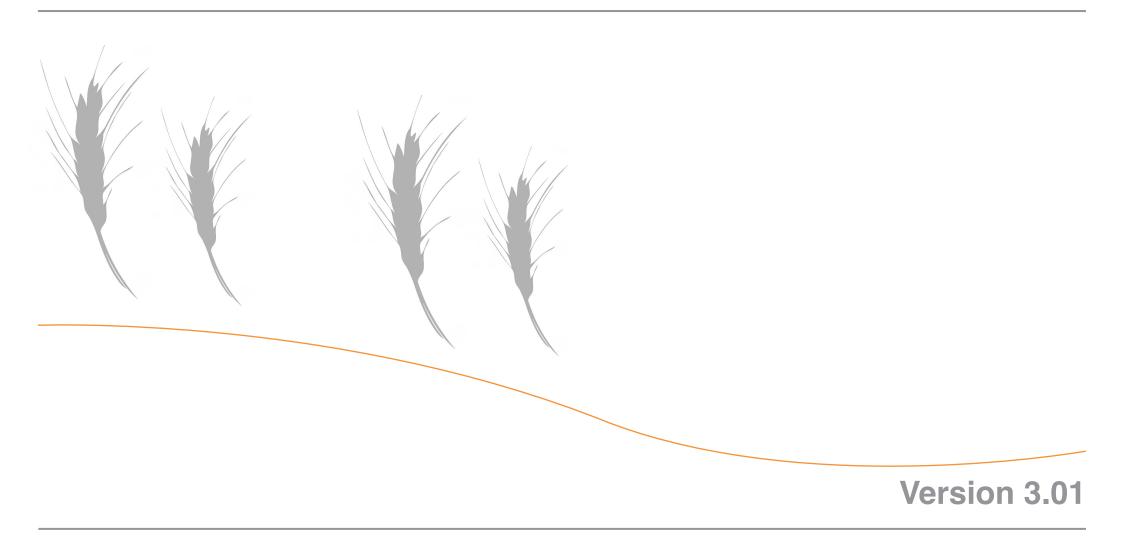
# **Genesis GAP** – Combinable Crops

**Technical Requirements** 





The Genesis GAP Combinable Crops Technical Requirement is for much more than just production and contains legal, food safety, animal welfare and relevant environmental requirements associated with the production and on farm storage of combinable crops. The standard highlights awareness of the legal and safety requirements globally. Producers and other relevant stages in the chain are required to meet the minimum Good Agricultural Practice requirements established by Genesis in addition to all relevant national legal requirements.

#### **ALL FARMS MODULE**

1. Site	1. Site Management, Housekeeping & Security		
Ref	Technical Requirement	Conformance Guide	
AF1.1 Shall	Security shall be considered at all times and the farm shall be managed so as to contain the farm's stock and discourage unauthorised access, theft or wilful damage that might compromise food safety, human safety or animal welfare.	There is no absolute requirement for a ring fence and locked gate although these would be desirable. Where practical, gates, farm buildings, workshops and stores should be kept locked. There should be at least two closable barriers (doors / gates) between housed livestock and the public highway to contain accidental escapes.	
AF1.2 Shall	There shall be a designated parking area for visitors' vehicles which shall be off the highway, away from livestock areas and not impede access by farm vehicles, emergency vehicles or access to water sources for firefighting.	Visitor parking areas need not be formally signed but farm workers shall know where visitors can park. It is recommended that suitably positioned signage is provided and draws attention to biosecurity requirements and if necessary, permitted rights of way.	
AF1.3 Shall	All potential hazards shall be clearly signed.	Potential hazards that may require signage include pesticide and fertiliser stores (containing more than 25 tonnes of fertiliser constituted with more than 28% nitrogen) and slurry pits. Internationally recognised symbols shall be used.	
AF1.4 Shall	A first aid kit shall be located in an easily accessible place. Farms that have stored pesticides shall have clean water for eye washing with 10 metres of each pesticide store.	In order to deter theft the location of the first aid kit need not be signed but its location shall be known by all workers. The recommended minimum stock of items within in a first aid kit is: a leaflet giving general guidance on first aid; 20 individually-wrapped sterile plasters (assorted sizes), appropriate to the type of work; two sterile eye pads, four individually-wrapped triangular bandages; six safety pins; two large, individually- wrapped, sterile, unmedicated wound dressings; six medium-sized, individually- wrapped, sterile, unmedicated wound dressings; a pair of disposable gloves.	

Ref	Technical Requirement	Conformance Guide
AF1.5 Shall	The farmyard and farm shall be clear of accumulated rubbish, materials and equipment not in regular use. Housekeeping, including vegetation control near livestock and crop storage buildings, shall be maintained at an appropriate level to reduce harbourage for pests and enhance the safety of personnel and any livestock.	Tidily and safely stored waste materials accumulated whilst awaiting collection for re-cycling or re-use are acceptable. Large amounts of scrap metal for re- working in the farm workshop or extensive collections of old machinery retained for spares "just in case" are not permitted.
AF1.6 Shall	An effective pest control system shall be in operation to prevent infestation and contamination by relevant insects, vermin, birds or other animals. The system shall include preventing their ingress wherever practical. Poison baits must be used in accordance with their statutory label instructions and must be sited to ensure that non-target species are not affected and the safety of human food products or animal feed is not accidentally endangered. A plan of the bait positions shall be available along with a record of baiting products, dates, actions and outcomes. <sup>®</sup>	The effectiveness of the pest control system is judged on the outcome. There is no requirement to use contractors or for formal workers' training. Minor non-conformance indicators: a little easily observed evidence of infestation or contamination/ evidence detectable only after close examination. Major non-conformance indicators: plentiful easily observed evidence of infestation or contamination/ rodents seen during the audit visit / birds or wild animals seen in grain or feed stores during the audit visit/ no plan/ record available.
AF1.7 Shall	All domestic animals shall be under control at all times and excluded from areas of the farm where they can contaminate human food products or animal feed or worry livestock. All domestic animals shall be wormed regularly in accordance with product recommendations and the treatment recorded. <sup>®</sup>	Minor non-conformance indicators: domestic animals seen in key areas such as poultry sheds and milking parlour or seen in contact with grain or feed during the audit visit. Major non-conformance indicators: domestic animals or their excrement seen in the hatchery or in contact with grain or feed during the audit visit.
AF1.8 Shall	Where artificial fertiliser is stored on the farm, it shall be stored in such a way as to reduce the risk of theft, with appropriate actions taken should a theft be discovered.	Where possible, fertiliser shall be stored in a secure building or compound where there is no public access and which is located away from the public highway where it cannot be seen. Where a secure building or compound is not available, the producer <u>shall</u> be able to explain what system he uses to ensure that stored fertiliser has not been tampered with or moved without his knowledge.

