</p> <p>The policy must be communicated to all company employees and be reviewed annually or as a result of company changes to make sure it remains current.</p>	<p>The “policy statement” would only be expected to be a brief (e.g. one page) document that is prepared and endorsed by, typically, the Managing Director or equivalent.</p> <p>It is acceptable for the company to use and adapt existing systems, documents, manuals and forms etc. to comply with FIAS. It is not expected that a company will duplicate systems already in use.</p>
2.1.2	<p>All employees that could affect product security, safety, legality, traceability and environmental impact shall be made aware of their responsibilities, the levels/limits to their authority and the organisational structure of the company.</p>	<p>Typically this information would be provided in a job description.</p> <p>A diagram of the company structure may be helpful.</p>
2.1.3	<p>The company shall ensure that adequate resources are put in place to meet the requirements of FIAS and relevant legislation.</p>	<p>The company should consider what resources (typically personnel, equipment and facilities) are needed to fulfil their obligations under the FIAS scheme and relevant legislation and make sure that these are available.</p>
2.1.4	<p>The company shall appoint a member of staff who, irrespective of other duties, ensures an effective system to comply with FIAS is implemented and maintained.</p>	<p>This member of staff can have other duties but must have clearly defined responsibility for ensuring the company implements a comprehensive system to comply with FIAS.</p>
2.1.5	<p>The company shall develop and implement working procedures and detailed instructions that are needed to control activities in the manner required by the FIAS standard.</p>	<p>The extent to which these working procedures are documented will be dependent on the nature of the work covered by the procedure, the methods used, the findings of the Risk Assessment Study and the skill/training needed by the staff.</p>
2.1.6	<p>The senior management shall review the operation of the company’s systems and procedures annually, or as a result of changes in the company to ensure they remain effective and compliant with FIAS [R].</p>	<p>The review could be part of a senior management meeting with information (written and/ or verbal) from key members of staff reporting on issues relating to the operation of FIAS within the business e.g. Internal Audits and Risk Assessment Review.</p>

2.2 Legislation

FIAS Requirements		Guidance
2.2.1	<p>The company shall have an effective means of ensuring that:</p> <ul style="list-style-type: none"> • They are aware of all product related legislation and appropriate systems are in place to ensure full compliance. • They have effective systems in place to identify and implement any changes in legislation. 	Sources would include trade associations, government departments, professional bodies and trade journals.
2.2.2	<p>The company shall ensure that the relevant authorities are notified and approvals obtained for products held at their sites, where relevant [R].</p>	Consult COMAH/ NAMOS Regulations details in Appendix 1.

2.3 Risk Assessment

FIAS Requirements		Guidance
2.3.1	<p>The Risk Assessment Team</p> <p>The company shall use a multi-disciplinary Risk Assessment Team to undertake a Risk Assessment study and implement/maintain the systems and controls required by the study [R].</p> <p>Risk Assessment Team members shall be sufficiently competent to enable them to fulfil their role within the Team effectively.</p> <p>A Risk Assessment Team Leader or nominated Team representative shall be appointed to co-ordinate the work of the Risk Assessment Team. The Team Leader shall be able to demonstrate competence in the understanding of Risk Assessment principles and their practical application.</p>	<p>The size of the Team should be appropriate to the size and complexity of the company operations. The overall membership of the Team should ensure that personnel are available with specific knowledge and expertise of all aspects of the operations.</p> <p>The Team Leader should ideally have attended a recognised training course.</p>
2.3.2	<p>Scope of Risk Assessment Study</p> <p>The company shall identify the possible safety and security risks associated with their products and any legislation that needs to be considered as part of the study [R].</p>	
2.3.3	<p>Flowcharts</p> <p>The company shall identify all operational and business process steps and document these in process flowcharts [R].</p>	<p>The flowchart shows the sequence of individual stages through the processes of a business.</p> <p>It is essential that the flowchart not only covers all operational processes but also relevant business processes such as product sales, storage, haulage, recruitment etc. that have an impact on safety and security.</p>

Fertiliser Industry Assurance Scheme – Transport and Storage Standard

2.3.4	<p>Risk Assessment</p> <p>The Risk Assessment Team shall use the Process Flowcharts to identify and document potential risks at every stage of the process with regard to product security, legality, safety and traceability as appropriate. [R]</p>	<p>The Team needs to be open minded and think deeply enough to establish all of the safety or security risks that could occur and not just assume that they wouldn't happen just because "they never have".</p>
2.3.5	<p>Controls</p> <p>The Risk Assessment Team shall identify and implement the controls needed to either prevent or minimise potential risks to an acceptable level.</p>	<p>The controls should be suitable for the level and nature of the risks identified.</p>
2.3.6	<p>Action Plans</p> <p>The Risk Assessment Team shall establish action plans to be implemented when identified risks are deemed to be out of control. [R].</p>	
2.3.7	<p>Risk Assessment Review</p> <p>The Risk Assessment Team shall review the Risk Assessment system annually and in response to any changes in products, processes, legislation or any other factors that may affect the safety and security of the finished product.</p> <p>The Risk Assessment review shall be recorded and findings implemented [R].</p>	<p>The results of the risk assessment review can be used as input for the management review required in 2.1.6.</p>

2.4 Procurement

	FIAS Requirements	Guidance
2.4.1	<p>General</p> <p>The company shall have in place systems to approve suppliers of goods and services such that company and FIAS requirements are met. All agreements to purchase goods and services must be recorded and contain sufficient detail to allow the contractor to meet customer and FIAS requirements. [R]</p> <p>Evidence supporting this requirement to be provided during FIAS assessment of companies hiring these services.</p>	<p>This section is only a mandatory requirement if the company undertakes product or process related procurement.</p> <p>For example, contracted hauliers should be informed of the company policy on incompatible loads.</p>

