CODES OF PRACTICE

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CODES OF PRACTICE

FOR

PART 1 - The Storage of Cereals, Oilseeds, Pulses and Vegetable Protein Meals and Hulls.

PART 2 - Road and Rail Haulage of Cereals, Oilseeds, Pulses and Vegetable Protein Meals and Hulls and Edible Liquid Products.

PART 3 - AOF – Bulk Transport of Vegetable Oils by Road and Rail.

PART 4 - Control of Salmonella.

PART 5 - Storage & Transport of Export Cottonseed.

STATEMENT

These Codes of Practice were initially prepared in consultation with:

- Stored Grain Research Laboratory, CSIRO.
- Australian Oilseeds Federation Inc. and its members.
- Grain Trade Australia Ltd (formerly NACMA Inc).
- Australian Bulk Handlers Association,

and in addition, Codes of Practice and guidelines published by:

- Federation of Oils, Seeds and Fats Associations Ltd (FOSFA).
- EC Seed Crushers and Oil Processors Federation (FEDOIL).
- Codex Alimentarius.
- Agricultural Industries Confederation (UK).
- Seed Crushers' and Oil Processors' Association (SCOPA)
- the American Feed Industry Association
- the Joint Institute for Feed Safety and Applied Nutrition
- US Food & Drug Administration

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PART 1

THE STORAGE OF CEREALS, OILSEEDS, PULSES AND VEGETABLE PROTEIN MEALS AND HULLS

HEREAFTER REFERRED TO AS "CROPS"

1. INTRODUCTION:

This Code of Practice comprises of a set of minimum standards which storage facilities must achieve when storing and handling cereals, oilseeds, pulses and vegetable meals and hulls. Operators of such facilities must be experienced and knowledgeable in the handling and storage of the named commodities which are likely to be stored and will be aware of their obligations under employment and safety legislation during the storage, handling and transport of raw materials intended for incorporation into, or direct use as, food and feeding stuffs. The ultimate objective is to operate a fully sealed storage facility, which will maximize the efficacy of fumigations, minimize the risk of developing resistance to phosphine and exclude rodents, insects, birds and other vermin. Operators should also install appropriately designed aeration and/or refrigeration equipment.

AN [R] IN THE TEXT INDICATES THE NEED TO KEEP A RECORD.

NB. Where it is necessary to use post-harvest pesticides or fumigants on combinable crops, only chemicals approved for specific crops can be used. Facility operators should check with their customer that only products approved by the buyer or where necessary, an importing country's food safety authority, are used, and that they are declared if required.

2. STORAGE

The facility must be secure, clean and fit for the purpose. It must be soundly constructed of durable materials, fully enclosed and proofed against birds and rodents. Roofs, floors and walls must be sound and impervious to liquids. Walls and floors should be constructed from materials that will not become impregnated with residues as this will create difficulties in cleaning and may result in insect infestations.

All storages must be adequately secured to prevent unauthorized entry to the storage and prevent contamination and / or theft of commodities stored within the facility. The facility owner shall establish a documented Food Defense Plan that includes controls on access to the site, internal security measures, personnel security measures and incident response security measures. The Food Defense Plan shall be reviewed on a minimum of an annual basis [R].

In all respects the storage facility's equipment must be maintained in a clean, dry state, free from taint and abnormal odour.

Personnel involved in the operation of a facility must understand and conform to relevant legislation, standards, procedures and work instructions. Training records should be kept **[R].**

There must be adequate and effective drainage.

Storage facilities must be designed and operated to minimise tracking of wet material and mud into the facility.

Each separate building / partition / cell / silo should be clearly identified by a unique name, initial, or number. Where different grades of products are stored in subdivided bays, these should be separately and clearly identified.

Ventilation and aeration requirements must be designed to prevent moisture migration within the commodity bulk, the build-up of hot air and to prevent condensation. External ventilation and aeration openings must be proofed against the entry of water, birds and vermin.

Electrical switches, wiring, lighting etc. shall conform to relevant fire/ safety regulations and be sited well clear of all stored materials.

Facility management shall establish procedures to control and account for glass and brittle plastics within the facility. Glass and brittle plastics must be excluded from storage facilities. Glass equipment and containers shall be excluded from all storage facilities. Glass and brittle plastics in vehicle and mobile equipment, including windows and lights, must be protected to prevent contamination in case of breakage. All light bulbs and fluorescent tubes must be covered with non glass fittings and any windows and/ or glass roof lights guarded to prevent the possibility of glass contaminating stored crops.

3. CLEANING THE STORAGE FACILITY:

Prior to a cell / silo being used for the storage of a commodity, the storage must be thoroughly inspected for the presence of residues of previous commodities, insects, rodents and other vermin, birds, water ingress and other contaminants. A Premise Inspection Report must be completed for each inspection and all non-conformances recorded. Appropriate Corrective and Preventative Actions should be implemented **[R].**

Facilities must be thoroughly cleaned after the storage of any non food material **[R].** Storage cells / silos should be cleaned each time there is a change in crop type **[R].**

No storage facility previously used for other purposes that might possibly lead to contamination, taint, infestation or transmission of disease shall be used for the storage of crops unless a thorough food safety risk assessment is first completed. The facility management shall ensure personnel undertaking the risk assessment have the skills, experience and knowledge to complete the assessment **[R].** For guidance, facility management shall refer to Appendix 1 of Part 2, The Code of Practice for Road and Rail Haulage, for materials that are either prohibited or contaminant sensitive. For additional guidance, facility management shall refer to the International Database for the Transport of Feed (IDTF) - http://www.icrt-idtf.com.

A routine cleaning program must be employed, covering all parts of the facility and structures within it, in particular roof trusses, ledges and all dust collecting surfaces **[R].** The cleaning program must ensure that floors are kept clean and dry at all times. The entire facility, including all structures, must be subjected to a regular thorough cleaning program, as a minimum on an annual basis.

Where crops are in store more than a year, procedures must be in place to prevent the build-up of dust on horizontal surfaces. Storage operators must also put in place procedures to prevent the development of insect resistance to fumigants such as Phosphine **[R].**

Particular care must be taken to clear residues of previous other commodities and remove insect infestations from under ventilated floors and beneath conveyors and other fixed equipment.

If wash-down cleaning is required, this should be carried out using potable water. Before storing crops, the facility operator must certify that the cleaning is sufficiently thorough to remove sources of contamination including those which could be a source of disease and that the facility is dry **[R].**

Any equipment used to load, unload or otherwise handle crops must be suitable for the purpose and must be routinely maintained in a clean condition. Where possible, dedicated equipment shall be

used to handle crops. Where equipment is used to handle other material goods which could be a source of contamination it must be thoroughly cleaned, dried and sanitised before being used to handle crops **[R].** Equipment used for the handling of crops must not be used for the handling of materials listed as prohibited in Appendix 1 of Part 2, The Code of Practice for Road and Rail Haulage. Additional information on prior materials can be found in the International Database for the Transport of Feed (IDTF) - http://www.icrt-idtf.com.

4. SUB-CONTRACTED STORAGE:

Operators shall ensure that any sub-contracted store (defined as a complete store directly leased for commercial purposes) conforms with the Code of Practice for the Storage of Cereals, Oilseeds, Pulses and Vegetable Protein Meals and Hulls and that the independent verification is up to date **[R].**

5. INSURANCE:

Insurance cover responsibilities shall be clearly defined by and to all involved parties **[R].**

6. STORAGE OPERATIONS:

Storage of Other Commodities

Materials listed as prohibited in Appendix 1 of Part 2, The Code of Practice for Road and Rail Haulage, cannot be stored in the same store as crops. Materials listed as contaminant sensitive in Appendix 1 of Part 2, the Code of Practice for Road and Rail Haulage, may be stored previously, subject to specified corrective actions being completed. For guidance, additional materials are listed the International Database for the Transport of Feed (IDTF) - http://www.icrt-idtf.com.

Flammable materials and toxic chemicals shall not be stored near crops.

Pest Control

Measures must be taken to prevent and/or eliminate infestation by rodents, insects, birds and other vermin.

Rodents, birds and other vermin

Control measures must be designed to ensure that poison baits cannot contaminate the stored crops. Where practical, baits should be outside the actual storage area. A Bait Station Location Register should be maintained that identifies the location of each Bait Station, the type of bait utilized and any activity associated with a bait **[R].** Waste and scrap materials, old pallets, or other material which can encourage and harbour pests, must be removed from the proximity of the stores. Storage surrounds must be kept free of weeds and forage, and retro-sealing of unsealed stores is both feasible and desirable.

Insects

The control of insects both in and around the structure and in the Crop in storage is critical.