Ref	Technical Requirement	Conformance Guide
AF2.1 Shall	Key personnel shall have access to the Genesis GAP standards.	This can be in either printed or electronic formats.
AF2.2 Shall	The requirements of all relevant current national, regional and local legislation and codes of practice shall be adhered to. This includes the requirement to be registered with all relevant regulatory authorities and where appropriate authorised to undertake farming activities.	The third party auditor will be auditing to the Genesis GAP standards and in general terms will restrict his activity to this only. However, any manifest infringement of local legislation or codes of practice, such as a failure to report or notify relevant disease outbreaks, will be raised against this technical requirement. Examples of potentially applicable registrations include regional and national government, official agencies responsible for animal identification, animal health, animal welfare, food safety, feed safety, environmental protection and payments under EU CAP.
AF2.3 Shall	A detailed farmyard sketch plan showing the relative layout of all buildings and storage areas for food products, livestock, animal feed, fertiliser, pesticides, veterinary medicines, fuels and farm wastes shall be available. The farmyard plan need not be to scale but the building uses must be stated and internal dimensions of all livestock buildings and pens shall be shown. ®	Minor non-conformance indicator: an incomplete farmyard sketch plan. Major non-conformance indicator: no farmyard sketch plan available.
AF2.4 Shall	Where the site has farm land, a farm map showing field numbers/names, field boundaries, buildings, yards, roadways, and indicating the presence of mature trees, woodland, wetlands, ponds, woody hedges, non-grazed native vegetation, ditches and water courses shall be available. ®	Minor non-conformance indicator: an incomplete farm map. Major non-conformance indicator: no farm map available.
AF2.5 Shall	A production record for each field shall be maintained. ®	In the case of individual fields, a record detailing any sowing dates/rates and all treatments and applications must be kept. In the case of livestock a record, such as note in the farm diary, relating to each livestock or storage building is recommended. This requirement does not apply if the unit has no farmland.

Ref	Technical Requirement	Conformance Guide
AF2.6 Shall	An emergency action plan accessible to all workers and visitors shall be in place and be repeated within 10 metres of each pesticide store. The plan will visually display the basic steps of primary accident care and shall include details of farm location and show contact telephone numbers for management, the emergency services and maintenance services that may need to be contacted in the event of any emergency that may affect the welfare of farm personnel or livestock, or pose a pollution risk to the environment. <sup>®</sup>	The plan shall include both the postal code and/or grid reference of the farmyard and indicate the location of the cut-off points for electricity, gas and water and the location of water sources for use for firefighting. The plan must be in the local language and English and in the language of any employee who is not fluent in the local language. Minor non-conformance indicator: an incomplete plan. Major non-conformance indicator: no plan available.
AF2.7 Shall	There shall be documented plans for all farm waste. In the case of non-organic wastes, the farm shall have and implement a plan which will identify all potential materials and shall document ways in which their use can be avoided or reduced along with the provisions for their disposal. Where organic wastes are produced or used, the farm shall have and implement a plan to prevent pollution and contamination by these materials. ®	It is recommended that non-organic waste output is minimised through careful purchasing decisions and by applying the principles of <b>reduction</b> , <b>re-use</b> and <b>recycling</b> . The plan for the use of organic farm wastes (including solid manure, slurry, litter, silage effluent and dirty water) on the farm must consider risks such as diseases, weeds and heavy metal content and identify the location, timing and application rates such that a total nitrogen application of 250kg/ha/year (or a lower amount if specified by government) is not exceeded. Where organic waste is exported from the unit, there must be a formal agreement with third parties for its utilization.
AF2.8 Must	Before use of any land, existing buildings or equipment, or commissioning of new buildings or equipment, all relevant risks must be assessed and effectively mitigated. A record of the assessed risk and mitigation must be retained. ®	Risks to be considered shall include: chemical, physical, microbiological, health & safety, animal health, animal welfare, pollution, adverse weather, fire and security risks. Minor non-conformance indicator: an incomplete record. Major non-conformance indicator: no record available.
AF2.9 Must	There <u>must</u> be a documented procedure to follow in the event that a product recall is required.	This documented procedure <u>must</u> identify the likely occurrences that could require a recall and these will include those that could arise from the purchase of unsafe inputs or intentional threats to product integrity and safety. The procedure <u>must</u> state who is responsible for making the decision and list the businesses that would need to be notified and involved which would include the certification body and Genesis QA.

Ref	Technical Requirement	Conformance Guide
AF2.10 <b>Must</b>	An internal audit <u>must</u> be undertaken annually by a competent person. Any non-conformances identified shall be rectified and records of this retained. <sup>®</sup>	Minor non-conformance indicator: an incomplete record. Major non-conformance indicator: no record available.
AF2.11 Must	There shall be a documented record of any complaints received that are relevant to the requirements of the scheme standards or to any production that has not met the specification expected by the customer. ®	This is a mandatory requirement of any scheme to be accredited to EN 45011 or its successor, ISO 17065. Minor non-conformance indicator: an incomplete record. Major non-conformance indicator: no record available.
AF2.12 Recom.	It is recommended that steps are taken to understand the needs of customers in each target market and to supply only product that meets customer expectations.	It is recommended that producers determine whether any of the crops or livestock produced requires specific action to satisfy the target market, e.g. notification regarding particular disease status; additional steps required to minimise pesticide or veterinary medicine residues. It is recommended that sufficient physical and financial records of enterprise performance are maintained and that, using these records, a cost-of-production figure be calculated at least annually.
AF2.13 Recom.	<ul> <li>It is recommended that there is a documented "Sustainable Productivity Plan" which will relate to the farm as a whole, shall be updated annually and shall consider the following opportunities for sustainable commercial agriculture, setting targets for improvement over time and mitigating for any negative impact where possible:</li> <li>enterprise production efficiency;</li> <li>adding value to farm production;</li> <li>farm-asset utilisation to contribute to farm income and/or be beneficial for the local community;</li> <li>collaboration to reduce direct or indirect costs;</li> <li>energy efficiency to reduce costs and reduce reliance on non- renewable sources;</li> <li>wildlife habitat and biodiversity;</li> <li>farm waste and potential pollutants.</li> </ul>	This need not be a single document and elements may already be covered by participation in environmental schemes.