2.4.2 Supplier Approval		
2.4.2.1	There must be a system in place to ensure only approved suppliers are used.	This could be in the form of a supplier list or otherwise incorporated into purchasing systems. Consider suppliers of services which may have an impact on product security, safety, traceability and legal compliance, not just suppliers of physical goods e.g.: <ul style="list-style-type: none"> • Onsite contractors • Spreading contractors • Calibration suppliers
2.4.2.2	Companies contracted to manufacture, blend, pack or otherwise change the nature or format of a product must be FIAS certified.	
2.4.2.3	Companies contracted to store or transport fertiliser must be assessed to ensure they are capable of meeting the company's requirements and do not pose a risk to the security or integrity of the fertiliser. [R] From 1 st February 2017, companies contracted to store or transport fertiliser with 16% N or greater from any nitrogen source must be FIAS certified. Where companies enter into arrangements for the provision of transport and storage of fertiliser, they shall specify in the Terms and Conditions covering such arrangements the measures necessary for compliance with 2.4.1 [R]	
2.4.2.3.1	Where the company has non-FIAS certified contractors storing and/ or transporting fertilisers with 16% N or greater, a derogation will be granted to companies submitting a full list of the contractors concerned along with copies of site audits (see 2.4.4) carried out and corrective actions to the certification body. [R] Audits must cover all aspects of the appropriate FIAS Standard.	The list of non-FIAS contractors handling explosive precursors may be provided on request to UK authorities. Contractors which subsequently prove to be failing to comply with FIAS requirements can jeopardise the certification status of the FIAS participant contracting them.
2.4.2.3.2	Additions to the list of contractors must be notified to the certification body in advance of first use.	

Fertiliser Industry Assurance Scheme – Transport and Storage Standard

2.4.2.4	<p>The company shall ensure that all purchased raw materials and finished products are obtained from known sources of supply.</p> <p>Suppliers of raw materials and finished products must be assessed to ensure they are capable of meeting the company's requirements and do not pose a risk to the security or integrity of the fertiliser.</p> <p>The company shall purchase raw materials against the requirements of a product specification and keep records of all purchased raw materials. [R]</p>	
2.4.3	<p>Importing</p> <p>The company shall ensure that fertiliser imports meet customer/user, company and/or legal product/ packaging specifications [R].</p> <p>The company shall comply with all relevant legislative requirements for the import of fertiliser.</p>	
2.4.4	<p>Supplier/ Customer Audits</p> <p>When the company conducts a site audit of a supplier of services or a merchant customer they must ensure that:</p> <ul style="list-style-type: none"> • The company audits the supplier/ customer at a defined frequency based on risk assessment and supplier performance • The audit covers all relevant aspects of the FIAS Standards • An audit report that records findings against each clause of the relevant standard is produced and retained • The supplier provides evidence that all non-compliances have been resolved • A copy of the audit report is supplied to the FIAS Certification Body. 	<p>The FIAS certification body will require evidence that the audit has been completed competently and records demonstrate that the supplier will be able to comply with the relevant FIAS standards and company requirements.</p>
2.4.5	<p>Packaging Materials</p> <p>The company shall ensure that all packaging is suitable for the classification of product. See also Error! Reference source not found.</p>	<p>Further information on specifying suitable packaging can be found on the FIBCA website http://fibca.com/ If for hazardous products, packaging is required to comply with ADR Regulations</p>

2.5 Personnel and Training

FIAS Requirements		Guidance
2.5.1	The company shall identify and provide any training that is needed to ensure employees (including agency workers) are competent, safe and legally qualified (where appropriate) for the work they are required to undertake. Records of training and competence shall be kept [R].	Training should cover work related activities to ensure that employees are able to carry out the work to an acceptable standard and also cover general site/legislative requirements (e.g. health and safety, security etc.).
2.5.2	Where specified by the Risk Assessment, the company shall undertake security screening of staff to determine their suitability [R].	The Risk Assessment should be used to consider the need for staff security screening. As a minimum references from previous employers (or other appropriate bodies where no previous employment) should be sought. Only if there is a clear need to screen staff, should legal checks be carried out to establish their suitability.

2.6 Internal Audits

FIAS Requirements		Guidance
2.6.1	The company shall plan and conduct internal audits as a means of determining compliance with safety, security, legal and company requirements.	The plan must ensure that all systems and activities required by the FIAS standard are covered, including the Risk Assessment.
2.6.2	Audits findings, including any deficiencies, shall be recorded and acted upon in a timely manner [R].	The results of these audits can be used as input for the risk assessment and management reviews required in 2.1 Commitment to FIAS and 2.3 Risk Assessment .

2.7 Document Control & Record Keeping

FIAS Requirements		Guidance
2.7.1	The company must ensure that only the current versions of documents are in use [R].	
2.7.2	The company must retain records relating to all FIAS clauses marked [R].	
2.7.3	The company shall make sure that records required for legal, safety and security reasons are kept in suitable conditions that prevent deterioration and enable easy retrieval.	
2.7.4	The company shall identify the retention periods for records taking into account regulatory requirements.	The FIAS assessment will review records relating to the period since the last assessment