All Crop residues in and around storages should be swept up and disposed of as soon as practicable. Fumigation with the chemical Phosphine is currently the only one registered for oilseed disinfestations generally. Sealing is a prerequisite for efficient fumigation with phosphine. An initial fumigation treatment will be required immediately after receival into store to eliminate pests inevitably introduced in the harvest process and handling and transport to store. Past experience with cereal grains suggests a single phosphine treatment in a well-sealed storage gives at least three

(3) months of “insect free” storage. Crops in storage should be regularly inspected for the presence of insects **[R].**

All external vents in a sealed storage must be sealed prior to the commencement of fumigation. Where possible, a sealing pressure test should be undertaken prior to commencing the fumigation **[R].** Regular monitoring of phosphine concentrations within the storage should be undertaken to ensure an effective fumigation is being conducted. Concentration testing should occur at a minimum of three times, preferably at the beginning, middle and end of the fumigation period **[R].**

Only suitably trained and qualified personnel should undertake grain treatment practices **[R].**

Detailed records of all chemicals used in around storage facilities should be maintained, including type / name of chemical used, date of application, rate of application, total quantity used, storage applied to and batch number **[R].** All chemicals should be stored in secure areas and regular (monthly) stock takes should conducted **[R].**

Storage Management

Storage Managers must make themselves aware of the proper conditions for the safe and effective storage of crops, including the impacts of oil content, moisture content and temperature on the storability of a crop.

A combination of sealing and cooling is currently the best strategy for protection of oilseed quality in store – fumigation eliminates the initial infestation while the cooling reduces the rate of oil oxidation, Free Fatty Acid formation and oil colour changes. It also reduces fire risk.

Management of the combination of sealing and cooling is not easy. Cooling generally requires venting and there is a risk of internal condensation in sealed stores.

The storage operator must at all times exercise due diligence in the care of stored crops and be conversant with and observe all relevant legislation.

Crops in storage must be monitored by the basic industry practices for each crop type and include aspects such as temperature control, odours and visual signs thereafter. Temperatures must be checked when and where applicable and recorded for each bulk or silo. Any unusual odours or visual signs such as mould, steam or insect presence shall be fully investigated and the appropriate corrective action taken **[R].**

All stores for receival of oilseeds shall have provision for cooling of the oilseed bulk e.g. by aeration or refrigerated aeration. Cooling shall be controlled so that it is achieved without wetting out of part of the bulk and so that storage temperatures are reduced to 25°C or less within one month of receival.

Store entrances, exits and gangways must allow access to stored crops in case of heating or fire.

Water entry through leakage must not be allowed, as it causes damage – for example heating, and microbial activity.

If, in spite of all precautions, stored crops do become wet, all wet material should be removed immediately, isolated and accounted for **[R].**

Eating, drinking, smoking and naked lights must not be permitted within storage facilities.

Welding or other 'hot work', such as burning or riveting, must not be allowed in the store, unless full precautions are taken to avoid the risk of fire or explosion. Precautions must also be taken to prevent contamination as a result of maintenance work within storage facilities.

Handling methods must be such as to minimise the production of dust. This precaution is necessary to minimise the risk of fire or dust explosion, to prevent contamination and to control insects and the spread of salmonella.

The storage operator shall take steps to avoid the accidental admixture or cross contamination of stored crops.

Doors must be kept shut at all times unless loading, ventilation or other operations are taking place.

Stock Records and Traceability

Storage Operators should maintain proper stock records of all Crops held in storage. Records should include, but may not be limited to, activity date, identification of the transport operator, the grade of the Crop, the tonnage received and outturned on behalf of each owner of each grade of Crop in each cell / silo, any movements or consolidation of Crops within the facility, any treatments applied to Crops and any waste grain, including dust, removed. Records should be sufficient to allow the traceability of Crops within the Storage Facility, including the accurate identification of any treatments applied to the Crop **[R].**

Collection and Delivery

Vehicles arriving to collect crops must be inspected at the time of loading to ensure that they are in a clean and dry state, including the tarpaulin and, where appropriate, augers and blowing equipment. The checking of vehicles should be undertaken in a manner that allows personnel to inspect the vehicle safely. To enable the risk of contamination from the transport unit to be evaluated, storage operators should request information on at least the last 3 prior loads for each transport unit to be loaded (refer Part 2, The Code of Practice for Road and Rail Haulage). Should the vehicle be deemed unsuitable, the storage operator should not load the vehicle until appropriate remedial actions are undertaken where possible **[R].**

Loaded vehicles must not be allowed to leave the site until adequately covered. Storage Operators must be aware of their obligations under relevant legislation, including, but not limited to, applicable Chain of Responsibility Legislation and the Transport of Dangerous Goods Legislation. Information relating the current dangerous goods status of canola meal is available on the AOF website.

7. RECORDS: [R]

Records of the following must be maintained and kept available for inspection:

- Inspection and cleaning of storage facilities and handling, loading and conveying equipment.
- Applications of pesticides, fumigants and any other chemicals.
- Vermin and bird control measures, to include a pest control policy.
- Temperature monitoring of the crops.
- Intake, discharge and stocks of crops.
- Other relevant information affecting the safety and security of the crops in storage.

8. PERSONNEL:

Storage operators must be made aware of the importance of this Code and any subsequent amendments, as well as the importance of their own personal hygiene. In order to assist this, proper toilet and washing facilities should be provided near to workplaces, and must be kept clean.

Operator's overalls and clothing must be regularly washed or cleaned.

Personnel must be appropriately trained to undertake required tasks and made aware of the appropriate standards of safety and hygiene **[R].**

9. SITE SECURITY:

The appropriate release must be given and collection documents provided before the goods are released.

Storages must be kept secure. The facility owner shall establish a documented Food Defense Plan that includes controls on access to the site, internal security measures, personnel security measures and incident response security measures. The Food Defense Plan shall be reviewed on a minimum of an annual basis [R].

10. QUALITY ASSURANCE PROCEDURES:

QA/HACPP Programs are useful measures for reducing hazards in crop storage operations.

PART 2

CODE OF PRACTICE FOR ROAD AND RAIL HAULAGE

(of Cereals, Oilseeds, Pulses, Vegetable Meals and Hulls and Edible Liquid Products)

This Code of Practice is intended to encourage good and safe practices as well as to ensure the cleanliness and safety of transport for the following categories of goods, including imports, which are, or may be, intended either for human consumption after processing or which are intended to enter the food chain either for direct feeding to livestock or for incorporation into animal feedstuffs. The list is not exhaustive but includes:

1. Crops (e.g. grain, pulses, oilseeds), vegetable protein meals and hulls and edible liquid products.
2. Animal feed materials (raw materials and straight feeds), feed additives, etc. (including liquids and powders).
3. Compound Animal Feedstuffs (including complementary feedstuffs, premixtures and "blends".
4. Cereal seeds and herbage seeds (grass, clover, etc.), pulse seeds and oilseeds for seed processing.

The Code applied to all transport by rail and public road of bulk loads being delivered to first processor or end user premises, and to the use of commercial haulage for movements from farm or port to other premises such as central stores. The use of non-commercial vehicles for transport into and between stores is at the discretion of storage owners/ managers, who must identify and record all vehicles delivering into their stores, and may require access to vehicle inspection and cleansing records, in order to provide the necessary traceability and food safety assurances when delivering out of store.

For the purposes of this Code any reference to "goods" shall include any of the commodities described above and any reference to a "vehicle" shall include all means (including rail) used to transport goods. Reference to "the Company" shall mean the company for whom the goods are being carried. **All "vehicles" must be numbered and/or lettered for identification purposes.**

The disciplines enabling the prior use of "vehicles" are likely to be given special attention by Quality Assurance auditors.

1. THE GOODS

Grain, pulses, oilseeds, protein meals, feed materials and hulls are subject to infestation, heating, spontaneous combustion, smell/ taint, moulds, dusts and their associated hazards. Respiring materials may give off carbon dioxide and solvent gases may be given off by extracted meals (especially those newly processed). Liquids carried for feed compounders are mainly molasses, oils, fats and acid oils. These materials (with the exception of molasses) are subject to oxidation from contact with other liquids including water; from contact with air; contact with metals especially copper and iron. Heat may also affect oxidation. Moulds may occur especially if water is present. Carbon dioxide and other gases may be present from fermentation or other causes. Corrosion may be caused to metals by the acidic content of liquids.

Hauliers are expected to be experienced and knowledgeable in the transport and handling of the type of goods to be carried, including the risks to human and animal health of the goods/materials they carry. This shall include;

- Contamination from previous loads and between goods/material where multi-compartment bulk vehicles are used.
- Protection of goods from the elements during loading, transport and delivery.
- Security and protection of the load.

Where hauliers are asked to transport goods or materials with which they are not familiar, they must obtain written details of handling and transport characteristics, and details of control measures resulting from risk assessments. Whilst it is the consignor's responsibility, hauliers should also check that the goods are not classified as "dangerous" under the Carriage **of Dangerous Goods Legislation** and where this is the case they should discuss the matter with the Company.

An AOF Industry Guidance Note relating the current dangerous goods status of canola and cottonseed meal is available on the AOF website.

2. GENERAL HAULAGE STANDARDS

All "vehicles" provided for the haulage of goods shall be suitable for the purpose and of sufficient capacity to accommodate the goods carried within the vehicles legal mass limits, including vehicles operated under a mass management program. The vehicles and their operation shall in every way comply with any notice, requirement or direction, printed or verbal, while on the collection or delivery site.