Ref	Technical Requirement	Conformance Guide
AF3.1 Must	There <u>must</u> be access to sufficient people who are competent, have the capability for the work they do and can be present when required. This shall include access to appropriately qualified advisors and contractors should the need arise. All workers, advisors, contractors and visitors shall be made aware of relevant hygiene and health and safety requirements.	The producer remains responsible for all activities undertaken on the farm, whether by workers, advisors or contractors. Competent is defined as having the necessary experience and/ or training for the work being undertaken. Those that undertake management, pesticide or fertiliser application, stockmanship activities, animal-welfare responsibilities, animal treatment, surgical operations or farm tasks that are subject to legally defined competence criteria must themselves be competent or be closely supervised and instructed by appropriately experienced or qualified personnel. The producer is not expected to maintain full training records for advisors or contractors but where an activity is subject to legally defined competence criteria e.g. pesticide application or livestock haulage, the producer must retain a record of the contracted worker's individual, legal, competence-approval reference number. If there is an officially recognised third party certification approval scheme for those performing the contracted activity then the competence- approval reference number shall be retained.
AF3.2 Shall	Care shall be taken in the recruitment of full-time, part-time or contract workers to avoid inadvertent employment of persons who may have malicious intent. It is recommended that referees are contacted before an offer of employment is made. New workers shall be adequately supervised until they are deemed to be competent.	For all new workers, it is recommended that application letters, application forms and curriculum vitaes (CVs) are retained. Where data protection requirements permit, it is recommended that photographs of new workers be taken and retained.
AF3.3 Shall	Records of the experience, qualifications and training for all persons working on the farm shall be kept. ®	Training records shall include the person's name, date of training, title of the training and who provided the training. Records shall be available for up to two years after a permanent worker has left the business. References taken up before employment shall also be retained.

Technical Requirement	Conformance Guide
Key personnel shall regularly access relevant up-to-date technical	Regular access to up-to-date technical information will include receipt of a
information and a note kept in the training record. ®	farming journal, membership of a farming union, participation in a discussion
	group or attendance at shows, technical events or industry/ customer/ retailer
	meetings.
	It is recommended that all farm workers participate in activities that contribute to
	their continuing professional development (CPD). Where available, the CPD shall
	be accessed through formal programmes. ®
There <u>must</u> be named persons responsible for food safety and	This need not be formally documented. In a small business this is likely to be the
human health and safety/ first aid. ®	same person. It is recommended that the nominated person responsible for first
	aid is trained and maintains their knowledge up-to-date.
	Major non-conformance indicator: the auditee cannot say who is responsible.
The instructions given in Product Safety Data Sheets (PSDS) must be	Hazardous products are likely to include pesticides, pest control products,
	disinfectants and veterinary medicines. No PSDS is expected for fuel, oil, lubricants
human health used or stored on the farm. *	or other workshop products.
	Minor non-conformance indicator: one PSDS missing.
	Major non-conformance indicator: more than one PSDS missing.
Workers must be equipped with suitable personal protective	These items may include rubber boots, protective boots, waterproof or protective
equipment (PPE) in accordance with legal requirements and Product	clothing, coveralls, aprons, gloves, face masks, eye and ear protection. Any
	personal protective equipment requirements in relationship to biosecurity are
	referred to in the appropriate livestock production module.
prevent contamination.	Minor non-conformance indicator: missing or poorly maintained / stored PPE.
	Major non-conformance indicator: workers observed to be using incorrect PPE.
	Key personnel shall regularly access relevant up-to-date technical information and a note kept in the training record. <sup>®</sup> There must be named persons responsible for food safety and human health and safety/ first aid. <sup>®</sup> The instructions given in Product Safety Data Sheets (PSDS) must be followed and these shall be available for all substances hazardous to human health used or stored on the farm. <sup>®</sup> Workers must be equipped with suitable personal protective

Ref	Technical Requirement	Conformance Guide
AF3.8 Shall	Electrical installations shall appear to be well maintained and be inaccessible to inadvertent access by humans or livestock.	Where possible, electrical installations shall be inaccessible to rodents. It is recommended that all mains voltage electrical facilities are inspected regularly and are protected by a residual current device (RCD). Electric fences shall only cause momentary discomfort to livestock.
AF3.9 Shall	<ul> <li>Where there are workers, the following shall be up-to-date and communicated to all:</li> <li>documented Health and Safety policy;</li> <li>documented assessment of Health and Safety risks;</li> <li>documented procedures to address the risks. <sup>®</sup></li> </ul>	Where local laws are more stringent, the requirements of these laws shall be adhered to.Minor non-conformance indicator: one document missing, incomplete or not communicated.Major non-conformance indicator: more than one document missing, incomplete or not communicated.
AF3.10 Must	All those that handling, store and transport pesticides <u>must</u> be trained in safe procedures.	Intentionally blank.
AF3.11 Must	All those that apply pesticides to the growing crop or the crop in- store, <u>must</u> be trained in safe procedures and hold a Certificate of Competence. Those not yet holding a Certificate of Competence <u>must</u> be under the close supervision of a Certificate of Competence holder. Copies of the Certificates of Competence of all farmworkers and contractors that apply pesticides by any method to any seed, crop or surface, <u>must</u> be held on farm. <sup>®</sup>	Intentionally blank.
AF3.12 Shall	All those that apply pesticides shall participate in activities that contribute to their Continuing Professional Development (CPD). Where available, the CPD shall be accessed through formal programmes. <sup>®</sup>	Regular access to up-to-date technical information will include receipt of a farming journal, membership of a farming union, participation in a discussion group or attendance at shows, technical events or industry/ customer/ retailer meetings. In the UK, this requirement will be met by participation in National Register of Sprayer Operators (NRoSO) and a valid NRoSO number for each sprayer operator will be made available to the auditor.