2.8 Management of Incidents and Emergencies

FIAS Requirements		Guidance
2.8.1	<p>The company shall have a documented procedure that outlines the actions to be taken in the event of a product related incident where it is established that product safety, legality, security or traceability has been compromised.</p> <p>The management procedures must be reviewed annually to ensure details remain up to date and effective. [R].</p>	<p>This relates to all sectors of the FIAS supply chain, and should cover foreseeable incidents such as:</p> <ul style="list-style-type: none"> • Fire • Theft • Major spills • Flood
2.8.2	<p>The company shall have a documented procedure that outlines the actions to be taken in the event of any suspicious or unusual activity.</p>	<p>It is essential that the company reports any suspicious activity to the Police or other enforcement agency as soon as possible. It is compulsory under EU Regulation 98/2013 to report to the authorities suspicious activities relating to fertilisers containing Ammonium Nitrate (>16%N), Potassium Nitrate, Sodium Nitrate, Calcium Nitrate and Calcium Ammonium Nitrate (substances and thresholds currently under review). See Appendix 5 Contact Details for the Anti-terrorist Hotline.</p>
2.8.3	<p>The company shall record actions taken in the event of incident, emergency or suspicious activity [R].</p>	

2.9 Non-conformance and Corrective Action

FIAS Requirements		Guidance
2.9.1	<p>The company shall investigate the cause of non-conformances and ensure that actions are taken to prevent a re-occurrence of the problem.</p>	<p>The company needs to review any problems which are not customer related, not just to resolve the immediate problem, but also to consider what changes or improvements might be needed to prevent the problem occurring again.</p>
2.9.2	<p>The company shall keep records of corrective actions taken [R].</p>	

2.10 Customer Complaints

FIAS Requirements		Guidance
2.10.1	The company shall establish and implement a system for recording customer complaints.	The company needs to record all complaints, preferably in a central system within the site. Best practice is to acknowledge receipt of the complaint and let the customer know how the complaint will be handled.
2.10.2	All complaints shall be reviewed promptly and appropriate action taken. The review shall also consider the potential effect of the problem on other products or services.	The company needs to review what the customer is saying and to determine the merits of the complaint. If complaints prove to be well-founded the company must consider the possible effect on other customers, products or services.
2.10.3	The company shall keep records of the complaint review and any actions taken [R] .	Simple records need to be kept of the reviews carried out, the actions taken and the results.

2.11 Security

FIAS Requirements		Guidance
2.11.1	The Risk Assessment study shall be used to determine the level of security risk(s) of individual parts of the company site and operations. The company shall ensure that security measures are planned and implemented to monitor and prevent unauthorised access to those parts of the Company's operations deemed necessary by the Risk Assessment.	Appropriate and proportionate security measures need to be implemented to control access to match the credible risks. These measures may include physical security, site access control, CCTV, control of visitors/contractors etc.
2.11.2	Data and IT Security The company shall ensure that data and IT systems are protected from unauthorised access.	Security does not just mean physical security but also the security of computer systems and sensitive internal data including archiving of paper records.

3. Not Applicable to this Standard

4. Not Applicable to this Standard

5. Handling of Fertilisers 16% Nitrogen or greater

For further information, refer to the AIC Guide for the Storage, Handling and Transportation of Ammonium Nitrate Based Fertilisers 2015.

5.1 Building Construction and Design

FIAS Requirements		Guidance
5.1.1	Buildings must be constructed to provide adequate security measures in line with the Risk Assessment study contained within Section 2.3.	Guidance for building security can be obtained from the National Counter Terrorism Security Office (NaCTSO) website. https://www.gov.uk/guidance/secure-hazardous-materials-to-help-prevent-terrorism
5.1.2	Where used, buildings must be in good order and capable of shielding the products from the weather.	
5.1.3	Buildings (including floors) must be constructed from not-readily combustible materials such as brick, concrete or steel, suitably protected where necessary against corrosion.	Galvanised items such as sheeting, vents and girders should be avoided as far as possible in the construction because of the zinc content which is known to react with AN. Bitumen joints or coatings should be avoided. Where asphalt is used for flooring this should be below 9% bitumen content.
5.1.4	Buildings (including floors) must be maintained in good condition to prevent significant cracks and holes developing that may become filled with compacted fertiliser.	This could lead to confinement leading to a hazard in the event of a fire.
5.1.5	Where internal drains, pits or channels exist, these must be securely sealed or in-filled with inert material	In the event of a fire, molten fertiliser could become confined in drains or channels.
5.1.6	Product must be protected from potential sources of heat and/ or ignition.	This should include consideration of protection against fire or lightning strikes.
5.1.7	Lighting and other electrical installations must be adequately protected from corrosion by means of separation from product and/ or sealing.	Consider IP ratings of electrical equipment.

5.2 Fire Precautions

FIAS Requirements		Guidance
5.2.1	A suitable and sufficient supply of water adequate to deal with an outbreak of fire must be available near the building.	This should be discussed with the local fire service.
5.2.2	A suitable fire detection system and firefighting equipment must be in place where indicated by the risk assessment and maintained. [R]	
5.2.3	Equipment and vehicles must be stored/ parked separately from product or packaging.	

6. Storage

6.1 Storage Facilities

FIAS Requirements		Guidance
6.1.1	<p>The company shall ensure that storage facilities are marked in accordance with legislation and are suitable for the fertiliser raw materials and finished products being stored.</p> <p>The type of storage facility required and the necessary equipment required to operate the facility in a safe and secure manner shall be determined by the Risk Assessment study.</p>	<p>For solid fertilisers companies should comply with the requirements of INDG 230 Storing and Handling Ammonium Nitrate guidance published by the HSE and the AIC Guide for the storage, handling and transportation of ammonium nitrate based fertilisers 2015 or full details are available through the HSE website www.hse.gov.uk/pubns/indg230.pdf</p> <p>Fertiliser storage facilities must comply with HSE requirements, as outlined within the booklet INDG467 Dangerous Substances (Notification And Marking Of Sites) (NAMOS) Regulations 1990, a brief guide on the amendment to the regulations 2013 or full details are available through the HSE website www.hse.gov.uk/pubns/indg467</p> <p>Further guidance on compliance with NAMOS regulations can be found in Appendix 7.</p> <p>Stores registered and inspected by BASIS or otherwise independently audited against the current version of the Code of Practice for suppliers of pesticides to agriculture, horticulture and forestry (“Yellow Code”) need not be included in the FIAS scope as long as only fertilisers defined as micro nutrients or foliar fertilisers (see Appendix 3 Definitions) are held on the site within the secure store.</p>