Drivers shall ensure all glass, including headlights and mirrors, brittle plastics and all hydraulic hoses, etc are in a sound condition and will not cause potential contamination of commodities or storage areas. Drivers must notify site management immediately of any event that may result in potential contamination.

If the hauler proposes to use second-hand or hire "vehicles" or trailers for carrying any goods covered by this Code they must ensure that before use the vehicle and its load sheet / tarpaulin are, as a minimum, thoroughly pressure cleaned with a 1% hot (70°-80°C) solution of any combined food grade detergent/ sanitiser and inspected by the haulier, or other competent person, who certifies that the "vehicle" is clean and satisfactory for use. Records of previous use of the "vehicle" and proof of the appropriate cleaning and inspection should be kept for audit purposes. Hauliers shall cross-check for restrictions and any additional cleaning requirements for all known prior loads, including any loads that are listed as prohibited. Refer to the Haulage Exclusion & Contaminant Sensitive List – Appendix 1 and the International Database for the Transport of Feed (IDTF) - http://www.icrt-idtf.com.

All bulk tipping vehicles and trailers must be fitted with a sheeting system that can be operated from ground level.

Drivers must be in possession of the proper qualifications. They must give full co-operation and assist as necessary with the loading and off-loading operation. Drivers must exercise total observance of safe operating practices for themselves and all others. Hauliers must at all times exercise due care and diligence in the transport of the goods and be conversant with all legislation that is relevant to such transport, including, but not limited to Chain of Responsibility Legislation and Australian Dangerous Goods Legislation.

Hauliers should ensure that they and their drivers are familiar with the Code of Practice.

3. SAFETY

Legislation and local site health and safety instructions must be observed at all times, including:

- No smoking on any collection or delivery premises, including in “vehicles” (except in specifically designated smoking area).

- Authorisation from the Site Manager or, in his/ her absence, someone with the appropriate authority, must be obtained before any form of work is carried out on vehicles which could cause contamination and/or fire or explosion by flame, sparks or similar risks.

Drivers of motor vehicles must be in control at all times during loading and discharge and must conduct themselves and operate their vehicles in a safe and reasonable manner at all times (see Clause 6, Collection and Delivery). The dangerous and unapproved practice of adding fumigants, including Phosphine (as either a gas or as Aluminum Phosphide tablets, pellets or blankets) and Carbon Disulphide, to loads in “vehicles” for the purpose of killing insect infestations in transit from farm to central store is specifically prohibited.

Full safety precautions appropriate to the “vehicle” and its load must be taken during unloading for the protection of the driver, employees, third parties and plant and equipment. Hauliers must advise their employees on safe practice, especially in regard to any motor vehicles where the body assumes a raised position during discharge e.g. bulk tippers, tipping tankers. Tailboards should be fitted with a safety chain and must not be released while “vehicle“ bodies are in a raised position.

Unauthorised persons must not be permitted to enter intake bays or go behind a “vehicle” while it is positioned for discharge and its body raised.

4. **CLEANLINESS**

All “vehicles” and operators are required to comply with the following standards of cleanliness - the Haulage Exclusion List and the Haulage Contaminant Sensitive List (refer appendix 1).

(a) Where “vehicles” are presented for the cartage of goods, their sheets and load carrying areas must at all times be kept in a clean, dry and fit state to avoid harm to the goods being carried. **It must be remembered that legislation requires that any surface which comes into contact with food must be clean.**

(b) ”Vehicles” must be operated in line with the Haulage Exclusion List. This defines those materials which should not be carried in vehicles used for the transportation of goods covered by this Code. The Haulage Contaminant Sensitive List defines a list of materials which after cartage of requires there should be adequate cleaning and any required sanitising of the vehicle and its tarpaulin. “Vehicles” must not be loaded until an inspection has been made at the collection point by the driver and the person appointed at the loading point and the “vehicle” passed as being fit for loading. It is however the Hauliers responsibility to ensure that vehicles are suitable for the cartage of commodities covered by this Code of Practice. Additional information on restrictions and cleaning requirements for prior loads can be found in the International Database for the Transport of Feed (IDTF).

NB. Hauliers are advised that some buyers will require proof (i.e. job sheets, weighbridge tickets, etc. showing the relevant times and dates) of the three previous loads carted in the “vehicle” together with any cleansing, and sanitising operations. Failure to provide such proof may result in rejection of the load. Particular care should be taken to clean the auger, blower units and discharge pipes on blower “vehicles”.

(c) **N.B. Only food grade sanitisers should be used in order to avoid smell or taint of subsequent loads. Spraying of fogging sanitisers into vehicles which have not been previously cleaned is**

completely ineffective. For health and safety reasons alcohol based sanitisers are not advisable.

(d) Strong smelling materials should normally be carried in dedicated vehicles/ trailers which are not used for transporting other goods, because cross-contamination or taint of subsequent loads can lead to rejection and substantial claims for which the haulier may be held liable.

(e) "Vehicles" must be kept sheeted at all times except for loading, unloading, weighing and sampling when the tarpaulin should be replaced immediately afterwards to protect the load from the elements and external sources of contamination.

(f) Drivers should not walk on their loads. However, if this is absolutely necessary they must be suitably attired to prevent any goods being infected or contaminated.

5. SUB-CONTRACTORS

Where a sub-contractor (which includes an owner driver) is employed by the haulier to perform his contract with the Company for the carriage of goods as defined in this code, the haulier must ensure that the sub-contractor is likewise bound by this Code of Practice.

6. COLLECTION AND DELIVERY BY ROAD TRANSPORT

(a) All orders to hauliers are given on the understanding that they will present a suitable vehicle (refer 4 (b) above) at the collection point on the appointed day at the correct time or loading period and will deliver to the receiving point on the appointed day and at the correct time or off-loading period. Where any failure to meet agreed loading and/or delivery times appears likely, or if a consignee has refused to take delivery of the goods carted, then the haulier must inform the Company promptly so that alternative arrangements can be made.

(b) Valid collection notes and evidence of the vehicles three previous loads/cleaning records must be presented by the driver at the loading point. Before signing for goods at the place of loading the driver must exercise all reasonable care in checking and ensuring that:

(i) they ask for the correct goods called for by the collection note in type, variety, grade, quantity and condition.

(ii) where the goods are weighed, the gross, tare and net weights or other measurements / calculations appear to be reasonably accurate and agree with the amount ordered.

(iii) That the vehicle and/or trailer are loaded correctly and safely.

Where any of these conditions are not met the vehicle is not to be loaded and the loading point supervisor is to be advised. In case of any difficulties or doubt about the goods or variety, grade, quantity and condition, the driver must notify the Company and the haulier before loading and seek further instructions.

(c) If any incidents (accidents, etc) occur during loading, transport or delivery which could result in contamination or loss of the goods, the circumstances must be reported to the Company, and delivery must not proceed until clearance has been given by the Company.

(d) On delivery the driver must report to the weighbridge or other site designated point, handing over the consignment note for the load and evidence of the vehicles three previous loads/cleaning records.

(e) Under no circumstances must drivers discharge their load before weighing and must also tare-off before leaving. Drivers must clear any significant quantity of water, snow, etc. from the sheet before gross weighing. The presence of any passengers must be drawn to the attention of the weighbridge operator whose instructions must be followed. Drivers must only discharge loads under instruction from the facility operator.

(f) Sampling of the load shall take place before off-loading commences. Where this is not possible, e.g. for some liquids, special sampling arrangements may apply.

(g) The driver must ensure that the gross, tare and net weights are correct and agree with the amount ordered. They must obtain copies of weighbridge tickets and/ or signed receipt notes.

(h) The driver must report all cases of damage or loss to the haulier so that an investigation can be made promptly.

(i) All farmers, storage operators and suppliers are instructed not to release goods to hauliers unless the driver presents a valid reference. Hauliers should make the necessary arrangements with their own drivers and subcontracted hauliers to provide a secure system under which drivers absent from base can comply with this requirement. All advice and consignment notes presented to collection and delivery points must give the full name of the goods carried. The use of initials only to describe the goods carried must be avoided.

7. DELIVERY ADVICE DOCKETS & VENDOR DECLARATIONS

Farmers dispatching goods with a haulier must ensure all necessary information and documentation is provided to the driver. This may include a Delivery Advice Docket (or similar) and/or either a Grain Trade Australia or Safemeat Vendor Declaration.

8. ENVIRONMENTAL CONSIDERATIONS

Disposal of sweepings, washings and similar residues from “vehicle” bodies including rat beds, bulk tippers, tankers, etc. must not be made on collection or delivery premises except by express consent of the supervisor. Where consent is given disposal must be made in the appropriate place for that purpose. Any cleanings and residues occurring from any journey in connection with the movement of goods must be disposed of in any suitable receptacle provided or in some other environmentally acceptable and ecologically safe manner (e.g. not indiscriminately dumped).

Cleaning of “vehicles” at load collection site is not permitted, however disposal of material from “vehicle” cleaning facilities might be provided otherwise the carrier must take the material away.