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AF3.13 Shall	All professional pesticide or fertiliser usage advisors shall participate in activities that contribute to their continuing professional development (CPD). Where available, the CPD shall be accessed through formal programmes. <sup>®</sup>	Regular access to up-to-date technical information will include receipt of a farming journal, membership of a farming union, participation in a discussion group or attendance at shows, technical events or industry/ customer/ retailer meetings. In the UK, this requirement will be met by participation in BASIS and FACTS as appropriate and a valid membership number for each will be made available to the auditor. In other territories, an appropriate post high school course study in Agricultural Engineering or Agronomy will suffice.
AF3.14 Shall	An accident recording system, that prevents unauthorised viewing of previous entries, shall be accessible by workers.	This does not need to be available to workers outside business hours.
AF3.15 Shall	All workers shall be provided with suitable shelter / rest areas, toilet facilities, hand-washing facilities and potable water to drink. There shall also be adequate break times consistent with employment legislation.	Intentionally blank.
AF3.16 Shall	Amenities for workers living on-site shall be habitable and include access to the basic services.	Basic services include a clean food-preparation area, access to doctor and hospital, running water, potable water to drink, toilets and drainage.
AF3.17 Shall	A record of all visitors shall be held to include name, date of visit and, if this is a livestock farm, the date of last contact with relevant livestock species. <sup>®</sup>	For most pig and poultry production, all livestock species visited within the preceding 21 days are likely to be relevant in terms of being potential disease reservoirs.
AF3.18 Shall	Visitors not known to the producer shall be requested to provide proof of identification and all visitors shall be asked to declare, on arrival, all recording equipment they bring onto the farm. It is recommended that visitors shall be supervised or directed at all times.	This is good practice. Footage of good production practices can be cleverly edited to give the wrong impression and cause reputational damage to you, your customers and ultimately to the continued viability of your business or even the sector. It is recommended that a note of the type of identification (e.g. passport/ business card etc.) is kept. Supervising visitors is good practice. It not only ensures that visitors cannot accidentally, or otherwise, cause harm but helps meet moral obligations and legal requirements, to ensure the safety of all visitors to the farm.

Ref	Technical Requirement	Conformance Guide
AF4.1 Shall	There shall be a documented farm-cleaning plan encompassing all the production areas and buildings.	The plan shall set out the frequency of cleaning for each area and building, the cleaning method, the disinfectant/sanitisers to be used, application methods and dilution rates. The above criteria shall be set in accordance with the contamination- or disease-transmission risk. When a livestock building is completely emptied it, and its fixtures and fittings, shall be thoroughly cleaned and disinfected.
AF4.2 Shall	There shall be relevant documented hygiene precautions in which workers shall receive training. This training shall be recorded in the training file.	The hygiene instructions shall be in the local language and English and in the language of any employee who is not fluent in the local language. As a minimum, the instructions shall include:- the need for hand cleaning;- the covering of skin cuts;- limitations on smoking, eating and drinking to designated areas;- notification of any relevant infections or conditions. This includes sign of illness (e.g. vomiting, jaundice, diarrhoea) whereby these workers shall be kept from direct contact with the product and all food-contactsurfaces; - the use of suitable personal protective clothing and equipment.
AF4.3 Must	Potential pollutants and contaminants including pesticides, paints, preservatives, baits, fuel, lubricants, disinfectants, organic wastes, manures, fertilisers, composts and waste containers <u>must</u> be stored, applied and disposed of appropriately to prevent pollution, contamination, injury and spread of disease. Records of application and disposal must be kept for three years. <sup>®</sup>	All potential pollutants must be stored away from stored crops, animal feeds, flammable materials and sources of ignition and be at least 10 metres from watercourses and at least 50 metres from well, springs or boreholes. Pesticides must not be stored with fertilisers. Any recycling of waste shall be undertaken in accordance with relevant waste regulations. Pesticide and veterinary medicine containers <u>must not</u> be re-used.
AF4.4 Must	<ul> <li>The pesticide store <u>must</u> be located more than 10 metres from any ditch or water course, more than 4 metres from flammable materials or sources of ignition and be signed.</li> <li>The pesticide store <u>must</u> be secure, well ventilated, frost proof, have ease of access and have sufficient light to enable reading of the product label. Shelving <u>must</u> be non-absorbent.</li> </ul>	Walls and doors <u>must</u> be soundly constructed of a material which will resist fire for 30 minutes with a warning side on the outer door. Unless products are supplied in purposely designed weatherproof packaging, a cage exposed to the elements is not acceptable. Pesticides <u>must not</u> be stored with fertilisers. Access <u>must</u> be limited to those with adequate training in the safe handling of pesticides.

Ref	Technical Requirement	Conformance Guide
AF4.5 Must	The pesticide store <u>must</u> have a bund to provide secondary containment of 110% of the volume stored and have suitable emergency facilities, such as dry sand or absorbent granules, in order to contain accidental spillages.	Intentionally blank.
AF4.6 Shall	Equipment shall be provided for measuring pesticides.	Intentionally blank.
AF4.7 Must	Stored pesticides <u>must</u> remain in their original package and retain their original label. Only when the original container has become damaged may pesticides be re-packaged. Replacement containers <u>must</u> be suitable, have a tight fitting lid and display all the information of the original label.	Auditor will record instances of pesticides not in original packaging or new packaging that does not display the original label.
AF4.8 Must	All pesticides intended for use on the farm must have current government approval in both the country where the crop is being grown the country of intended destination of the crop.	Products present on farm that do not have current government approval must be clearly identified as such and be subject to the storage requirements set out above. Whilst the presence of any unapproved pesticides in the store will score as a non-conformity, any failure to fully achieve the storage requirements for unapproved pesticides will result in immediate suspension of certification.
AF4.9 Shall	Storage provisions for powdered pesticides shall ensure that they cannot be contaminated accidentally by liquid spillage.	Intentionally blank.
AF4.10 Shall	An up-to-date inventory of stored pesticides shall be maintained away from the store and accessible if needed by emergency services.	Intentionally blank.
AF4.11 Must	All pesticide sprayers used on the farm, other than hand-held applicators and knapsacks, must be tested and calibrated annually under a certification scheme or by an engineer accredited by the sprayer manufacturer.	All sprayers shall also be calibrated by the operator when changing from one product to another. Suitable sprayer certification schemes in the UK include the National Sprayer Testing Scheme (NSTS) and the Genesis Sprayer Testing Scheme (GSTS). Hand-held applicators and knapsacks must be checked annually by the operator and records maintained to 2 years.

