

N O N – G M O S T A N D A R D

# FoodChain ID Non-GMO Global Standard

Version 6.1 – July 16, 2018

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## SECTION I - INTRODUCTION

The FoodChain ID Non-GMO Global Standard was first launched in 1999 and continues to enjoy worldwide recognition and acceptance among brands and retailers in the food and feed industry. The Standard integrates a risk-based approach to Non-GMO identity preservation through its certification program. The FoodChain ID Non-GMO Trademark (seal) is used to grant Non-GMO status to production systems that have identity preservation procedures and is also used to identify products that have been awarded FoodChain ID product certification. The seal is used as a product claim which establishes Non-GMO status, in accordance with the Standard, through production with identity preservation and is supported by risk-based sampling and testing programs. Product certification is designed to be region specific so organizations are able to satisfy the requirements of Non-GMO markets of their choice and multiple Non-GMO markets.

Non-GMO markets worldwide have diverse regulatory systems making it increasingly complex for organizations to confidently approach and access varied global markets. The concept of the FoodChain ID Non-GMO Global Standard recognizes the importance of offering market oriented solutions and adapting certification to meet these different markets. Version 6 accommodates the need to provide certification that is flexible and able to satisfy the requirements of the target markets. This necessitates organizations seeking certification to understand the Non-GMO requirements of their target markets.

There are two considerations that are unique to each target market: (1) mandatory labelling requirements setting maximum permitted level of adventitious presence of genetic modification in Non-GMO products to exempt the same from labelling as GMO; (2) approved and non-approved GMOs. The flexibility of the FoodChain ID Non-GMO Global Standard provides organizations with solutions that meet these regulatory requirements to successfully provide Non-GMO products to their customers in their target markets.

## SECTION II - SCOPE

FoodChain ID Non-GMO certification is applicable at all levels of the supply chain to organizations that provide cultivation, production, processing, storage, distribution, logistics, and/or trade. Applications for product certification include raw materials, derivatives, multi-ingredient products, additives, and processing aids. Certification may also be sought by organizations that provide animal feed or animal feed compounds, livestock and/or animals raised for slaughter, or raised for their by-products.

Organizations seeking certification under this Standard shall demonstrate conformance through annual audits, risk assessments and traceability supported by sampling and testing methodologies, which validate that the target market thresholds are being met. There are various techniques or technologies that can be applied to determine compliance, including immunological reaction strip test, PCR, ELISA, and isotope testing. These tools are utilized to help verify the validity of the risk assessment methodologies being utilized by the organization to help monitor the organization's daily operations.

# SECTION III - CERTIFICATION REQUIREMENTS

## Explanation of Layout of Section III:

The certification requirements of this Standard must be met to gain certification. Following a clause, a Guidance Note may be provided to help interpret the Standard and explain the intent of the given clause, offer additional relevant details, and/or provide an example to better understand the clause. Guidance Notes should be read along with the certification clauses and should be considered on a process-to-process and/or product-to-product basis. Where no Guidance is offered, the Standard alone suffices.

## 1.0 Quality Management Systems (QMS)

- **1.1** The Organization shall determine its Targeted Threshold Tolerance Level(s) for their targeted markets.
  - **1.1.1** The certification contract agreement shall include the determined Targeted Threshold Tolerance Level(s).
- **1.2** The Organization shall determine the approved and non-approved GMOs that meet regulatory requirements in their target markets.
  - **1.2.1** The certification contract agreement shall include the determined approved and non-approved GMOs in their target markets.
- **1.3** The Organization shall establish and maintain a written Quality Management System (QMS), which includes procedures, work instructions or Standard Operational Procedures (SOPs), and records.
  - **1.3.1** The extent and depth of the QMS shall be appropriate to the operation and scale of the Organization.
  - 1.3.2 All procedures, work instructions, reference materials, specifications and other documentation essential for the execution of the FoodChain ID Program (sometimes called the "Program;" see definitions) shall be maintained at the location where certification is provided.
  - **1.3.3** The Organization shall have a current, original hard copy or electronic version of the FoodChain ID Non-GMO Global Standard available.
- **1.4** The Organization shall have a policy statement that demonstrates the Organization's commitment to the supply of Non-GMO products. The policy statement shall;
  - 1.4.1 Be signed by a member of the Organization's senior management,
  - 1.4.2 Be reviewed based on risk no less than annually,
  - **1.4.3** Be updated when there is a change that may affect the policy.

*Guidance: The Standard does not mandate the organization to be dedicated exclusively to Non-GMO.* 

- **1.5** The QMS shall have a Document Control Procedure to support the development, implementation, maintenance and control of the QMS.
  - **1.5.1** A designated person shall manage the Document Control Procedure to ensure all documents relevant to the FoodChain ID Program are kept current including changes to operations, facilities and procedures.
  - **1.5.2** Personnel involved in monitoring and assessing performance of the system shall be trained and independent of the personnel responsible for the day-to-day production.
- **1.6** The QMS shall be available to relevant personnel.
- **1.7** The QMS shall be in a language or multiple languages understood by all key personnel.
- **1.8** The QMS shall include an organizational chart.
- **1.9** The QMS shall have documented job responsibilities and functional positions for execution and implementation of the FoodChain ID Program.
  - **1.9.1** Job responsibilities and functional positions shall be kept up to date and be clear for roles that impact its management systems.
  - **1.9.2** Functional positions shall have nominated, trained Deputies as back-up.
  - **1.9.3** The Organization shall demonstrate how Deputies are deemed competent to fulfill deputized roles.