Residues of commodities on vehicle chassis, wheels, etc, that are a result of loading at the collection site must be removed prior to leaving the site to prevent contamination of road ways, etc.

9. RECORD

Records must be kept of all loads carried by “vehicles” and all cleaning operations including details of any chemicals used, e.g. sanitisers, pesticides, etc. These records must be available for inspection by the Company’s staff on request or by such other person who is authorised by the Company. Hauliers are advised to retain records for a period of two years.

10. BULK PRESSURE TANKERS CARRYING LIQUIDS AND POWDERS

Where a haulier is unable to dedicate a "vehicle" for the carriage of one material, then thorough and appropriate cleaning procedures should take place between loads and records should be kept of such occasions and the cleaning methods employed. Hauliers must instruct drivers on safe methods of work (ie appropriate confined space procedures) where there is a need to enter the "vehicle" body.

Care must be taken to clean liquid or dry materials from the upper sides of the tank interior and from all surfaces to which liquids or particles may lodge including interior ladders, seals, crevices and under fluidising pads. Special attention must be paid to the cleaning of hoses for both dry and liquid materials. Hose ends must always be capped.

Tanker drivers must only couple up to the fixed intake pipes on express instruction and must not discharge until instructed to do so. Where intake pipes are locked off a mill employee should unlock and re-lock after discharge. Drivers should remain in the vicinity of the vehicle at all times during discharge of their load.

(a) **Fats & Oil.** "Vehicles" used for the conveyance of bulk fats and oils must conform with the Australian Oilseeds Federation (AOF) Code of Practice for the Bulk Transport of Vegetable Oils by Road and Rail. "Vehicles" shall not have carried on their previous load any of the material on the FOSFA List of Banned Immediate Previous Cargoes.

(b) **Dry Powders or Granular Materials.** Air pressure discharge vehicles used to carry bulk powder or granular materials, i.e. limestone, salt, etc. should preferably be dedicated to the carriage of this material only. "Vehicles" should clean and sanitized in accordance with requirements listed in Appendix 1 and the IDTF. Where dry powder tankers have been washed out, they must be thoroughly dried before loading.

Drivers should remain in the vicinity of the "vehicle" at all times during discharge and should be aware of dust emissions from filters, pipes and hoses, or from the operation of silo pressure relief valves. They should also be aware of silo level indicators or escape of dust as a result of overfilling. Care must be taken when blowing off powder tankers to avoid excess pressure at the end of the blow in order to avoid over-pressure in silos. In the event of any of these occurring, drivers should discontinue discharging immediately and refer to site personnel.

11. TRAINING

The successful operation of the Code of Practice is unlikely to be achieved without proper training of personnel. Such training should include a full understanding of the purpose and detailed requirements of the Code of Practice, as well as a basic awareness of food safety and hygiene disciplines. Training should be Regular, Updated and Documented.

APPENDIX 1 – Haulage Exclusion & Contaminant Sensitive List

Table 1: Haulage Exclusion List The following material must not have been carried in vehicles or trailers used for the transportation of goods covered by this Code of Practice. Hauliers must be prepared to give an undertaking to this effect if required:
Toxic and corrosive materials and any packaging used for these materials
Radioactive materials
Livestock including poultry and their carcasses
Animal/poultry wastes (including manures/litter) and soil containing animal manure (peat)
Processed animal products, e.g. meat and bone meal, meat meal, bone meal, blood meal, dried plasma and other blood products, hoof meal, horn meal, poultry offal meal, feather meal, dry greaves, and any other similar products, includes mixtures, feedstuffs, feed additives and pre-mixes containing these products.
Mammalian protein including any feed containing these materials (milk & milk products are permitted to be carried).
Mineral clays which have been used for detoxification purposes
Cereal & other seed treated with toxic dressing (excluding bagged or packaged seed).
Glass
Hides treated with tanning substances and associated waste
Scrap metal, including metal flakes or metal product
All wastes obtained from the various phases of the urban, domestic and industrial waste water treatment process.
Solid urban waste, such as household waste
Untreated waste from eating places except food stuffs of vegetable origin considered unsuitable for human consumption for reasons of freshness
Compost
Asbestos or materials containing asbestos.
Bituminous products, including asphalt (fresh) and asphalt rubble
Pharmaceutical waste
Animal derived dicalcium phosphate and hydrolysed protein from authorized plants
Strong smelling materials
Table 2: Haulage Contaminant Sensitive List (part 1) Transport vehicles must be pressure cleaned with a 1% hot (70°-80°C) solution of any combined detergent/ sanitiser after such vehicles are used for carrying the goods listed below. The load sheet must also be pressure cleaned in this way. The vehicle and sheet must be drained and dry before re-use for other loads.
Tallows
Infested grain products (pre-treatment with an insecticide may be required)
Materials contaminated with salmonella or other pathogens
Food stuffs of vegetable origin considered unsuitable for human consumption
Treated Wood Products
Treated Bulk Grains (e.g. Pickled Grain)
Treated Fertilisers
Silage
Table 3: Haulage Contaminant Sensitive List (part 2) All physical remnants removed (Blown out, Swept or Washed as required)
First time quarried aggregates (other than fine / granular limestone products)
Untreated Bulk Grains (e.g. when changing grain types)
Untreated Fertilisers (e.g. Super phosphates etc)
Untreated wood, sawdust or other derived products
Nuts, nut products and sesame seed. Hauliers should check individual company's policies which are influenced by the allergic reaction to these products suffered by some people, resulting in severe anaphylactic shock.)
Salt

PART 3

CODE OF PRACTICE FOR THE BULK TRANSPORT OF VEGETABLE OILS BY ROAD AND RAIL

This Code of Practice references information from FOSFA, Codex and Fediol.

1. CONTAINERS, VALVES, PIPES AND DISCHARGE HOSES

Road tanks and tank containers (including ISO tankers) shall be of stainless steel.

Rail tanks may be of mild steel. If these tanks are used for oils and fats intended for direct edible use without intermediate processing, they must be dedicated to the transport of edible oils/fats.

All conveyances must be dedicated to the transport of foodstuffs only.

All pumps, valves and cargo lines are preferably of stainless steel construction with sufficient drain valves. Copper and its alloys such as brass, bronze or gun metal shall not be used for any parts of the system installation and means of transport that has contact with the oils and fats.

All flexible hoses used to connect pipelines during loading and unloading must be of inert material, be suitably reinforced and be of such a length to make cleaning easy. Exposed ends should be capped when not in use. Couplings should be of stainless steel or other inert materials. Discharge hoses shall have only been used for the conveying of food products or those vegetable oils commonly used for food purposes ("food oils").

For solid or semi-solid fats and high viscosity oils, road and rail tankers and ISO tank containers where fitted with internal heating coils, these should be of stainless steel which can be coupled to a source of hot water or low pressure steam (pressure up to 150 kPa (1.5 bars) gauge).

2. PRIOR LOADS

Containers and associated valves, pipes and discharge hoses used for the transport or handling of vegetable oils shall be clean and dry and safe for this use. The following provisions shall apply;

(i) Prohibited Prior Loads:

https://www.fosfa.org/document-library/fosfa-banned-list-copy/

FOSFA Prohibited Prior Load Flow Chart (Jan 2021)

(ii) Acceptable Prior Loads:

https://www.fosfa.org/document-library/fosfa-acceptable-list/

FOSFA Acceptable Prior Load Flow Chart (Jan 2021)

However, in all instances the supplier shall ensure that the quality of its product is not affected adversely by prior loads.

3. Cleaning

The Carrier must ensure that the cleaning is carried out correctly, by checking after cleaning that all compartments, pumps, valves, gaskets and hoses are visually clean, dry and free from odor.

Unless otherwise agreed between the Receiver and the Supplier in writing, the compartments, pumps, valves, gaskets and hoses must be cleaned out and dried between loads.

Cleaning stations which are used by the Carrier must have an implemented HACCP-system in accordance with the Codex Alimentarius principles and guidelines and must be regularly audited and approved by the Carrier.

The Carrier must ensure that the tank car/container is completely sealed with numbered tamper-evident security seals at all times other than cleaning, loading, discharge, maintenance and transport between unloading and cleaning station. These seals must be attached to all accessible outlets, inlets, valves and caps of pumps and hoses. Seal numbers must be recorded and signed for by the Carrier and made available immediately upon request.

4. CERTIFICATE OF CLEANLINESS

With each consignment, the transport contracting body, the shipper and/ or their appointed agent as appropriate shall supply a "Certificate of Cleanliness" specifying the previous three loads carried and the method used for cleaning, etc. A copy shall be handed by the driver to the consignee's representative at the discharge point. If at any time the standard AOF* forms are not available, the transport contracting body or shipper's certificates can be used provided they contain the necessary information required by the AOF. The shipper shall prepare two copies of the certificate: one signed copy shall go to the receiver of the goods, and one shall be retained.

5. MINIMIUM CLEANING PROCEDURES

Where permanent chemical cleaning facilities are not available, minimum cleaning procedures shall be observed as follows:

(i) Ensure that the container has not previously carried prohibited products. If so, the container shall not be used for carrying vegetable oils destined for food use. (See 1 above).