Ref	Technical Requirement	Conformance Guide
AF4.12 Shall	An up-to-date inventory of stored fertilisers shall be maintained away from the store and accessible if needed by emergency services. <sup>®</sup>	Intentionally blank.
AF4.13 Shall	Records of the chemical content of purchased inorganic fertiliser shall be retained for 2 years. ®	Intentionally blank.
AF4.14 Shall	Granular fertilisers shall be stored on a hard dry surface, under cover, where any spillage can be contained and prevented from contaminating groundwater.	All granular fertilisers shall be stored away from stored crops, animal feeds, flammable materials and sources of ignition and be at least 10 metres from watercourses and at least 50 metres from well, springs or boreholes. Pesticides must not be stored with fertilisers.
AF4.15 Must	Liquid fertilisers must be stored in suitable tanks. Where liquid fertiliser tanks are not within a bund to providing secondary containment of 110% of the volume stored then they must have lockable or removable tap handles and any sight gauges must be isolated by lockable valves.	All liquid fertilisers must be stored away from stored crops, animal feeds, flammable materials and sources of ignition and be at least 10 metres from watercourses and at least 50 metres from well, springs or boreholes.
AF4.16 Shall	Fertiliser applicators shall be checked regularly to ensure correct and accurate operation. Records to be retained for 3 years. Precautions must be taken to protect non-target areas	Genesis supports the 4R approach to choosing and applying fertilisers. This approach can be summarised as Right Product at the Right Rate, Right Time and Right Place. This Technical Requirement is important in helping with achieving Right Rate and Right Place.
AF4.17 Shall	Where more than 1,500 litres of agricultural fuel oil is stored, the stores, or areas for storing fuel oil drums, shall have a bund to provide secondary containment of 110% of the volume stored. Fuel stores shall not be located within 10 metres of a ditch or surface water.	Intentionally blank.

Ref	Technical Requirement	Conformance Guide
AF4.18 Recom.	<ul> <li>It is recommended that an assessment of the various energy requirements of the farm be undertaken. Steps should be taken to:</li> <li>avoid wasting energy.</li> <li>avoid unnecessary operations and inappropriate use of machinery or equipment.</li> <li>increase the use of renewable energy and fuels.</li> <li>record and monitor fuel usage.</li> <li>optimize the use of energy-intensive inputs such as inorganic fertilizers.</li> </ul>	Intentionally blank.
AF4.19 Recom.	<ul> <li>It is recommended that an assessment of the various water requirements of the farm be undertaken. Recommended actions include:</li> <li>have a plan of the water-supply network and check taps, drinkers, troughs and nozzles regularly for leaks;</li> <li>record and monitor water usage. Look out for any increase in use that may indicate leaks;</li> <li>ensure all hoses, hand lances and washing equipment have trigger controls;</li> <li>insulate pipes properly;</li> <li>consider water re-use or rainwater harvesting</li> </ul>	Intentionally blank.
AF4.20 Recom.	It is recommended that during the cleaning of buildings, facilities and equipment with water, that consideration is given to methods that use less water.	The method of thoroughly wetting the surface to be cleaned, then leaving for a period before beginning washing, can save substantial amounts of both time and water.

Ref	Technical Requirement	Conformance Guide
AF5.1 Shall	Ecosystems such as mature trees, woodland, wetlands or ponds that provide habitats for wildlife living on the farm, or for wildlife that pass through the farm during migration, shall be protected and maintained. Special measures shall be taken to protect threatened or endangered species.	Not applicable to farms without farmed land.
AF5.2 Shall	Ploughing or other deep cultivations shall not take place under the canopy of mature trees.	Not applicable to farms without farmed land.
AF5.3 Shall	The producer shall take steps to maintain or increase the farm's carbon-absorption and carbon-holding capacity by planting or conserving trees or other woody biomass.	Not applicable to farms without farmed land.
AF5.4 Shall	Farming activities shall maintain and enhance biological diversity on the farm by planting native or adapted species or by promoting natural regeneration.	Not applicable to farms without farmed land.
AF5.5 Shall	Farming practices shall aim to improve soil structure, reduce land vulnerability and prevent land degradation through careful choice of cultivations and avoiding the poaching of land by livestock.	There shall be a written soil management policy with soil maps to assist in the optimal use of inputs. Rotation for annual crops should be practiced where feasible. Not applicable to farms without farmed land.
AF5.6 Recom.	It is recommended that the classification of soils is known and the characteristics and production potential understood.	Not applicable to farms without farmed land.
AF5.7 Recom.	It is recommended that soil-analysis results, crop nutrient-demands, topography and prevailing weather conditions are used to help determine the timing, frequency and quantity of applications of nutrients and to ensure that nutrient loss and pollution are minimised.	It is recommended that a nutrient management plan is developed. Not applicable to farms without farmed land.

Ref	Technical Requirement	Conformance Guide
AF5.8 Recom.	It is recommended that ecosystems, such as mature trees, woodland, wetlands or ponds are connected to one another by "wildlife corridors" consisting of, for example, hedges, non-grazed native vegetation, ditches or water courses.	Not applicable to farms without farmed land.
AF5.9 Recom.	It is recommended that the protection of grassland and crops against pest, diseases and weeds shall be achieved with as little reliance as possible on pesticides. It is recommended that use be made of selective pesticides (insecticides, fungicides, herbicides) rather than broad-spectrum products i.e. use insecticides that control only the pest species and not the predator or other non- target species.	It is recommended that integrated crop management (ICM) should be adopted and discussed with relevant staff, contractors and advisors. Not applicable to farms without farmed land.
6. Gene	tically Modified Organisms	
Ref	Technical Requirement	Conformance Guide
AF6.1 Must	The husbandry and growing of any Genetically Modified Organisms (GMO) must comply with all legal requirements in both the countries of production and intended destination.	Any producers intending to grow any GMOs, in trials or commercially, must have prior written approval from both GQA and their customers prior to planting GM varieties. Producers must maintain records of the GM status for all crops in each field.
AF6.2 Must	Genetically Modified (GM) crops and animal feeds <u>must</u> be clearly labelled as such physically separated from other similar materials and crops.	If GM and non-GM materials or crops become co-mingled in transport or storage, the whole bulk must be treated as GM.
AF6.3 Shall	The requirement of the Code of Practice on the Provision of Information relating to Genetically Modified Crops shall be followed.	For further information refer to the Supply Chain Initiative on Modified Agricultural Crops (SCIMAC) Code of Practice available from <u>www.scimac.org.uk</u>

## ALL CROPS

1. Se	1. Seeds and Seed Treatments		
Ref	Technical Requirement	Conformance Guide	
AC1.1 Shall	Farms shall choose varieties that are suitable for the production system and local climate.	The chosen varieties will be suitable and have sufficient tolerance to important pests and diseases.	
AC1.2 Must	All pesticides used for the treatment of seed or rootstock <u>must</u> be approved and records of their use be maintained. <sup>®</sup>	Intentionally blank.	
AC1.3 Shall	Certificates /reference numbers / lot numbers and any seed treatment of purchased seed shall be retained. ®	Intentionally blank.	
AC 1.4 Shall	Records shall identify the source and any treatments applied to any farm-saved seeds. ®	Intentionally blank.	
	ewable Energy Directive 2009/28/EC (RED)		
Ref	Technical Requirement	Conformance Guide	
AC2.1 Shall	Land classified as uncultivated or semi-natural or permanent pasture (at or after 01.11.2008) shall not be brought into arable food crop or biofuel feedstock production until the requirements of the Environmental Impact Assessment (EIA) Regulations have been met in full. ®	Where biofuel feedstock is to be produced, carbon losses shall be calculated and records retained.	
AC2.2	Land classified as being of high biodiversity value or land with high	Arable production areas shall not be created from any wooded or forested areas	
Shall	carbon stock or land that was peat land (at or after 01.11.2008) shall not be brought into arable food crop or biofuel feedstock production. ®	or any undrained peat land, any woodland area, areas prohibited for cultivation by law for nature protection purposes or protection of specific ecosystems or species	