6.2 Storage Operations

FIAS Requirements		Guidance
6.2.1	<p>The company shall ensure that systems and procedures manage storage activities, according to the Risk Assessment study. These shall include:</p> <ul style="list-style-type: none"> • Product receipt • Product storage and handling • Security • Inventory management • Smoking • Housekeeping • Proximity to combustible materials • Maintenance • Handling of spills • Fire prevention • Fire fighting equipment • Inspections 	<p>Consideration shall be made in the Risk Assessment to the following:</p> <ul style="list-style-type: none"> • Safe unloading and loading • Safe stacking and sheeting • Availability of keys for handling equipment • Water ingress • All aspects of product security • Roles and Responsibilities including with respect to contracted services • Health and Safety • Storage of pallets and packaging materials

6.2.2	The company shall identify raw materials and finished products to enable recognition and traceability.	The level of traceability for different products will vary. Legislation requires that batches of relevant AN with separate DRTs are not mixed. For example, in the case of “relevant” AN it is necessary to identify and trace the finished product to all destinations. (Refer to AIC Code of Practice for the Transfer and Traceability of Fertiliser classified as Dangerous Goods). For all other products the principle of “one up/one down” traceability should be applied.
6.2.3	All bulk products containing 16% nitrogen or greater must be stored on a single floor which should be without basement or cellar except for channels required for product movement.	Where possible bagged material should also be stored in this way
6.2.4	There must be sufficient clearance between the top of stacks of stored product (bulk or bagged) and eaves/ beams light fittings or overhead conveyors (whichever is lower) to protect product from heat and contamination	

6.3 Material Receipt and Intake

FIAS Requirements		Guidance
6.3.1	<p>The company shall ensure that the origin and conformity of materials and products to order requirements and delivery documents is verified on receipt [R].</p> <p>The company shall ensure that:</p> <ul style="list-style-type: none"> all received materials are correctly transferred from the point of receipt to their correct storage location and that the storage location is correctly identified; Precautions are taken to prevent contamination. <p>Where the company takes in or despatches loads classified as dangerous goods, Transport Regulations (e.g. ADR) requirements, including the appointment of a qualified DGSA must be met. The company must hold a copy of the DGSA’s certificate & Annual Report [R].</p>	<p>All products should be checked for compliance with requirements to the extent required by the Risk Assessment.</p> <p>In whatever form the materials arrive (e.g. ship, lorry, pipeline, packaged etc.) the discharge/unloading and intake systems shall be free from contaminants before discharge/unloading and protect the material/bags from contamination before discharge/unloading and/or physical damage that would compromise compliance with the product specification.</p> <p>The DGSA will advise the company on full compliance with ADR, including annual reports and preparation of emergency procedures.</p>
6.3.2	The delivery driver shall be provided with the signature and full (printed) name of the employee receiving the fertiliser. By prior arrangement, other verifiable means of demonstrating correct delivery may be agreed between the receiver and the consignor[R].	

7. Not Applicable to this Standard

8. Transport

8.1 Transport Instructions

FIAS Requirements		Guidance
8.1.1	The company must ensure that they know their clients to be bona fide fertiliser companies or carry out sufficient checks to ensure that any new clients are verified as bona fide fertiliser businesses [R].	
8.1.2	<p>Receiving Instructions from Clients</p> <p>Where the company is contracted to carry fertiliser by another business, they must ensure that fertiliser collection/delivery requirements from the client either are provided in written/electronic form.</p> <p>The company shall ensure that the transport operations are only allocated to trained Drivers and fit-for-purpose vehicles.</p>	
8.1.3	<p>Passing Instructions to Drivers</p> <p>The company shall operate a secure system for informing drivers of clients’ transport requirements. As a minimum the driver shall be informed of the following [R]:</p> <ul style="list-style-type: none"> • Unique collection reference no. • Collection address • Product Description • Quantity • Delivery address • “Emergency Instructions in Writing” where necessary <p>Drivers shall be provided with sufficient information to enable them to meet the requirements of the collection site.</p> <p>Drivers shall be provided with a mobile telephone or an alternative method of secure communication with their company in the event of an emergency or an incident occurring.</p>	The company needs to make sure that Drivers are given written instructions regarding the fertiliser to be collected. If a driver is given instructions remotely (e.g. they need to collect a back load), the system must ensure that this information is provided securely.

8.2 Collection

FIAS Requirements		Guidance
8.2.1	<p>The driver shall present a vehicle at the collection site that is in good condition and suitable for the type and quantity of fertiliser to be loaded.</p> <p>Bagged fertiliser shall be fully covered and adequately secured to the vehicle platform to ensure the security of the load in transit is not compromised.</p>	