(ii) Open all drain valves and drain to ensure that all compartments are empty. Close all drain valves.

(iii) Clean each compartment with rotating tank cleaning nozzles using high pressure (10,000 kPa), high temperature (100°C) water for five minutes. Alternatively, steaming using a lance or other suitable device can be used. Open drain valves and continue cleaning for a further five minutes. During this period, ensure that all valves and pipes receive direct injection of the cleaning medium.

(iv) Mop up all surplus water from each compartment.

(v) Inspect the container, valves and pipes, and if odour or visible foreign matter is evident repeat the cleaning procedure. This is especially important for the removal of traces of diesel fuel oil.

(vi) A Certificate of Cleanliness (See page 3_5) shall be made out when inspection shows that cleaning has been carried out satisfactorily and this Certificate shall accompany the load.

6. Operational Practices

Supplier, Receiver and Carrier should take all reasonable measures and precautions to assure that personnel conform to the requirements of Good Hygienic Practices in line with the Codex Alimentarius and HACCP (Hazard Analysis Critical Control Point) systems (e.g. personnel hygiene, empty or closed pockets, no jewelry, hairnets, etc.).

The loading and unloading areas should be designed and maintained in accordance with these Good Hygienic Practices in order to reduce the potential for contamination of the product, the conveyance or the equipment.

Measures should be taken to prevent the risk of associated Occupational Safety Hazards (i.e. safety harness or equivalent.

Cleaning certificates and bills of lading / way bills, should be reviewed and seal identification checked and verified by the Supplier and the Receiver. Any discrepancy should be reported to management immediately.

The verification of the records for the 3 previous cargoes should be part of a monitoring program. Suppliers shall document acceptable prior loads for each oil type being carried. If one or more of the previous cargoes was not an acceptable material the conveyance should be rejected for loading or unloading and appropriate management should be contacted immediately.

The interior of the tank should be inspected visually by the loader. It is the responsibility of the Carrier to ensure that the interior of the tank is clean and free of moisture, cracks and corrosion, which can harbor contaminants. Internal damage or corrosion, foreign objects, incompatible product residue, mould and moisture are potential causes for rejection.

The presence of off-odors or of any residual material when opening the dome cover should be reported immediately to management.

It is recommended that the Suppliers and Receivers use their own pumps and hoses for loading and unloading purposes. If the truck's pumping system is to be used, all hoses and pumps should be visually inspected. If pumps and/or hoses carried on the tractor are to be used, they should be indicated as having been cleaned on the cleaning station certificate.

All seals, gaskets, pumps, valves, hoses, and hose tubing should be inspected for cleanliness, integrity, and proper capping. Cracked, corroded, or improperly protected equipment can trap residual material and serve as a source of contamination or create an environment conducive to bacterial growth with the potential for contaminating product coming in contact with the surface.

All inspections and findings should be documented appropriately.

7. COMPANY POLICY

A clear Company policy should be established to designate authorised personnel for observing the requirements of this code of practice with regard to the proper handling and inspection of containers and/ or consignments and the reporting associated therewith. This Code is in no way to

be considered a substitute for any legal requirements for the transportation of foods or raw materials associated therewith.

* AOF – Australian Oilseeds Federation Inc.
** FOSFA – Federation of Oils, Seeds and Fats Association Limited.
*** As described in the Australian Code for the Transport of Dangerous Goods.

8. References

FEDIOL Code of Working Practice for Bulk Road and Tank Container Transport of Fats and Oils for Direct Food use.

FEDIOL Code of Practice for the transport in bulk of oils into or within the European Union.

FOSFA Qualifications and Operational Procedures for Ships engaged in the Carriage of Oils and Fats in Bulk for Edible and Oleo-chemical use.

Codex Alimentarius; CODE OF PRACTICE FOR THE STORAGE AND TRANSPORT OF EDIBLE FATS AND OILS IN BULK; CAC/RCP 36 – 1987.

CERTIFICATE OF CLEANLINESS

This Certificate must be completed by the Transport Contractor and/or Tanker Wash Station

Date _____

Transport Carrier _____

Registration/ Trailer No: _____ **Tanker Nos:** _____

PRIOR LOADS (do not use Trade Names) 1. _____

2 . _____

3. _____

Prior Load Restrictions: See "Code for the Bulk Transport of Vegetable Oils by Road and Rail". Hoses to be used only for food products.

CLEANING METHOD(S):

Not Cleaned	Yes	No	Well Drained	Yes	No
Water	Yes	No	Caustic Soda	Yes	No
Steam	Yes	No	Solvent	Yes	No
Detergent (*)	Yes	No	Dried	Yes	No
Acid	Yes	No			

(*) if Yes, Specify _____

(detergent must be suitable for use in food industry)

VISUAL INSPECTION: tick and fill in appropriate details

	Clean	Dry	Free of Odour	Seal Number(s)	Remarks
Compartment 1					
Compartment 2					
Compartment 3					
Compartment 4					
Compartment 5					
Compartment 6					
Compartment 7					
Compartment 8					
Manifold					
Pump					
Hoses					

Inspected By: Name _____ Signature _____

(Print)

Issued By: _____

(Company or Business Name - Print)

Version 3.0 July 2018

Part 4

CODE OF PRACTICE FOR THE CONTROL OF SALMONELLA

Applicable during the storage, handling and transport of raw material intended for incorporation into or for direct use as animal feedstuffs.

Because of the importance of this subject, viz salmonella, this special Code is produced even though some detail is repeated in the General Code of Practice relating to storage.

CONTENTS

	PAGE NO.
SECTION I - Introduction	4.2
1. Purpose of the Code	4.2
2. Scope of the Code	4.2
SECTION II – Feed Safety Management	4.2
3. Hazard Analysis Critical Control Points	4.2
4. Prerequisite program	4.3
4.1. Facility Design	4.3
4.2. Raw Material	4.4
4.2.1. Intake	4.4
4.2.2. Storage	4.4
4.2.3. Processing Aids & Additives	4.5
4.3. Production	4.5
4.4. Final Product Storage	4.6
4.5. Pest Control	4.6
4.6. Hygiene & Sanitation	4.7
4.7. Equipment maintenance	4.7
4.8. Personnel	4.7
5. Bacteriological monitoring	4.8
6. Action to be taken following isolation of salmonella	4.9
7. Records	4.9
SECTION III - Transport	4.9
8. Vehicles	4.9
9. Personnel	4.10
Section IV - References	4.10

SECTION I INTRODUCTION

Salmonella organisms are widespread in the environment and each link in the food chain, from producers to consumers, has a part to play in reducing the risk of human infection caused by salmonella. Animal feedstuffs are acknowledged to be one possible route by which salmonella can enter the food chain.

This detailed Code of Practice provides non-statutory guidelines for establishing good production practices and safeguarding the microbiological quality of oilseed meals used directly as, or intended for incorporation into, animal feedstuffs. It can also be used as guidance for other raw materials.

1. Purpose of the Code

To ensure that oilseed meals supplied for incorporation into, or direct use as, animal feedstuffs are of a satisfactory bacteriological quality with the risk of contamination with salmonella minimised. It can also be used as guidance for other raw materials.

2. Scope of the Code

2.1. "Oilseed Meal" refers to meals from vegetable oilseeds, whether from domestic production or imported sources and includes, but is not limited to canola meal, soybean meal, cottonseed meal and sunflower meal.

2.2. "Raw materials" in this code means any material of animal, fish, vegetable (including oilseed meal) or mineral origin used as an ingredient for incorporation into, or direct use as, animal feedstuffs, but excludes unprocessed roughages such as hay, straw, silage or root crops. However, although such unprocessed forages are outside the scope of this Code every reasonable care should be taken to keep them clean and, as far as possible, free from faecal matter and rodent infestation.

2.3. "Raw Material Storage" refers to storages where oilseeds and other raw materials are stored prior to processing. This also includes any associated intake grids, elevators and conveying systems.

2.4. "Final Storage" in this Code means the final storage prior to dispatch to the final feed compounder or, in the case of material fed direct to livestock, prior to dispatch to the livestock unit.

2.5. In the case of imported material, the Code applies from the point of landing. In the case of domestically produced material, the Code applies to final storage before dispatch from the processing plant or on-farm store and delivery to the final feed compounder or livestock unit.

SECTION II FEED SAFETY MANAGEMENT

A key objective of any salmonella control program is to reduce the background levels of salmonella within the facility by;

1. Limiting contamination from in-coming material, including cross-contamination through intake systems.
2. Limiting spread throughout the facility through product and personnel flow control programs.
3. Limiting re-contamination in the final product.

Facility Management shall establish a Feed Safety Management System (FSMS) that is designed, documented, implemented and controlled, so as to provide assurance that final feedstuffs will be consistently of a satisfactory bacteriological quality. The FSMS shall identify the risks, and implement critical control points, prerequisite programs, monitoring and corrective measures in case of non-conformities. The FSMS should be developed using Hazard Analysis Critical Control Points (HACCP).

