

## 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 and Ammonium Nitrate Material (Amendment) (EU Exit) Regulations 2019**

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 **and updated biennially**)

The Ammonium Nitrate Materials (High Nitrogen Content) Safety Regulations 2003, **as amended**

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

**The Producer Responsibility Obligations (Packaging Waste) Regulations 2007**

EC Fertilisers (England & Wales) Regulations 2006

EC Fertilisers (Scotland) Regulations 2006

EC Fertilisers (Northern Ireland) Regulations 2006

Explosives (Ammonium Nitrate & Sodium Chlorate) Order 1972

**The Poisons Act 1972 (Explosives Precursors) (Amendment) Regulations 2018**

**Control of Poisons and Explosives Precursors Regulations 2015**

**Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors**

**REACH – Registration, Evaluation, Authorisation and Restriction of Chemicals**

## 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
AIC Recommended best practice for the sales of fertiliser explosive precursors on the internet	Guidance	AIC
Code of Practice for suppliers of pesticides to agriculture, horticulture and forestry (“Yellow Code”)	Code of Practice	HSE
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 Compatibility of Fertilizer Blending Materials	Guidance	Fertilizers Europe
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.

### **Blended fertiliser**

A fertiliser obtained by dry mixing of more than one fertiliser, with no chemical reaction.

### **Business process risk assessment**

An assessment for the purposes of FIAS which identifies the hazards, threats and resulting risks related to legal compliance, security, traceability and product safety of all fertiliser operations undertaken by the business. It is distinct from a Health and Safety Risk Assessment but may follow similar principles.

### **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.

### **Company**

The organisation certified or seeking certification under FIAS.

### **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 (DRT)**

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, a blender, 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 UK* shall be deemed to constitute placing on the market.

### **Product**

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

### **Product Recall**

Product recall is the process required to enable identification and location of non-conforming material or product at all points in the supply chain between producer and end user in order for remedial action to be agreed and implemented by the parties involved.

### **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; 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".

***Straight fertiliser***

A nitrogenous, phosphoric or potassic fertiliser having a declarable content of only one of these primary nutrients.

***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.

***Traceability***

*The ability to track and follow a material or product through all stages of sourcing, production, storage, sales and distribution to end user.*

## 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
G2.2 (2.1.1)	Policy statement
G3.1 (2.1.6)	Management system review
G5.1 (2.1.5)	Records of communication of staff responsibilities
G6.1 (2.5.1)	Training and competence records
G6.3 (2.5.2)	Security screening of staff
G9.2 (2.2.2)	Notification/approvals for products held on site.
G10.1 (2.3.1, 2.3.2, 2.3.3, 2.3.4, 2.3.6)	Business process risk assessment records - team members, risks associated with the products, process descriptions, hazard and risk assessments, controls and action plans
G9.2 (2.2.2)	Notification/approvals for products held on site.
G11.1 (2.3.7)	Business process assessment review
G13.1 (2.4.1)	Supplier approval
G13.1 (2.4.2.4)	Purchase specifications and records
G15.1 (2.4.2.3)	Contracted services – FIAS certification confirmation
G16.2 (2.4.2.3.1)	Non-FIAS Contractor or merchant customer initial audit and inspection assessments, reports and authorisations.
G16.3 (2.4.2.3)	Non-FIAS Contractor or merchant customer annual audit and inspection assessments, reports and management review record.
G18.2 (2.6.2)	Internal audit reports and follow-up information
G19.1 (2.7.1)	Document control records
G20.1 (2.8.1)	Incident management procedure review
G20.3 (2.8.3)	Notification of suspicious or unusual activity to enforcement agencies
G21.1 (9)	Traceability records
G21.6 (9.1)	Verification of product recall system in management review
G22.3 (2.10.3)	Complaints and actions taken
G24.1 (3.1)	Purchase contracts for product sourced from overseas
G24.2 (3.2)	Notification of authorities of AN imports
G24.3 (2.4.3)	Compliance of fertiliser imports to specification and legislation
G25.1	DRT certificate/product transaction records
MP1.1 (4.1.1)	Management of new product development
MP4.1 (4.4.1)	Product inspection/test records
MP6.1 (4.6.1)	Non-conforming product records
MP6.2	Contingency plan for DRT failed AN
MP7.1 (4.7.1)	Equipment calibration, Calibration failure investigation
S3.2 (5.2.2)	Fire detection system and firefighting equipment maintenance
S5.1	Product changeover cleaning record
S6.1 (6.3.1)	Verification of incoming material
S6.3 (6.3.1)	Appointment of DGSA, certificate and annual report
S6.4 (6.3.2)	Signature and name of employee Agreement of other verifiable means
S7.2 (6.4.1)	Checks of vehicle/driver legal compliance
S7.3 (6.4.1)	Name/ Signature of driver
M1.1 (7.1.1)	Customers and product sales checks
M1.2 (7.1.2)	Non account holding customer details
M1.5 (7.1.5)	Customer and sales records
M1.6 (7.1.7)	Evaluation of suspicious requests to purchase products
M1.7 (7.1.8)	Customer requirements records
M2.1 (7.2.1)	Training of sales representatives
M2.2 (7.2.2)	Agent responsibilities
M4.1 (7.4.1)	Approval of hauliers
M4.3 (7.4.3)	Verification of compliance
T1.1 (8.1.1)	Instructions received from clients Bona fide client checks
T3.1 (8.1.3)	Instructions passed to drivers