8.3 Safety and Security

FIAS Requirements		Guidance
8.3.1	<p>All transport companies must have an operator's licence, a copy of which must be sent to the certification body upon application to join FIAS, or when requesting a change of title.</p> <p>Where the company also transports loads classified as dangerous goods, ADR requirements, including the appointment of a qualified DGSA must be met. The company must hold a copy of the DGSA's certificate and Annual report [R].</p>	<p>The DGSA will advise the company on full compliance with ADR, including annual reports and preparation of emergency procedures.</p>
8.3.2	<p>Vehicles</p> <p>Vehicles, whether hired, leased or owned shall be equipped with the necessary safety equipment, identification and documentation for the fertiliser carried, where required by law.</p>	<p>Where the load comes under ADR, the vehicle needs to carry the specified safety equipment, PPE and documentation. This is a Transport Document provided by the consignor and Instructions in Writing provided by the carrier.</p>
8.3.3	<p>Parking and the leaving of unattended vehicles shall be in accordance with the Terms and Conditions agreed between the haulier and its customer.</p> <p>Prior to leaving the vehicle parked or left unattended the driver must seek authorisation from their company that the location complies with the Risk Assessment requirements.</p> <p>When a vehicle is parked or left unattended the driver must leave it locked and ensure that the load is secure and undamaged. Upon returning to the vehicle the driver must check that no loss or damage has occurred to the consignment. If any such damage or loss has occurred the driver must report this immediately to the Police and notify their company.</p>	<p>The preferred parking location would be a secure yard with locked gates and access control measures in place. Where such facilities are not available the vehicle should be left in a recognised HGV parking area, where the presence of other vehicles and drivers may help to prevent interference or loss. Isolated lay-bys and parking areas should only be used in exceptional circumstances.</p>

8.3.4	Where vehicles carrying hazardous fertiliser products are parked or left unattended, the driver shall follow the procedures described within his employer’s security measures in accordance with the requirements of ADR 1.10 [R]	
8.3.5	<p>Delays in Transit</p> <p>If fertiliser is unloaded from the collection vehicle and temporarily stored by the Company, storage conditions must meet the requirements of both the HSE and the FIAS Standard for Fertiliser Storage.</p>	If fertiliser is going to be delayed in-transit then the company needs to include this in the Risk Assessment.

8.4 Delivery

FIAS Requirements		Guidance
8.4.1	<p>Drivers shall only deliver to the addresses shown on the delivery documents unless a diversion is approved by the consignor in a recordable manner [R].</p> <p>The driver shall obtain the signature and full (printed) name of the employee or the Application Contractor receiving the fertiliser. By prior arrangement with the consignor of the fertiliser, other verifiable means of demonstrating correct delivery are acceptable when the consignor has carried out a security and safety risk assessment [R].</p> <p>For deliveries of bulk fertiliser to farm and by prior arrangement with the consignor of the fertiliser, other verifiable means of demonstrating correct delivery are acceptable when the consignor has carried out a security and safety risk assessment [R]</p>	<p>It is essential for the control of the fertiliser that drivers only deliver to the address shown on the delivery documents. If the recipient requests a different delivery address, the driver must get approval from the client that contracted the company. If there are any differences between the quantity ordered, carried and unloaded, or the delivery address then these must be recorded on the delivery documents.</p> <p>The driver must be very careful to ensure that the delivery/unloading is under the supervision of the recipient at the delivery site and that they get both their signature and their full name (signatures are usually impossible to read).</p> <p>In some cases, the driver may find that there is nobody available to receive the delivery e.g. on farm. If this happens the driver is not allowed to unload but must contact their traffic office or the collection site for instructions on what to do with the undelivered load.</p> <p>Where other means of verifying delivery are used, the risk assessment should take account of the nature and quantity of the product delivered, and the period of time before the customer will confirm receipt.</p>

9. Product Recall

	FIAS Requirements	Guidance
9.1	<p>The company shall take prompt action to advise and inform those affected by any incidents affecting product safety, security, legality or traceability.</p> <p>The company shall have planned arrangements for the recall of products delivered to customers.</p> <p>The product recall process shall be tested at least annually, to check its effectiveness [R].</p>	<p>If the investigation indicates that the problem relates to product actually delivered to a customer, they should be informed immediately and advised if a product recall is considered necessary.</p> <p>This system relies on effective internal systems, records and traceability. It is a process that only gets used in an emergency and therefore it must be trialed (e.g. with a “dummy” emergency) so that it is known to work and therefore can be relied upon when needed. Periodically means at a sufficient frequency to make sure that the “tests” reflect the current system and personnel in place.</p> <p>A recall test can be a theoretical exercise that does not require the physical recall of product.</p>

Appendix 1 Legislation

Disclaimer: The information provided in this appendix is a guide to the legislation related to fertilisers. AIC shall not be responsible for keeping this list up to date or for any errors or omissions. The company participating in the Fertiliser Industry Assurance Scheme is responsible for ensuring that it is aware of all legislation related to their business.

Agriculture Act 1970

Regulation (EC) No 2003/2003 of the European Parliament and of the Council of 13 October 2003 relating to fertilisers Official Journal of the European Union number L304 published on 21/11/2003

The Fertilisers Regulations 1991, as amended

The Fertilisers (Sampling and Analysis) Regulation 1996

The Notification of New Substances Regulations 1993, as amended

The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009, as amended

The European Agreement Concerning the International Carriage of Dangerous Goods by Road latest edition (known as ADR updated alternate years)

The Ammonium Nitrate Materials (High Nitrogen Content) Safety Regulations 2003

Regulation (EC) No 1272/2008 Of The European Parliament And Of The Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006

The Control of Substances Hazardous to Health Regulations 2002

The Dangerous Substances (Notification and Marking of Sites) Regulations 1990, as amended

The Control of Major Accident Hazards Regulations 2015, as amended

Planning (Hazardous Substances) Act 1990, as amended

The Planning (Control of Major Accident Hazards) Regulations 1999

The Planning (Hazardous Substances) Regulations 1992

The Pollution Prevention and Control Regulations, as amended

Weights and Measures Act 1985

The Weights and Measures (Packaged Goods) Regulations 1986, as amended

Producer Responsibility Obligations (Packaging Waste) Regulations 1997.