Ref	Technical Requirement	Conformance Guide
AC3.1 Shall	Crops <u>must</u> be inspected regularly for relevant pests, diseases and weeds. Records of these inspections shall be maintained. <sup>®</sup>	Industry thresholds shall be reached before the decision to apply a pesticide is taken. Cropwalker's notes or agronomist's recommendations will suffice.
AC3.2 Must	Pesticides and other crop protection products <u>must</u> be government approved at the time of use and <u>must</u> be handled, transported and applied in accordance with manufacturer's instructions and in ways which prevent pollution and contamination of non-target areas. Records must be maintained to confirm compliance and a hard copy of any Local Environmental Risk Assessment for Pesticides (LERAP) or direct electronic access to any Specific Off Label Approval (SOLA) must be available. ®	Particular attention <u>must</u> be paid to the statutory conditions of use including the specified crop, maximum number of applications, maximum total dose, spray intervals, timing, mixing, filling, and buffer zone, LERAP or SOLA. Where these requirements have not been met, the crop or the whole farm, if appropriate, may be de-certified. Pesticides <u>must not</u> be transported within the same air space as the driver or any passengers.
AC3.3 Shall	When pesticides that are potentially harmful to bees are to be applied, the local bee keeper shall be given a minimum of 48 hrs prior notice.	Intentionally blank.
AC3.4	Pesticide purchase and application records <u>must</u> be kept for a	These records <u>must</u> include: Name of equipment operator, crop, variety and
Must	minimum of 3 years. ®	growth stage, crop location/field name/ store name, area to treat, rate of application, product name and active ingredient, volume of water, reason for application, special precautions required (i.e. LERAP), harvest interval, date of application start and finish.
AC3.5 Shall	Empty pesticide containers shall be triple rinsed with water. All washings shall be returned to the spray tank.	Intentionally blank.

AC3.6 Must	At the end of spraying, surplus dilute pesticide and any washing <u>must</u> be used or disposed of appropriately.	Appropriate use or disposal can include: retained for use on next crop; sprayed back onto the target area provided the maximum rate will not be exceeded, sprayed onto unsprayed crop specifically left for this purpose, sprayed onto government authorised area or stored whilst awaiting collection by a licenced waste contractor.
4. Use	of Fertilisers	
Ref	Technical Requirement	Conformance Guide
AC4.1 Shall	Fertiliser rates shall be based on a calculation of the nutrient requirements of the crop and on regular analysis of nutrient levels in soil or plant tissue.	Single applications of Nitrogen in the Spring shall not exceed that which can be readily utilised by the crop. Guidance on this is available in publications such as the UK Government Fertiliser Manual RB209. Any relevant rules regarding maximum nitrogen application levels shall be adhered to (in UK, the Nitrate Vulnerable Zone (NVZ - SMR4) may be applicable). Genesis supports the 4R approach to choosing and applying fertilisers .This can be summarised as: Right Product at the Right Rate, Right Time and Right Place.
AC4.2 Shall	The choice of fertiliser shall be matched to meet crop demand, maintain nutrient balance (particularly P and K) and minimise nutrient leaching.	Nitrogen (N), phosphate (P) and potash (K) applications should match crop requirements and the rate chosen shall take into account previous cropping and organic manure applications. b
AC4.3 Shall	Fertilisers shall be applied in accordance will all relevant legislation and codes of practice and not be applied to waterlogged, snow covered or frozen soil.	Relevant legislation and codes of practice for UK includes COGAP, Nitrate Vulnerable Zones (NVZ), The Sludge (Use in Agriculture) Regulations 1989 and the Safe Sludge Matrix.
AC4.4 Must	Any use of treated Human Sewage Sludge (Biosolids) on land destined for agricultural use <u>must</u> be in accordance with the UK Government Code of Practice for the Agricultural Use of Sewage Sludge. Untreated Human Sewage Sludge (Biosolids) <u>must not</u> be applied to farmed land.	Relevant legislation and codes of practice for UK includes The Sludge (Use in Agriculture) Regulations 1989 and the Safe Sludge Matrix.
AC4.5 Shall	Fertiliser application records including field name, date of application, type and quantity of fertiliser applied, application method and operator name shall be kept. These records to be retained for 2 years. <sup>®</sup>	Fertilisers include organic, inorganic, solid, granular, liquid and treated human sewage water. Untreated human sewage sludge (biosolids) and abattoir waste (other than manure) must not be applied to farmed land.

5. Shoot	5. Shooting		
Ref	Technical Requirement	Conformance Guide	
AC5.1 Shall	Care shall be taken to avoid contamination of crops with lead shot, or other particles, which have the potential to cause nuisance or harm within the supply chain e.g. clay pigeons.	Bituminous material can easily become a contaminant of any combinable crop. Clay pigeons should not be shot over a cereal crop after 31 March or after the yellow bud stage, whichever is the later. In the case of oilseeds, when the material enters the oil extraction process plant it can lead to dangerously high levels of the polyaromatic hydrocarbon benzo-alpha- pyrene (BaP - a toxic pollutant) in both the extracted oil and rapemeal by-product.	