3. Hazard Analysis Critical Control Points (HACCP)

Hazard Analysis Critical Control Points **(**HACCP) is a management system in which food safety is addressed through the analysis and control of biological, chemical, and physical hazards from raw material production, procurement and handling, to manufacturing, distribution and consumption of the finished product

Prerequisite programs such as current Good Manufacturing Practices (cGMPs) are an essential foundation for the development and implementation of successful HACCP plans

HACCP is a systematic approach to the identification, evaluation, and control of food safety hazards based on the following seven principles:

Principle 1: Conduct a hazard analysis.

Principle 2: Determine the critical control points (CCPs).

Principle 3: Establish critical limits.

Principle 4: Establish monitoring procedures.

Principle 5: Establish corrective actions.

Principle 6: Establish verification procedures.

Principle 7: Establish record-keeping and documentation procedures.

4. Prerequisite Programs

The World Health Organization defines prerequisite programs as “practices and conditions needed prior to and during the implementation of HACCP and which are essential for food safety”. Prerequisite programs provide a foundation for an effective HACCP system. They are often facility-wide programs rather than process or product specific. They reduce the likelihood of certain hazards.

Facility management shall, as part of the HACCP review, identify appropriate prerequisite programs. For guidance, these may include, but are not limited to;

4.1. Facility Design

In many cases the facility is already established, but for guidance;

- Facilities should be located on a site that is suitably drained, i.e. no water pooling.
- Access roadways should be properly graded, compacted and well drained.
- The lay-out, design, construction and size of the facilities and equipment should permit adequate cleaning and/or disinfection.
- Facilities and equipment should be designed as much as possible without ledges, rafters, or protrusions that can collect dust and debris.

- Adequate site security should be provided to minimize the possibility of product contamination by either accidental or deliberate means.
- Facilities should be provided and maintained for the temporary storage of waste materials prior to removal from the premises in a sanitary fashion. Waste containers should be clearly identified, leak-proof and, where appropriate, covered. Waste containers should be cleaned and sanitized at an appropriate frequency to minimize contamination potentials.
- Premises should be designed for wet weather operation, so that the facility is able to load and/or unload feeds and ingredients without significant water damage to products or ingredients.
- Windows, doors and other openings should prevent the entrance of pests.
- Zoning Preventative Controls should be established to control of movement of people, equipment and materials necessary to protect products from potential hazards originating from the manufacturing environment and its surroundings. Material and human traffic flow patterns should be laid out to avoid potential contamination from raw to finished areas.

4.2. Raw Materials

4.2.1. Intake

Raw material specifications should be established for each raw material, including criteria for rejection. All raw materials should be inspected prior to acceptance for conformance to specification, including evidence of odour, water damaged and pest contamination.

All intake areas should be designed to prevent contamination, including the ingress of pests and of mud and dirt, during the receiving of raw materials.

All intake areas shall be cleaned to prevent cross=contamination prior to the receival of any raw materials.

4.2.2. Storage

4.2.2.1. All raw materials should be stored in facilities which protect against the entrance and harbouring of pests, vermin, rodents, birds and domestic animals and control measures should be regularly applied to exclude them.

Storage facilities shall be equipped with a means of disinfestation of raw materials from insect and mite pests, such as by fumigation with phosphine. Subsequent to an initial disinfestation, reinfestation shall be controlled by measures taken to exclude entry of pests.

4.2.2.2. Raw materials should not be stored in close proximity to animal housing or animal waste, including manure. If this is necessary, particular attention should be given to keeping storage facilities free of invertebrate and rodent pests as far as practicable, and to maintaining adequate separation between stored products, animals and their waste. In these circumstances the following measures should be applied:

(a) All raw materials should not be stored in any area without the area first being thoroughly cleaned to remove all organic material, disinfected and dried.

(b) Any control treatment required should be carried out by trained personnel and should not contaminate goods in the store.

(c) The storage facility should be clearly separated from any areas which could be a source of any form of contamination. All personnel entering the storage facility should put on clean overalls or disinfect outer clothing when entering from areas of potential contamination.

4.2.2.3. The storage facility should be soundly constructed of durable materials and fully sealed. Floors and walls should be impervious to liquids. There should be sufficient clean hard standing at the store entrance to minimise tracking of mud, effluent and other wet material into the store. Doors should be soundly constructed, close fitting and, where at all possible kept closed other than for personnel entry or for the inward or outward movement of materials and goods. If it is necessary for ventilation purposes to open doors then suitable precautions should be taken to ensure this does not increase the risk of vermin and birds gaining entry.

4.2.2.4. Storage bays/ areas should be organised to permit suitable and effective separation and identification of the various raw materials and other goods.

4.2.2.5. The store should be maintained in a generally clean and orderly condition with adequate and effective draining. In particular, storage facilities used for raw materials should be subject to a regular cleaning program, including complete emptying, at appropriate intervals.

4.2.2.6. Raw materials should be kept dry at all times since salmonella needs moisture to multiply. Any leakage or condensation in areas/ bays used for raw materials should be prevented or promptly corrected. Good ventilation is important to minimise condensation.

4.2.2.7. Raw materials which have been rejected, recalled or returned because of salmonella contamination should be placed in separate and adequately segregated storage pending treatment to eliminate contamination so as to preclude contamination of other raw materials. Any store which contains raw materials contaminated with salmonella should be decontaminated before use for other products.

4.2.2.8. Cooling facilities should be provided so that the oilseed bulk is protected against the proliferation of pests and degradation of oilseed quality.

4.2.3. Processing Aids & Additives

All processing aids and additives must not cause or contribute to contamination of the final product. Facility Management shall establish procedures to approve and control processing aids and additives used in the production of meals, etc.

4.3. Production

Facility Management shall ensure process controls are adequately defined and control limits are documented and are understood.

In the crushing process, a key step in the production of oilseed meals is the desolventising-toaster (DT) where the meal is exposed to specified heat/time treatments that result in a considerable decrease of the microbial load. Facility management must ensure minimum heat / time requirements are monitored and controlled to ensure effective control of salmonella.

It is essential that all process steps and equipment post the D/T are controlled to ensure the risk of cross-contamination is minimized.

- Dust Extractors/Collectors, Coolers and conveyers should be cleaned regularly and condensation should be prevented where possible.
- Dust from manual cleaning, maintenance and overhaul of equipment such as extractors, cyclones and filters, must not re-enter the finished meal stream.
- Maintenance should take place not only for mechanical but also for hygienic purposes.
- Plant maintenance should not increase microbiological contamination or improve growth conditions.
- New plant equipment should be designed hygienically.

4.4. Final Product Storage (refer also to 4.2.2)

4.4.1. Storage facilities must be secure to prevent unauthorized entry.

4.4.2. Storage facilities must be dedicated to the storage of final product and be adequate to allow storage of goods in a clean, dry condition.

4.4.3. Storage facilities should be properly ventilated to prevent moisture concentration through condensation.

4.4.4 Storages must be emptied, cleaned and santised on a regular basis, minimum annually.

4.4.5. Storage facilities should be designed and maintained to protect against the entrance and harbourage of rodents, birds and other animals.

4.4.6. Storage must be designed and maintained to prevent the entry of water, rain, etc. There must be adequate drainage.

4.4.7. Final product in storage must be inspected weekly for the presence of water and pest damage.

4.4.8. Dedicated equipment shall be used to handle final products, including any mobile loaders, auger, elevators, etc. Equipment must be cleaned and santised on a regular basis to prevent cross-contamination.

4.4.9. Only authorized personnel can enter the final storage.

4.5. Pest control

Animals of all kinds are potential sources of pathogenic microorganisms. Exclusion of rodents, other mammals, insects, birds, and reptiles is an important part of any sanitation program. Flies and cockroaches may transmit Salmonella, Staphylococcus, C. perfringens, C. botulinum, Shigella, Streptococcus, and other pathogens. Rodents are sources for Salmonella and parasites, and birds are hosts for a variety of pathogens such as Salmonella and Listeria.

To minimize the risk of cross-contamination, a documented pest control program shall be established.

All rodent bait and monitoring stations shall be clearly identified (ie numbered). There shall be a site plan identifying the location and number of all rodent bait stations in and around the facility. Toxic baits shall not be used inside production and storage facilities. Non-toxic baits / monitoring stations are acceptable subject to a documented risk assessment being completed. There shall be sufficient bait stations to control pests. Rodent bait and monitoring stations shall be inspected and on a regular basis, preferably weekly. All inspections shall be documented and reviewed.

The program shall also include measures to monitor and control other pests, such as birds and insects.

The use of any chemicals within the facility must be documented, including the date used, they type and concentration used, the location treated, the quantity applied and the name of the person applying the chemical. All persons applying chemicals shall be appropriately qualified. All chemicals must be used in accordance with legislative requirements.

4.6. Hygiene and sanitation

A cleaning and sanitation program shall be documented. The program shall identify the areas to be cleaned, the frequency of cleaning and the expected level of cleaning to be achieved. The program shall be detailed and include outside areas, internal structures and floor areas, storage areas, intake and discharge areas and equipment. All cleaning and sanitation activities shall be recorded and reviewed on a regular basis (weekly).