## FIAS REVIEW 2021 – APPENDICES

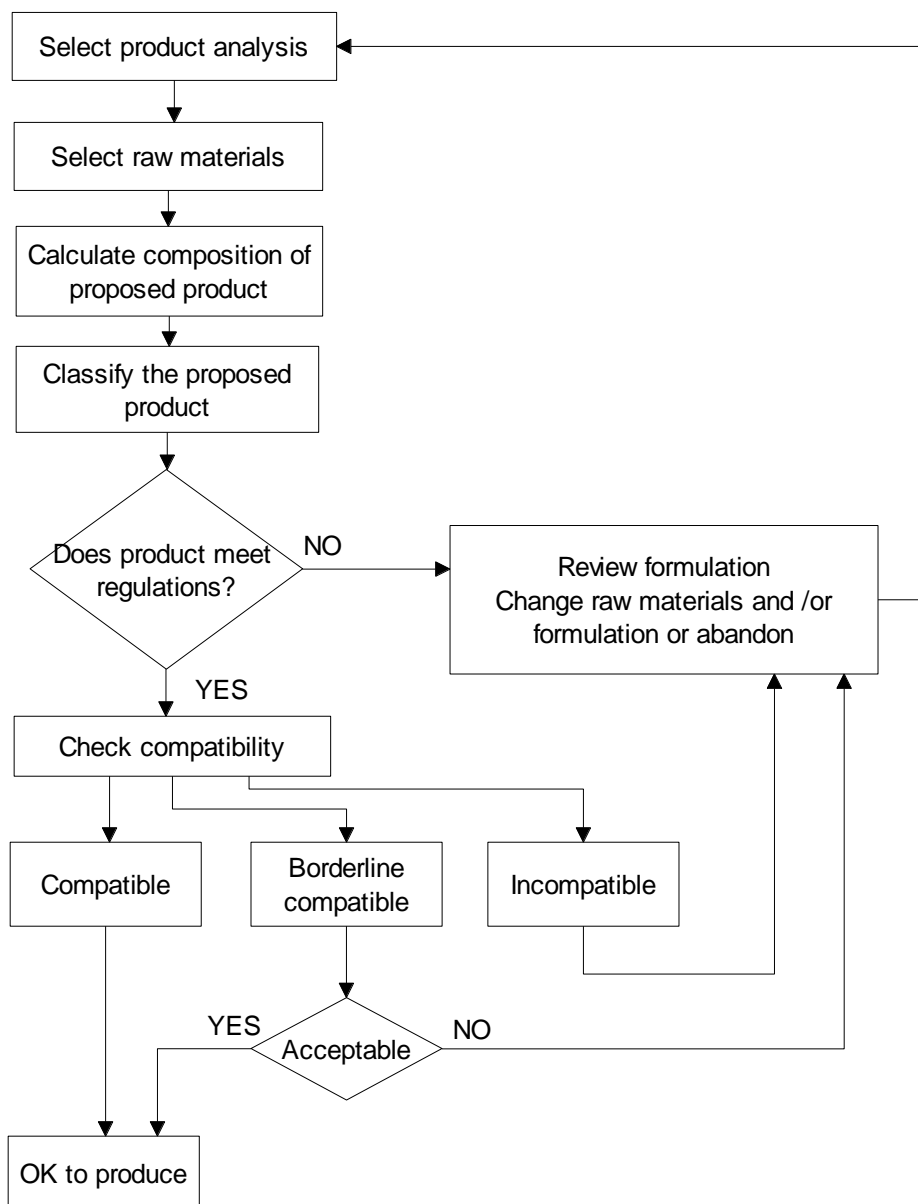
T6.1 (8.3.1)	Current operator's licence
T6.2 (8.3.1)	Appointment of DGSA and certificate
T7.3 (8.3.4)	Security measures taken when parked/ unattended
T9.1 (8.4.1)	Approval of diversion of deliveries
T9.2 (8.4.1)	Damaged or rejected deliveries
T9.3 (8.4.1)	Differences from specified delivery instructions
T9.4 (8.4.1)	Proof of delivery/ Risk assessment