COMB	COMBINABLE CROPS ONLY		
1. B	1. Buildings, Machinery, Equipment & Contamination		
Ref	Technical Requirement	Conformance Guide	
CC1.1 Shall	All walls, floors and horizontal surfaces of any combinable crop reception, intake, holding, handling conveying or storage shall be cleaned of previous crop residues before use. ®	Care must also be taken with respect to pesticide residues if the facilities have been previously used for storing other crops. For example, Chlorpropham (CIPC) is sprout suppressants authorised for use on potatoes, but not on cereals and residues have been detected in stored grain and have led to poor germination and load rejections.	
CC1.2 Must	All buildings, intended for use for combinable crop holding, handling or storage, which have been used for holding or housing livestock, <u>must</u> be thoroughly washed to remove all organic material, sanitised using a food grade sanitiser and then allowed to dry, before use. <sup>®</sup>	<i>Typically, it is expected that wet cleaning would need to be undertaken at least 5 weeks before the building is intended to be used as a crop store.</i>	
CC1.3 Shall	After cleaning and before use of long term combinable crop storage facilities, insect baiting and trapping shall be undertaken in to demonstrate that cleaning operations have been successful. If insects are still present after cleaning, remedial action must be taken. ®	Insect baiting and trapping in short-term stores is not compulsory. Insect baits containing nuts shall not be used.	
CC1.4 Must	Where any pesticides are applied to the store pre-harvest, they <u>must</u> be approved for that use. Pesticide application records <u>must</u> be completed and retained. <sup>®</sup>	Pesticide application to the store pre-harvest is not compulsory. Some customers may have additional commercial restrictions on the use of pre-harvest combinable crop store pesticides.	
CC1.5 Shall	All machinery and equipment used in the harvesting, transportation, handling, conveying, drying and loading of grain shall be appropriately and thoroughly cleaned. ®	Combinable crop contact surfaces such as trailers or loading buckets etc. and the wheels, tyres, wheel arches, axles, body work and cab floor etc. of bucket loaders, tractors and trailers that have been in contact with potential contaminants such as silage, farmyard manure, soil or aggregates etc., shall be thoroughly washed and sanitised, using a food grade sanitiser and then allowed to dry, before use around the combinable crop holding, handling or intake area or in the store. Other combinable crop dedicated machinery such as combine harvesters, trailers, loading buckets, augers, cleaners, conveyers and driers etc. shall be regularly cleaned by an appropriate method which could include a dry cleaning method such as compressed air or vacuum.	
CC1.6 Shall	Reception areas or other facilities used for holding, handling or intake of combinable crops shall have solid floors which are in	Intentionally blank.	

	good condition and kept clean to help prevent contamination of the crop with concrete, stone, earth, metal or other extraneous material.	
CC1.7 Must	Buildings used for the long-term storage of combinable crops <u>must</u> have solid floors, impermeable roof with working gutters, down pipes and drains along with suitable walls and doors to exclude rainwater, vermin, birds and other animals.	As a minimum, the lower portion of any walls <u>must</u> be of solid construction to prevent ingress of rainwater, vermin, birds and other animals. The upper portion of any wall may be constructed from close meshed netting or similar material but these must completely fill the openings. Doors may be of similar construction but they must close properly. There <u>must</u> be no gaps that would permit access for rainwater, vermin, bird or other animals. There <u>must</u> be no obvious entry points around eaves and auger pipes etc.and doors must be kept shut whenever possible. It is recommended that store interiors are kept as dark as possible to discourage entry by birds.
CC1.8 Must	Buildings used for short-term temporary storage of combinable crops <u>must</u> have solid floors, impermeable roof and suitable walls to exclude rainwater and animals.	It is expected that short-term temporary stores will be in use for no more than 4 weeks after harvest. In the UK, all short-term temporary stores will be emptied by the end of October at the latest.
CC1.9 Must	The risk of contamination of combinable crops from treated seed or seed treatment chemicals <u>must</u> be avoided.	Bags of treated combinable crops seed must not be used as a grain wall or otherwise be in close proximity to stored grain.
CC1.10 Must	The risk of contamination of combinable crops with glass or hard plastics <u>must</u> be avoided. Any light bulbs, tubes, lamps, windows or any other glass or hard plastic material situated above or in very close proximity to facilities or equipment used for the storage, handling or distribution of uncovered crops <u>must</u> either be shatter-proof or be protected with shatterproof covers.	All glass and hard plastic (windows, light covers, mirrors etc.) present on bucket loaders or tractors operating in the vicinity of the combinable crops handling and storage area <u>must</u> be removed, guarded to prevent impact and to capture any broken material or be subject to such regular checking during the working day as to be able to identify and isolate the contaminated batch of combinable crop. The batch to be marked as suspected of containing glass/hard plastic and only released into the store when all the glass/hard plastic have been retrieved completely.
CC1.11 Shall	The risk of contamination of combinable crops with vehicle fluids (engine oil, gear oil, hydraulic oil, fuel, coolant or brake fluid etc.) shall be avoided. Vehicle fluids shall not be stored in combinable crop stores, placed in trailers or on other equipment used for combinable crops or disposed of near combinable crop stores.	Bucket loaders or tractors to be used or kept around the combinable crop holding, handling or intake area or in the store, shall not be re-fuelled or undergo cleaning or maintenance in these areas and must be subject to regular checking for any leakage. Bucket loaders or tractors with any vehicle fluid leaks shall not be used around the combinable crop holding, handling or intake area or in the store until the leak is rectified. Vehicle fluids on the floor of the combinable crop holding, handling or intake area or in the store shall be soaked up with absorbent material and the immediate area cleaned and dried. Used absorbent material and any contaminated combinable crops shall be disposed of carefully.

CC1.12 Shall	The risk of contamination of stored combinable crops with lead shall be avoided. Shotguns or air guns shall not be used in and	Intentionally blank.
Shan	around combinable crop stores.	
CC1.13 Must	The risk of contamination of combinable crops with bituminous material <u>must</u> be avoided. Clay pigeons <u>must not</u> be stored in combinable crop stores, placed in trailers or on other equipment used for combinable crops or disposed of near combinable crop	Bituminous material can easily become a contaminant of any combinable crop. Clay pigeons should not be shot over a crop after 31 March or after the yellow bud stage, whichever is the later. In the case of oilseeds, when the material enters the oil extraction process plant it can
	stores. Oilseeds <u>must not</u> be stored or handled on floors or adjacent to walls containing any bituminous material such as expansion joints or sealers.	lead to dangerously high levels of the polyaromatic hydrocarbon benzo-alpha-pyrene (BaP - a toxic pollutant) in both the extracted oil and rapemeal by-product.
CC1.14 Must	The risk of contamination of combinable crops with mycotoxins or ergot <u>must</u> be assessed and measures taken to reduce the risk of contamination of crops. ®	Mycotoxins have been identified as a potential risk to growing cereals crops and producers must have access to and proceed in accordance with the UK Home Grown Cereals Authority (HGCA) Topic Sheet 114/Summer 2012 "HGCA risk Assessment for Fusarium Mycotoxin in Wheat. Storage fungi can grow on cereals from about 14.5% moisture content (7.5-8% in oilseed rape) upwards. They can cause heating and loss of germinative capacity and some produce mycotoxins. Ochratoxin A (OTA) may be produced by the storage mould Penicillium verrucosum if grain exceeds 18% moisture content. The greatest risk occurs during harvest backlogs and during ambient air drying when grain may take weeks to dry. OTA incidence can be unpredictable. If producers recognise that ergot is present in the crop they should consult their
CC1.15	The risk of contamination of combinable crops at the drying	customers to determine if any additional commercial restrictions exist. Drier operators shall be trained and the drier manual must be available. Oil-fired
Must	stage <u>must</u> be avoided. Drying equipment <u>must</u> be used and maintained in accordance with the manufacturers' instructions.	driers <u>must</u> be operating efficiently and be provided only with the correct fuel, waste oil must never be used. Re-fuelling the drier must not be allowed to pose a risk to the crop.
		Wherever possible, direct oil fired driers should not be used for the drying of oilseeds because benzo-alpha-pyrene (BaP), present in both the fuel and fumes from combustion, can contaminate the crop.
CC1.16	Surfaces outside combinable crop stores where bucket loaders	For further information refer to DEFRA Code of Practice for the Control of Salmonella
Shall	operate, shall be kept clean and be well-drained to help reduce the risk of transferring salmonella or other pathogens to the crop.	during storage, handling and transport of raw materials. www.defra.gov.uk/animalh/diseases/zoonoses/zoonoses_reports/salmonella_cop.pdf