All areas within and around the plant shall be kept free from refuse and trash. Unused equipment should be stored in a manner that eliminates pest infestation. Keep the grounds surrounding the facility well drained and free of unnecessary vegetation, such as weeds and high grass. Clean storage bins and flat storage areas on a regularly scheduled basis. Minimize ingredient and product spillage and clean up spills promptly.

4.7. Equipment maintenance

Facility management shall establish a maintenance program that identifies the equipment that needs to be inspected and serviced, the frequency of inspection, the nature of the inspection and service and the type of oils and greases to be used, including the requirement for food grade greases and oils to be used where necessary.

All greases and oils shall be clearly identified as food grade / non-food grade.

4.8. Personnel

4.8.1. The aim should be to ensure that there are sufficient personnel with the ability, training and expertise necessary to make sure that the provisions of this Code are applied. All personnel who may be involved in handling oilseed meal and raw materials in stores should be given clear guidance and instruction on their duties. Training should cover not only specific tasks but good hygiene practice generally and the importance of personal hygiene.

4.8.2. All personnel should wear overalls or other appropriate garments. These should be regularly and frequently cleaned. Eating, drinking or smoking should not be permitted within storage areas or near to raw materials. Cloakroom and toilet facilities, where provided, should be kept clean.

4.8.3. No person known to be suffering from a communicable enteric disease should be employed in the handling of raw materials.

5. Bacteriological monitoring

5.1. All raw materials should be subject to testing for the presence of salmonella. The aim of the testing is to:

(a) check on the bacteriological quality of raw material; and,

(b) if testing detects bacteriological presence, take any necessary disinfection action. The information gained by this monitoring should be used to help select sources of raw materials which most consistently provide the desired quality (in the case of material entering stores) or to monitor the effectiveness of microbiological hygiene (in the case of material leaving stores), and identify the need for corrective action where problems are detected. In the case of stores handling raw materials of more than one type of source, each individual storage facility should be regarded as a separate store for sampling purposes.

5.2. Owners of raw materials entering stores should aim to ensure that representative aggregate samples are collected and submitted for testing for salmonella. Aggregate samples should be collected over a period of one month (30 days) or less. In the case of imported materials this sampling should be carried out at the point where the cargo discharges. On the basis of the test results, three categories of risk (high, medium and low) should be established by the storage operator, taking into account the history of the source of each raw material. The frequency of sampling and monitoring for each category of raw material entering stores should vary in accordance with the established risk factor, increasing for high risk and decreasing for low risk materials.

5.3. Monitoring of products dispatched from stores that have been tested in accordance with 5.2. On each day the material is dispatched, at least one sample should be taken for aggregation. Aggregate samples should not contain more than 40 incremental samples or materials collected over a period of more than one month (30 days). On the basis of the test results, three categories of risk (high, medium and low) should be established relating to the previous microbiological testing history of dispatched raw material. Continuing sampling and monitoring for each category of dispatched material should vary in accordance with the established risk factor, increasing for high risk and decreasing for low risk materials.

5.4. The results of tests on material entering and leaving stores should be compared in order to identify whether contamination is taking place during storage. If contamination is occurring, the source of the contamination should be sought and corrective action should be taken.

5.5. Monitoring of products dispatched from storage facilities should ensure, in collaboration with the storage operator and any other party involved, that raw materials are representatively sampled and aggregate samples are submitted for testing. On each day the material is dispatched, at least one sample must be taken for aggregation. Aggregate samples must not contain more than 40 incremental samples or materials collected over a period of more than one month (30 days).

The owners of raw materials dispatched from storage facilities should ensure, in collaboration with the storage operator and any other party involved, that raw materials are representatively sampled and aggregate samples are submitted for testing. On each day the material is dispatched, at least one sample must be taken for aggregation. Aggregate samples must not contain more than 40 incremental samples or materials collected over a period of more than one month (30 days).

5.6. Monitoring of manufactured products and by-products leaving the place of manufacture. On each day the material is dispatched at least one sample should be taken for aggregation. Aggregate samples should not contain more than 40 incremental samples or materials collected over a period of more than one month (30 days). On the basis of the test results, three categories of risk (high, medium and low) should be established relating to the previous microbiological testing history of dispatched raw material. Continuous sampling and monitoring for each category of dispatched material should vary in accordance with the established risk factor, increasing for high risk and decreasing for low risk materials.

5.7. Samples should be collected, handled and tested in accordance with approved methods. Isolations of salmonella should be serotyped by approved serotype reference methods.

6. Action to be taken following isolation of salmonella

The action to be taken following the isolation of salmonella will depend on the circumstances of the isolation. The following should be undertaken in all circumstances:

(a) Ensure that appropriate authorities, the storage operator, vendor and purchaser are notified of the isolation.

(b) Thoroughly investigate the circumstances of the isolation, review all procedures and put in place any necessary remedial action which could include correction of any sources of water ingress into stores, enhanced control of pests and vermin and more vigorous decontamination of storage areas, etc.

(c) Increase the monitoring of any other raw materials in the store and take all necessary precautions to avoid cross-contamination.

7. Records

Owners should be responsible for ensuring that suitable records are maintained and kept for two years. The records should show:

(a) Details of movements of raw materials into and out of storage including, where appropriate, names and addresses of consignees/ consignors.

(b) Details of samples taken and dates of sampling and testing.

(c) Details of any salmonella isolations and serotypes.

(d) Details of actions taken following any salmonella isolation.

SECTION III TRANSPORT

8. Vehicles

8.1. The owner of the raw materials, or his agent, should ensure that all vehicles, including those operated by third parties, are inspected at the time of loading and found to be clean and dry before being used for the transport of raw materials. Keeping raw materials dry is important since salmonella needs moisture to multiply.

8.2. All vehicles used for the transport of raw materials should be subjected to a regular cleaning and sanitising program to ensure they are maintained in a clean state with no build up of waste material. Ideally, separate vehicles should be designated specifically for feedstuffs but

it is recognised that resources may not allow this. Therefore, if vehicles are used for the carriage of other goods or materials, they should be thoroughly cleaned, sanitised and dried before being used to transport raw materials.

8.3. Raw materials should be protected from contamination and kept dry during transport. It is recommended that enclosed vehicles and containers are used for loose bulk, but where this is impracticable, loads should be covered/ sheeted. Any cover so used should be maintained in a clean and sound condition and should be cleaned, sanitised and dried before use if it has been used to cover other materials or goods.

9. Personnel

9.1. All persons who may be involved in the transport of oilseed meal and raw materials should be given clear guidance and instructions on their duties. Training should not only cover specific tasks but good hygiene practice generally and the importance of personal hygiene.

9.2. All personnel should wear overalls or other appropriate garments in work areas. These should be regularly and frequently cleaned. Eating, drinking or smoking should not be permitted within storage areas or near to raw materials. Cloakroom and toilet facilities, where provided, should be kept clean.

9.3. No person known to be suffering from a communicable enteric disease should be employed in the handling of raw materials.

Section IV References

US FDA – Food Safety Moderisation Act – guidance notes, fact sheets

Joint Institute for Feed Safety and Applied Nutrition, Prerequisite Programs for Good Manufacturing Practices, 2007

American Feed Industry Association, Salmonella Control Guidelines, Nov 2010

PART 5

CODE OF PRACTICE FOR THE STORAGE AND TRANSPORT OF EXPORT COTTONSEED

CONTENTS	
SECTION I	**PAGE NO.**
Introduction	**5.2**
1. Purpose of the Code	**5.2**
2. Scope of the Code	**5.2**
SECTION II	
Storage of Cottonseed	**5.3**
1. Storage facilities	**5.3**
2. Equipment	**5.3**
3. Fumigation	**5.4**
4. Personnel	**5.4**
5. Contaminant monitoring	**5.4**
6. Action to be taken following identification of contaminants	**5.5**
7. Records	**5.5**
SECTION III	
Transport	**5.5**
1. Bagged and/ or Containerised transport	**5.5**
2. Bulk transport	**5.6**
3. Fumigation	**5.6**
4. Personnel	**5.6**
5. Records	**5.6**
SECTION IV	
Cottonseed	**5.7**
1. Cottonseed Standard	**5.7**
SECTION V	
Arbitration	**5.7**
1. Arbitration	**5.7**

SECTION 1: INTRODUCTION

Cottonseed is a by-product of the Cotton Industry and has been used extensively over the past 30 years for the production of vegetable oil and feedstuff. During recent years with the increase in the production of cotton, more Cottonseed has become available than can be utilised by the domestic market. .

In order for Australia to maintain its clean, green image, it is proposed that the Cottonseed Industry be "self-regulating" in this area by use of a "Code of Practice" and hence the development of this code. This code was originally developed in conjunction with the Australian Cotton Industry Council.