EC Fertilisers (England & Wales) Regulations 2006

EC Fertilisers (Scotland) Regulations 2006

EC Fertilisers (Northern Ireland) Regulations 2006

Explosives (Ammonium Nitrate & Sodium Chlorate) Order 1972

Appendix 2 Codes of Practice and Guidance Documents

DOCUMENT TITLE	CODE OF PRACTICE OR GUIDANCE	PUBLISHER
AIC Guide for the Storage, Handling and Transportation of Ammonium Nitrate Based Fertilisers 2015	Guidance	AIC
Ammonium Nitrate Materials (High Nitrogen Content) Safety Regulations 2003	Guidance	AIC
AIC/ Defra/ HSE guidance note for manufacturers, importers ,blenders, transporters, storekeepers and suppliers of ammonium nitrate based fertilisers	Guidance	AIC
Contingency Plan For Dealing With Ammonium Nitrate Fertiliser That Has Failed A Detonation Resistance Test	Guidance	AIC
Fluid Fertiliser Code	Code of Practice	AIC/ Environment Agency
Guidance on the storage of hydrochloric acid and nitric acid in tanks – HSG 235	Guidance	HSE
Guidance for the Storage, Handling and Transportation of Solid Mineral Fertilizers (2007)	Guidance	Fertilizers Europe
Prevention of Water Pollution from the Storage and Handling of Solid Fertilisers (1998)	Code of Practice	AIC
Prevention of Water Pollution from the Storage and Handling of Fluid Fertilisers (1998)	Code of Practice	AIC
Recommendations for Inspections of Atmospheric Refrigerated Ammonia Storage Tanks (2008)	Guidance	Fertilizers Europe
Safe Handling and Utilisation of Non-Conforming Solid Fertiliser and Related Materials for Fertiliser Producers (2003)	Guidance	Fertilizers Europe
Safe Handling and Utilisation of Non-Conforming Solid Fertiliser and Related Materials for Fertiliser Importers, Distributors and Merchants (2004)	Guidance	Fertilizers Europe
Sea Transport of Ammonium Nitrate based Fertiliser (2004)	Guidance	Fertilizers Europe
Storage of Hot Ammonium Nitrate Solutions (2005)	Guidance	Fertilizers Europe
Storing and Handling Ammonium Nitrate - INDG 230	Guidance	HSE
Transfer and Traceability of Fertiliser Classified as Dangerous Goods	Code of Practice	AIC

Appendix 3 Definitions

Agent (or Broker)

An agent (or broker) facilitates a contract between a buyer and a seller but takes no financial involvement in the transaction except to receive a commission from either buyer or seller or both. If a Body, Person or Company that acts as a principal to the debt incurred in the supply of fertiliser they are a merchant. If the agent is authorised to agree sales on behalf of a company or enter sales into the system then they must be trained as a sales representative.

Caking tendency

The ability for fertiliser's granules or prills to form an agglomeration. Mechanisms for caking are numerous and include formation of crystal bridges due to incompatibility or post reactions, moisture content and/or pick up, high fines/dust content and granule deformation.

Compatibility

Materials when mixed together are not necessarily compatible with each other; some may produce undesirable effects when mixed with others; in other words they may not be compatible. These undesirable effects can include, chemical reaction(s) and physical effects e.g. stickiness which can cause handling difficulties, moisture migration giving rise to caking tendency. For reasons of safety, it is very important to avoid blending ammonium nitrate or raw materials containing ammonium nitrate with any organic materials.

Detonation Resistance Test

A test carried out by a competent laboratory in accordance with Schedule 2 of the Ammonium Nitrate Materials (High Nitrogen Content) Safety Regulations 2003.

Foliar fertiliser

A fertiliser suitable for application to and nutrient uptake by the foliage of a crop. (Regulation EC 2003/2003)

Manufacturer

The natural or legal person responsible for placing a fertiliser on the market; in particular a producer, an importer, a packager working for its own account, or any person changing the characteristics of a fertiliser, shall be deemed to be a manufacturer. However, a distributor who does not change the characteristics of the fertiliser shall not be deemed to be a manufacturer. (Regulation EC 2003/2003)

Merchant

The Body, Person or Company that acts as a principal to the debt incurred in the supply of fertiliser to a customer and does not change the characteristics of the fertiliser. For the purposes of FIAS, companies which pack or repack fertilisers themselves, or engage a contract packer to do so on their behalf fall within the definition of manufacturer.

Micro-nutrients

The elements boron, cobalt, copper, iron, manganese, molybdenum and zinc, essential for plant growth in quantities that are small compared with those of primary and secondary nutrients. (Regulation EC 2003/2003)

Non-conforming product

Non-conforming materials are those materials which do not meet the characteristics of the intended products at the time of storage or when marketed. They include both off-spec and reject materials, which are defined below. Essentially, they include everything other than marketable specified product.

Off-spec

The definition of “off-spec” given in The Control of Major Accident Hazards (Amendment) Regulations 2005 is as follows:

Material rejected during the manufacturing process and to ammonium nitrate and preparations of ammonium nitrate, straight ammonium nitrate-based fertilisers and ammonium nitrate-based compound/composite fertilisers referred to in Notes 2 and 3, that are being or have been returned from the final user to a manufacturer, temporary storage or reprocessing plant for reworking, recycling or treatment for safe use, because they no longer comply with the specifications of Notes 2 and 3; or

- (b) fertilisers which do not fall within Notes 1(a) and 2, because they do not satisfy the detonation resistance test, other than fertilisers which -
 - (i) at the time of delivery to a final user satisfied the detonation resistance test; but
 - (ii) later became degraded or contaminated; and
 - (iii) are temporarily present at the establishment of the final user prior to their return for reworking, recycling or treatment for safe use or to their being applied as fertiliser.

Placing on the market

The supply of fertiliser, whether in return for payment or free of charge, or storage for the purpose of supply. Importation of a fertiliser into the customs territory of the European Community shall be deemed to constitute placing on the market. (EC Regulation 2003/2003)

Product

All fertilisers intended for agriculture, horticulture, forestry, amenity and any other such commercial use.