Ref	Technical Requirement	Conformance Guide
CC2.1 Shall	All farms shall have immediate access to a moisture meter and this must be calibrated every year and at any time it is suspected of becoming inaccurate. ®	Intentionally blank.
CC2.2 Shall	All farms with long term combinable crops storage facilities shall have immediate access to a temperature probe and this shall be calibrated every year and at any time it is suspected of becoming inaccurate. <sup>®</sup>	Farms with short term storage only, are not required to have a temperature probe.
CC2.3 Shall	The condition of crops shall be routinely monitored during at the time of harvest in order to determine the need for any drying, cooling or other conditioning during the following few days.	For further information see HGCA Grain Storage Guide 3rd edition and HGCA Safe Storage Time Calculator
CC2.4 Shall	The temperature and moisture content of combinable crops in storage shall be monitored. Any overall rise in temperature, the development of hot spots, water ingress or bird, rodent or insect activity shall be investigated and remedied. ®	Initially the temperature (and moisture content) of stored grain shall be monitored very frequently until records show that temperature has been stabilised over a period of time, following which, the interval between monitoring may be extended. For further information see the HGCA Safe Storage Time Calculator.
CC2.5 Shall	Insect pitfall type traps shall be used in stored grain to monitor any insect and mite activity. Where insects or mites are detected, remedial action shall be taken. <sup>®</sup>	For further information see HGCA Grain Storage Guide 3rd edition.
CC2.6 Shall	Where any pesticides (including diatomaceous earth products) are applied to the crop in-store post-harvest, the pesticide must be approved for that use and application records shall be completed and retained. <sup>®</sup>	Pesticide application to the crop in-store post-harvest is not compulsory. No chemically active post-harvest pesticides are approved for application to oilseeds but the Seed Crushers and Oil Processors Association (SCOPA) has approved the use of certain diatomaceous earth products. Some customers may have additional commercial restrictions on the use of post- harvest combinable crop store pesticides and diatomaceous earth products.

Ref	Technical Requirement	Conformance Guide
CC3.1 Must	There <u>must</u> be a system of traceability within storage and off the holding. <sup>®</sup>	All heaps and bins must be labelled with variety and field name. Genesis QA scheme membership/ reference number, trailer identification number and scheme sticker must be included on signed Post Harvest Pesticide Declaration for all consignments leaving the farm. See AF2.5 for requirement to maintain production records and AC5.9 for treatment records.
CC3.2 Must	Parallel production <u>must not</u> occur.	The intended production of certificated and non-certificated combinable crops <u>must</u> <u>not</u> occur on the holding. However where non certified/ certifiable combinable crops are present these must be clearly physically separated from certified crops. Two scenarios where the presence of non-certified/ certifiable combinable crops on the same farm include: the first year of certification where crops produced in preceding years are still present or where the certification for a species has been withdrawn after serious non-conformity has been detected in the production of that variety/ field only.
CC3.3 Shall	In the case of storage bins, representative samples shall be compiled as the bin is filled and retained until 3 months after the final consignment, to which that sample relates, has left the farm.	Samples gathered in this way are representative of the bin as a whole and can be compiled with little risk to human health and safety. An important purpose of this type of sample is the accurate communication of quality parameters to the prospective buyer.
CC3.4 Must	Representative samples from each load dispatched form the store <u>must</u> be compiled and be retained for 3 months.	An important purpose of this type of sample is that the farmer retains a reference that can be independently tested in the event of a dispute over quality, admixture or food safety.
CC3.5 Must	In order to retain their assured status, combinable crops <u>must</u> be transported either by the farmer or by a third party haulier certificated to a scheme formally recognised by Genesis Standards, where such a scheme exists. ®	For the current list of recognised schemes please refer to www.genesisstandards.com

Ref	Technical Requirement	Conformance Guide
CC4.1 Shall	All bulk carrying vehicles and trailers shall be uniquely identified.	The identifier shall be large enough to be visible from a distance of 10m and should appear on both sides as a minimum. Compartments within bulk containers shall be individually identified.
CC4.2 Shall	An inventory of all owned leased or hired bulk carrying vehicles or trailers shall be maintained. It must include bulk carrying vehicles and trailer's identifiers and the dates between which they were available for use. ®	Intentionally blank.
CC4.3 Shall	All bulk carrying vehicles, trailers and their sheets shall regularly cleaned and disinfected and the date of cleaning to be recorded.	Intentionally blank.
CC4.4 Shall	Records of the three previous loads shall be maintained for all bulk carrying vehicles and trailers.	This record shall show that bulk carrying vehicle and trailers comply with the haulage contamination, cleaning, testing and exclusion requirements laid by the International Committee for Road Transport (ICRT).
CC4.5 Shall	Bulk carrying vehicle or trailers shall not be loaded until they have been inspected for cleanliness and passed as being fit for loading.	Intentionally blank.
CC4.6 Shall	All bulk carrying vehicles and trailers shall be fitted with protective sheets that are sheets operable from ground level. All bulk loads leaving the farm shall be securely sheeted.	Intentionally blank.
CC4.7 Shall	There shall be a procedure in place whereby the intended recipient is notified if an incident occurs in which the load is accidentally contaminated.	The decision as to whether to continue with the delivery shall be made in conjunction with the recipient.