1. Purpose of the Code

To ensure that all Cottonseed destined for export markets, either for use as an animal feed or for further processing to produce vegetable oil, is of a satisfactory standard to meet the market requirements. The Code of Practice is to replace the requirement by the Department of Agriculture to have Cottonseed listed as a prescribed grain and thus enable the Cottonseed Industry to self-regulate this aspect of their business. Note: Where the importing country requires the Australian government to issue a Phytosanitary Certificate, inspection and certification that is authorized by the Department of Agriculture is a legal requirement. Exporters must verify the importing country requirements.

This code of practice lists a Cottonseed Standard which, is agreed to by both buyer and seller on a contractual basis. However, this does not absolve either party from complying with the relevant human food and stock feed regulations which apply at either Federal and/ or State levels.

2. Scope of the Code

Cottonseed in the Code means any Cottonseed that can include genetically modified seed, undelinted seed and delinted Cottonseed which is being put up for export out of Australia.

"Storage" in the Code means the final storage, loading or packing facility in Australia prior to dispatch to either the port or the vessel in or on which the Cottonseed is to be transported to the overseas customer/ s.

"Container" in the Code refers to the basic shipping containers that are used for the international transport of cottonseed products.

"Transport" in the Code means the vehicle used to transport (containers or bulk vehicles) the product from the storage to the port of departure.

"Fumigation" in the Code refers to the treatment of the Cottonseed with fumigants or chemicals (insecticide/ pesticide) in accordance with the label directions legally permitted under Australian law to control the spread of pests and insects.

"GTA" in the Code refers to Grain Trade Australia Ltd.

SECTION II: STORAGE OF COTTONSEED

1. STORAGE FACILITIES

1.1. Construction

The storage facility should be soundly constructed of durable materials. There should be no evidence of leaks and the floor must be sealed. General construction should also be in compliance with relevant State regulations in regard to lighting and wiring etc. There should be sufficient clean, hard standing at the storage entrance, to minimise tracking of dirt or other wet material into the storage facility.

1.2. Vermin

All Cottonseed should be stored in facilities which discourage the harbouring of rodents, birds, domestic animals, and control measures should be regularly applied to exclude them.

1.3. Insects and Pests

The storage should, where practical, be free of any evidence of insects and/ or pests prior to its use. The storage facility should have a documented pest control program carried out to minimise the infestation of insects in the Cottonseed. Any chemicals used on the Cottonseed must be legally permitted under Australian law and used in accordance with the label directions.

1.4. Overall Appearance

The storage facility should be clean and free of any previously stored Cottonseed and/ or products at the end of each season, before it is used to store Cottonseed. There should be no unusual or strong odour that might cause contamination of the product. Any evidence of nonconforming Cottonseed from previous storage must be identified and removed prior to the storage of any new Cottonseed. Records are held for any previous product/ s held in the storage facility.

The storage should be maintained in a generally clean and orderly condition and subject to a regular cleaning program, including complete emptying at appropriate intervals, normally at the end of season. The areas immediately surrounding the storage should be kept clear of vegetation and any spilt seed should be removed immediately.

2. EQUIPMENT

Equipment should be suitable for the purpose intended and maintained in good working order. Any equipment used within the storage facility should be cleaned before use to ensure it is going to be free of any vermin, pests, insects or other contaminants. Such equipment should include any mechanical equipment used to unload or load Cottonseed, or any vehicles used within the storage facility (e.g. front-end loaders).

3. FUMIGATION

Any fumigation or spraying of chemicals either within the storage facility itself or on the Cottonseed within the facility should be with chemicals which are registered and are legally permitted under Australian law, and used in accordance with the label directions.

Written documentation should be kept on all chemicals used, when they were used and at what levels, whether it is on the seed, equipment or the storage facility itself.

4. PERSONNEL

4.1. Training

The aim should be to ensure that there are sufficient personnel with the ability, training and expertise necessary to make sure that the provisions of this Code are applied. All personnel who are involved in the handling of export Cottonseed in storage facilities shall be given guidance and instruction on their duties. Training records should also be held covering not only specific tasks, but also good hygiene and safety practices.

4.2. Protective Clothing

All personnel should wear appropriate garments suitable for the handling of Cottonseed. These should be regularly cleaned. Eating, drinking or smoking should be prohibited within the storage facility areas. Appropriate amenities should be provided and must be kept clean.

5. CONTAMINANT MONITORING

Storage of Cottonseed should be subject to monitoring for the presence of physical contaminants. The aim of the monitoring is to:

a. Check on the quality of the seed; and

b. If it is necessary to take any corrective action, the information gained by monitoring should be used to help select sources of seed which most consistently provide the desired quality in both the seed entering the storage facility, as well as the seed leaving the storage facility. Monitoring is also used to determine the effectiveness of the program that has been put in place and identify the need for corrective action where problems are detected.

5.1. Monitoring of Cottonseed when entering the Storage Facility

The storage facility should aim to ensure that a representative aggregate sample is collected and examined in accordance with the AOF standards.

5.2. Monitoring of Cottonseed dispatched from the Storage Facility

On each day the Cottonseed is dispatched at least one sample should be taken for aggregation. This could be a composite of a number of containers or bulk transport leaving the storage facility. Continuance of sampling and monitoring of dispatched Cottonseed may vary in accordance with the AOF Standard.

The results of the examination of the cottonseed entering and leaving the storage facility should be compared in order to identify whether contamination is taking place during storage. When contamination is identified, the source of the contamination should be sought and corrective action should be taken.

6. ACTION TAKEN FOLLOWING THE IDENTIFICATION OF CONTAMINANTS.

The action to be taken following the isolation of a given contaminant will depend on the circumstances of the isolation.

a. Ensure that the Cottonseed is recorded and isolated by the most appropriate means.

b Investigate the circumstances for the isolation, review all procedures and implement any remedial action. This may include correction of the storage and enhanced control of pests or vermin etc.

c. Increase the monitoring of any other cottonseed within the storage and take all necessary precautions to avoid cross-contamination.

7. **RECORDS**

To ensure that suitable records are maintained, kept for one year and made available during any inspection or audits. The records should show:

a. Details of movements of Cottonseed into and out of the storage facility, including where appropriate, consignees/ consignors.

b. Details of pest control program at the specific storage facility, including chemicals used, dosage used and date used.

c. Details of the documented hygiene and safety programs.

d. Any audits carried out on the storage facility.

e. Details of the samples taken and dates of sampling and examination.

f. Details of any contaminants that were identified.

g. Details of the corrective actions taken following any isolation of contaminants.

SECTION III: TRANSPORT

Containers or bulk transport should be inspected prior to loading and should be clean and dry before being used for the transport of Cottonseed. Keeping containers or bulk transport free of any previous contamination and moisture is essential in maintaining the integrity of the quality of the Cottonseed being exported.

1. BAGGED AND/ OR CONTAINERISED TRANSPORT

The bags used for cottonseed should be new so as to ensure they are free of insects and contaminants. Containers should be clean and inspected prior to use. It is essential that containers

are inspected to ensure they are free of any previous containerised product. Containers should be sealed and a log of the seal numbers kept.

2. BULK TRANSPORT

Bulk transport should comply with the AOF Code of Practice for the Road and Rail Haulage of Cereals, Oilseeds, Pulses and Vegetable Meals and Hulls and Edible Liquid Products.

2.1. Rejection of Transport

Any truck found to be unfit for the transport of Cottonseed can be rejected by either the receiver and dispatcher. If the rejection is solely due to the truck not being cleaned properly, then such vehicles will only be accepted once they have been cleaned and re-inspected by the receiver.

2.2. Enclosed or Covered Vehicles

Cottonseed should be protected from contamination and kept dry during transport. It is recommended that enclosed vehicles or containers are used for loose bulk, but where this is impractical loads should be covered or sheeted with a tarp. Any cover so used should be maintained in a clean and sound condition. If used to protect other materials or products, then the cover should be clean and dry prior to transporting Cottonseed.

3. FUMIGATION

Any fumigation of either the containers or bulk transport vehicles shall be undertaken in accordance with the fumigant label directions and/ or instructions. No fumigation of seed in transit can be undertaken.

4 PERSONNEL

All persons who may be involved in the bagging and containerising of cottonseed, should be given clear guidance and instructions on their duties. Training records should also be held covering not only specific tasks, but also good hygiene and safety practices.

All personnel should wear appropriate garments suitable for the handling of Cottonseed. These should be regularly cleaned. Eating, drinking or smoking should be prohibited within the storage facility area. Appropriate amenities should be provided and must be kept clean.

5. RECORDS

Ensure that suitable records are maintained, kept for one year and made available during any inspection or audits. The records should show;

a. Details of the documented hygiene and safety programs.

b. Any audits carried out on the transport.

c. Details of the samples taken and dates of sampling and examination.

d. Details of any contaminants that were identified.

e. Details of the corrective actions taken following any isolation of contaminants.

SECTION IV: COTTONSEED

1. COTTONSEED STANDARD

The Cottonseed Standards are updated as required by the Australian Oilseeds Federation and published by Grain Trade Australia.

SECTION V: ARBITRATION

1. ARBITRATION

Arbitration is to be conducted by GTA in accordance with the GTA Arbitration Rules.