## Appendix 5 Contact Details

<p><b>Agricultural Industries Confederation (AIC)</b>  <a href="http://www.agindustries.org.uk">www.agindustries.org.uk</a>          01733 385230 (t)</p> <p>AIC Trade Assurance – FIAS:  <a href="http://www.aictradeassurance.org.uk/fias">www.aictradeassurance.org.uk/fias</a>          AIC FIAS i-learning <a href="mailto:uk.fertiliser@kiwa.com">uk.fertiliser@kiwa.com</a></p>	<p><b>Freight Transport Association (FTA)</b>  <a href="http://www.fta.co.uk">www.fta.co.uk</a>          03717 11 22 22 (t)  <a href="mailto:enquiry@fta.co.uk">enquiry@fta.co.uk</a></p>
<p><b>Anti-terrorist Reporting</b>          Hotline: 0800 789321 (t)  <a href="http://www.met.police.uk/tua/tell-us-about/ath/possible-terrorist-activity/">www.met.police.uk/tua/tell-us-about/ath/possible-terrorist-activity/</a></p>	<p><b>Health and Safety Executive (HSE)</b>  <a href="http://www.hse.gov.uk">www.hse.gov.uk</a>          0845 345 0055 (t)  <a href="https://www.hse.gov.uk/contact/index.htm">https://www.hse.gov.uk/contact/index.htm</a></p>
<p><b>National Counter Terrorism Security Office (NaCTSO)</b>  <a href="http://www.gov.uk/government/organisations/national-counter-terrorism-security-office">www.gov.uk/government/organisations/national-counter-terrorism-security-office</a></p> <p><b>Action Counter Terrorism (ACT) awareness e-learning</b>  <a href="https://ct.highfieldelearning.com/">https://ct.highfieldelearning.com/</a></p>	<p><b>Home Office</b>  <a href="https://www.gov.uk/government/organisations/home-office">https://www.gov.uk/government/organisations/home-office</a>          020 7035 4848 (t)  <a href="mailto:public.enquiries@homeoffice.gov.uk">public.enquiries@homeoffice.gov.uk</a></p>
<p><b>Red Tractor Farm Assurance</b>  <a href="http://www.redtractor.org.uk">www.redtractor.org.uk</a>          020 7630 3320 (t)</p>	<p><b>Driver and Vehicle Standards Agency</b>          0300 123 9000 (t)  <a href="http://www.gov.uk/contact-dvsa/y">www.gov.uk/contact-dvsa/y</a></p>
<p><b>Department of the Environment Food and Rural Affairs (Defra)</b>          03000 200 301 (t)  <a href="mailto:defra.helpline@defra.gov.uk">defra.helpline@defra.gov.uk</a>  <a href="https://www.gov.uk/government/organisations/department-for-environment-food-rural-affairs">https://www.gov.uk/government/organisations/department-for-environment-food-rural-affairs</a></p>	<p><b>National Farmers Union (NFU)</b>  <a href="http://www.nfuonline.com">www.nfuonline.com</a>          024 7685 8500 (t)</p>
<p><b>Department for Business, Energy and Industrial Strategy (BEIS)</b>          020 7215 5000 (t)  <a href="mailto:enquiries@beis.gov.uk">enquiries@beis.gov.uk</a>  <a href="https://www.gov.uk/government/organisations/department-for-business-energy-and-industrial-strategy">https://www.gov.uk/government/organisations/department-for-business-energy-and-industrial-strategy</a></p>	<p><b>National Farmers Union Scotland (NFUS)</b>  <a href="http://www.nfus.org.uk">www.nfus.org.uk</a>          0131 472 4000 (t)  <a href="mailto:info@nfus.org.uk">info@nfus.org.uk</a></p>
<p><b>Department for Transport (DfT)</b>          0300 330 3000 (t)  <a href="https://forms.dft.gov.uk/contact-dft-and-agencies/">https://forms.dft.gov.uk/contact-dft-and-agencies/</a>  <a href="https://www.gov.uk/government/organisations/department-for-transport">https://www.gov.uk/government/organisations/department-for-transport</a></p>	<p><b>Kiwa Agri-Food</b>  <a href="https://www.kiwa.com/gb/en/products/kiwa-agri-food/">https://www.kiwa.com/gb/en/products/kiwa-agri-food/</a>          01423 878878 (t)</p>
<p><b>Environment Agency</b>          03708 506 506 (t)  <a href="mailto:enquiries@environment-agency.gov.uk">enquiries@environment-agency.gov.uk</a>  <a href="https://www.gov.uk/government/organisations/environment-agency">https://www.gov.uk/government/organisations/environment-agency</a></p>	<p><b>Road Haulage Association (RHA)</b>  <a href="http://www.rha.uk.net">www.rha.uk.net</a>          01932 838 910 (t)</p>
<p><b>Fertilizers Europe</b>  <a href="http://www.fertilizerseurope.com">www.fertilizerseurope.com</a>          00 32 2 675 35 50 (t)  <a href="mailto:main@fertilizerseurope.com">main@fertilizerseurope.com</a></p>	<p><b>United Kingdom Accreditation Service (UKAS)</b>  <a href="http://www.ukas.com">www.ukas.com</a>          01784 429000 (t)  <a href="mailto:info@ukas.com">info@ukas.com</a></p>
<p><b>International Fertiliser Society</b>  <a href="https://fertiliser-society.org/">https://fertiliser-society.org/</a>          01206 851 819 (t)  <a href="https://fertiliser-society.org/contact-ifs/">https://fertiliser-society.org/contact-ifs/</a></p>	



## Appendix 6 Product Development Process Flow



## 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 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%.