Raw Material

Ingredient used in the production of fertiliser intended for agriculture, horticulture, forestry, amenity and any other such commercial use.

Reject

Reject materials are those non-conforming materials which are out of specification, or which have deteriorated during storage and/or handling to such an extent that they can be considered potentially hazardous. They cannot be sold as fertiliser products and may require treatment to render them safe. Examples include: those which contain more than the maximum permitted level of combustible material; those which have physically degraded into fines and could reasonably be expected to fail the Detonation Resistance Test and product grossly contaminated with reactive substances.

Relevant Ammonium Nitrate

The definition given in the Ammonium Nitrate Materials (High Nitrogen Content) Safety Regulations 2003 is

Ammonium nitrate in solid form, where its nitrogen content is more than 28% of its weight, material in solid form, comprising a mixture of components, one of which is *ammonium nitrate*, in circumstances where the nitrogen content derived from *ammonium nitrate* is more than 28% of the material by weight, and where the material has a total weight of five hundred kilogrammes or more, but does not include material which is a classified explosive.

Relevant Ammonium Nitrate Mixtures

The Dangerous Substances (Notification And Marking Of Sites) (NAMOS) Regulations define ‘relevant ammonium nitrate mixtures’ as ammonium nitrate and mixtures containing ammonium nitrate, where the nitrogen content exceeds 15.75% of the mixture by weight.

This definition was transferred from the NIHHS Regulations.

Resistance to detonation

The ability of a fertiliser to resist detonation determined by the Detonation Resistance Test.

Self-sustaining decomposition

A fertiliser capable of self-sustaining decomposition is defined as one in which decomposition initiated in a localised area will spread through the mass after removal of the initiating heat source. This type of fertiliser is commonly known as a “cigar burner”.

Supplier

The company that sells fertiliser within the scope of FIAS

Source of Supply

The place from which materials are purchased.

Thermal cycling

A thermal cycle is the application of heat to a closed sample of ammonium nitrate to a temperature of 50°C followed by cooling to 25°C. The combination of successive phases at 50°C and 25°C forms one thermal cycle.

Appendix 4 Records

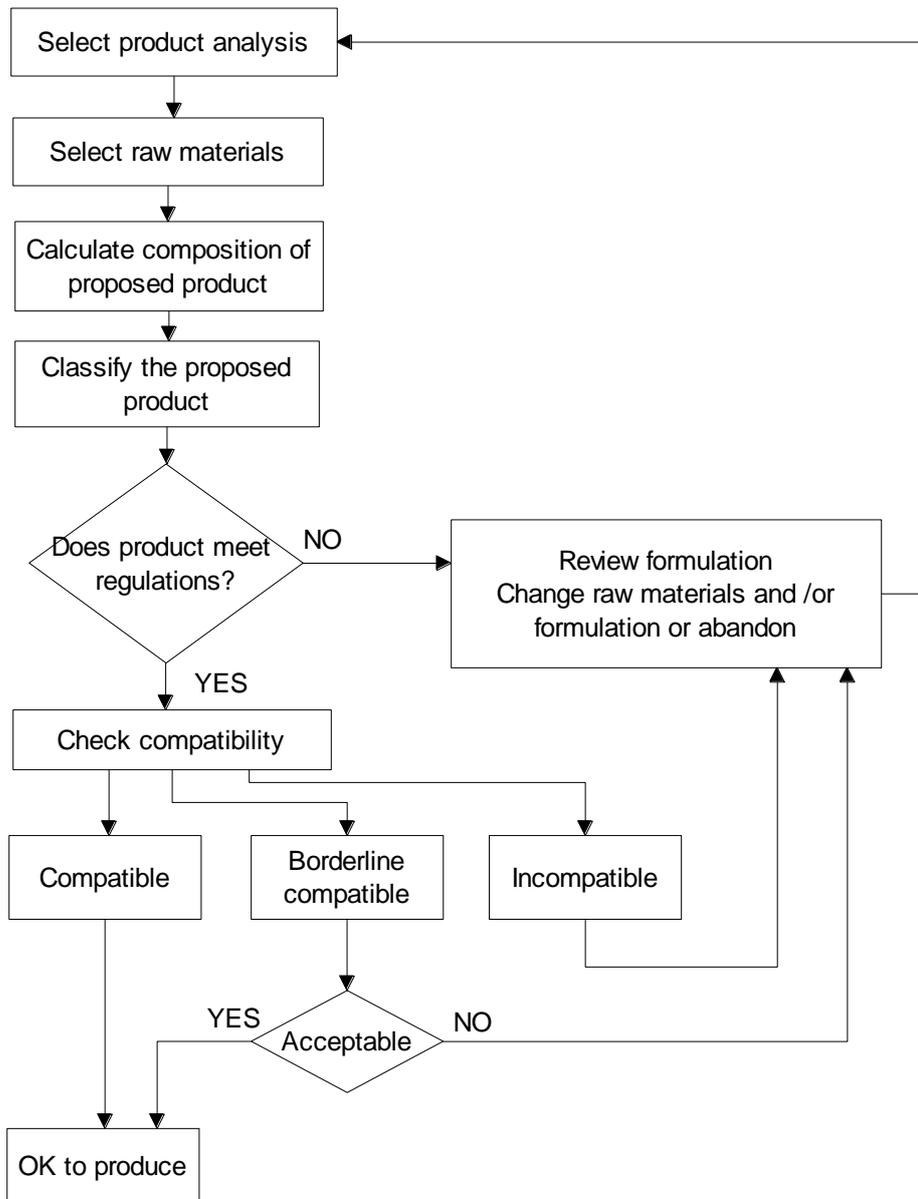
The following is a list of the records that are identified within the text of FIAS and must be kept:

Clause Ref	Record Required
2.1.6	Management system review
2.2.2	Notification/approvals for products held on site.
2.3.1	Risk Assessment Team Members
2.3.2	Risks associated with the product
2.3.3	Process flowchart
2.3.4	Risk Assessment
2.3.6	Action plans
2.3.7	Risk Assessment review
2.4.1	Supplier agreements
2.4.2.3	Storage and Transport contractor risk assessments, Contractor terms and conditions
2.4.2.3.1	Non certified Storage/ Transport Contractors list
2.4.2.4	Purchase specifications and records
2.4.3	Compliance of fertiliser imports to specification and legislation
2.5.1	Training and competence records
2.5.2	Security screening records
2.6.2	Internal audit reports and follow-up information
2.7.1	Document control records
2.8.1	Incident management procedure review
2.8.3	Notification of suspicious or unusual activity to enforcement agencies
2.9.2	Non-conformances and corrective action
2.10.3	Complaints and actions taken
3.1	Purchase contracts for product sourced from overseas
3.2	Notification of authorities of AN imports
4.1.1	Management of new product development
4.4.1	Product inspection/test records
4.6.1	Non-conforming product
4.7.1	Equipment calibration, Calibration failure investigation
6.3.1	Verification of incoming material Appointment of DGSA, certificate and annual report
6.3.2	Signature and name of employee
6.4.1	Checks of vehicle/driver legal compliance Name/ Signature of driver
7.1.1	Customers and product sales checks
7.1.2	Non account holding customer details
7.1.3.1	Non certified Merchant Customers list
7.1.7	Evaluation of suspicious requests to purchase products
7.1.8	Customer requirements records
7.2.1	Training of sales representatives
7.2.2	Agent responsibilities
7.4.1	Approval of hauliers
8.1.1	Instructions received from clients Bona fide client checks
8.1.3	Instructions passed to drivers
8.3.1	Appointment of DGSA and certificate
8.3.4	Security measures taken when parked/ unattended
8.4.1	Approval of diversion of deliveries Damaged or rejected deliveries Proof of delivery/ Risk assessment Differences from specified delivery instructions
9.1	Verification of product recall system

Appendix 5 Contact Details

<p>Agricultural Industries Confederation (AIC) www.agindustries.org.uk 01733 385230 (t)</p>	<p>Freight Transport Association (FTA) www.fta.co.uk 08717 11 22 22 (t)</p>
<p>Anti-terrorist Hotline 0800 789321 (t)</p>	<p>Health and Safety Executive (HSE) www.hse.gov.uk 0845 345 0055 (t)</p>
<p>Red Tractor Farm Assurance www.redtractor.org.uk 020 7630 3320 (t)</p>	<p>Home Office 020 7035 4848 (t) public.enquiries@homeoffice.gsi.gov.uk</p>
<p>Department of the Environment Food and Rural Affairs (Defra) 08459 33 55 77 (t) defra.helpline@defra.gsi.gov.uk</p>	<p>National Farmers Union (NFU) www.nfuonline.com 024 76858500 (t)</p>
<p>Department for Business, Innovation and Skills (BIS) 020 7215 5000 (t) enquiries@bis.gsi.gov.uk</p>	<p>National Farmers Union Scotland (NFUS) www.nfus.org.uk 0131 472 4000 (t)</p>
<p>Department for Transport (DfT) 0300 330 3000 (t) https://forms.dft.gov.uk/contact-dft-and-agencies/</p>	<p>Kiwa PAI www.kiwa.co.uk/about-us/kiwa-pai 01423 878878 (t)</p>
<p>Environment Agency 03708 506 506 (t) enquiries@environment-agency.gov.uk</p>	<p>Road Haulage Association (RHA) www.rha.uk.net 01932 838 910 (t)</p>
<p>Fertilizers Europe www.fertilizerseurope.com 00 32 2 675 35 50 (t)</p>	<p>United Kingdom Accreditation Service (UKAS) www.ukas.com 020 8917 8400 (t)</p>
<p>International Fertiliser Society www.fertilizer-society.org 01206 851 819 (t)</p>	<p>Driver and Vehicle Services Agency 0300 123 9000 (t) www.gov.uk/contact-dvsa</p>

Appendix 6 Risk Assessment Decision Tree



Appendix 7 Guidance for compliance with the Dangerous Substances (Notification And Marking Of Sites) (NAMOS) Regulations

1. Under the Dangerous Substances (Notification And Marking Of Sites) (NAMOS) Regulations 1990, as amended on 6th April 2013, sites which store certain fertilisers have a requirement to notify the relevant authorities and display warning signage at the site entrances.
2. **Sites which hold 25 tonnes of material classified as being 'Dangerous Substances' are required to notify both the HSE and local Fire and Rescue Service.** This includes all fertilisers which display the hazardous classification symbol for 5.1 oxidising substances under the Carriage of Dangerous Goods regulations (ADR) (This will include Ammonium Nitrate based products)
3. Sites which hold 25 tonnes of material classified as being 'Dangerous Substances' are required to place a **'Dangerous Substance' warning symbol at all access points** to the site.
4. A person in control of a site which holds a total quantity of 150 tonnes or more of 'relevant ammonium nitrate mixtures' (see Appendix 3 Definitions) are required to notify the Fire and Rescue Service for the area in which the site is located. (There is no requirement to notify the HSE.)
 - a. A typical ratio would be 25.5.5 which equates to 25% N, 5% P and 5% K. In this example the Nitrogen would contain both Nitric Nitrogen (N) 12.5%, and Ammoniacal Nitrogen (N) 12.5%, thus making the total Nitrogen (N) content 25%.