*Guidance: Organograms, organizational charts greatly assist clarity in demonstrating job responsibilities, functional positions and deputies.* 

- **1.10** A current list of all service providers for the Organization shall be maintained.
  - **1.10.1** Service providers for the Organization shall have contract agreements in place.

#### 2.0 Risk Assessment

- 2.1 The Organization shall perform a documented risk assessment which addresses the Targeted Threshold Tolerance Level(s) against which the Organization is seeking certification.
- 2.2 The Organization shall perform a documented risk assessment which is HACCPbased, evaluating all stages of their processes where the risk of GMO contamination is possible.
  - **2.2.1** The Organization shall perform a documented risk assessment which addresses possible GMO contamination that may be present in its sourcing region.

- 2.2.1.1 Products that have no testable protein or DNA shall undergo a risk assessment to determine whether isotope testing should be considered to validate country or region of origin.
- 2.2.2 The risk assessment shall include known and reasonably foreseeable risks with its suppliers as well as within the Organization itself.
- 2.2.3 Contractors or subcontracted organizations that perform any handling, processing, distribution or storage shall be included in the risk assessment to ensure its product status and integrity is maintained.
- 2.2.4 Product changeover from GMO containing inputs/products to Non-GMO production shall be evaluated in the risk assessment for possible GMO contamination risks.
- 2.2.5 Equipment flushing procedures used to segregate inputs/products shall be included in the risk assessment.
- **2.3** Product changeover and/or flushing from GMO containing inputs/products to Non-GMO production shall be fully validated using appropriate sampling and testing to ensure exclusion of GMO.
- **2.4** The Organization shall perform a documented HACCP-based risk assessment evaluating all inputs to determine whether there is a risk of GMO contamination.
  - 2.4.1 The risk assessment shall consider sources of GMO contamination that may not be testable, e.g., refined oils with no DNA or protein, or highly processed inputs.
  - 2.4.2 The risk assessment shall identify which inputs are at-risk and shall be required to have documentation to validate the input meets the designated GMO threshold.
- **2.5** Appropriate control measures shall be implemented for each identified risk to ensure that contamination or cross-contamination shall not occur.
  - 2.5.1 Identified control points shall be documented and validated by scientific means through appropriate sampling and testing methods.
- **2.6** The Organization shall have an established and documented risk-based sampling and testing plan based on identified risks from the risk assessment.
  - **2.6.1** Sampling plans shall be written and detail the sample methods for each sampling event identified in the risk assessment.
  - **2.6.2** The sampling and testing plan shall be verified and validated at a minimum annually.
- 2.7 The Risk Assessment Plan shall be dated and signed by the appropriate Quality Assurance Manager and a Senior Representative with authority for decision making.

2.8 The Risk Assessment Plan shall be frequently reviewed and updated at least once every 12 months or whenever any change takes place that may affect the Non-GMO status of the product.

This shall include but not be limited to a change of:

- 2.8.1 Targeted Threshold Tolerance Level(s),
- 2.8.2 Approved and non-approved GMOs in the target markets,
- 2.8.3 Supplier of inputs, (including country or region of origin),
- 2.8.4 Ingredients,
- 2.8.5 Processing conditions or equipment,
- 2.8.6 Storage or distribution conditions,
- 2.8.7 Change in job responsibilities,
- **2.8.8** Developments in scientific information associated with ingredients, process or product.
- 2.9 Changes to the Risk Assessment Plan shall be subject to document control.

## 3.0 Control of Processes

- **3.1** The Organization shall ensure it stays current and up to date on all scientific and technical developments, industry codes, and any new legislation for the country the product is made in and/or shipped to.
- **3.2** The Organization shall maintain an inventory system that effectively accounts for all inputs and finished products that are Non-GMO.
- **3.3** Based on a documented Risk Assessment Program, the Organization shall implement a hold and release program for each lot or batch that bears the FoodChain ID Non-GMO Certification.
  - **3.3.1** The Organization shall contact FoodChain ID immediately if a lot or batch bearing the FoodChain ID Non-GMO claim is found to be out of compliance.

Guidance: The incident should trigger a review of the corrective action procedure so that relevant changes are made to prevent recurrence. It is good practice for incidents to be reviewed again during the annual internal audit to confirm corrective action was effective.

- 3.4 An effective and documented recall/withdrawal procedure shall be in place.
- 3.5 A recall/withdrawal procedure shall include at a minimum:
  - **3.5.1** Emergency contact details for contacting FoodChain ID during a recall/withdrawal situation;
  - **3.5.2** A documented trial recall exercise performed at least once a year that is independent of a traceability test; and
  - 3.5.3 Methods for retrieving and disposing of recalled/withdrawn product.

## 4.0 Control of Inputs

- **4.1** The Organization shall identify their Targeted Threshold Tolerance Level(s) for the presence of GMOs for their inputs and products.
- **4.2** Based on a documented Risk Assessment Program, there shall be a procedure for supplier approval including spot purchases to determine the risk of contamination or cross contamination by GMO inputs/ingredients. Based on a documented Risk Assessment Program, supplier approval shall include the following documentation:
  - 4.2.1 A statement that declares at-risk inputs are Non-GMO.
  - **4.2.2** Testing that confirms at-risk inputs meets the Targeted Threshold Tolerance Level(s) for the presence of GMO for each lot of purchased at-risk inputs.
  - **4.2.3** Products that have no testable protein or DNA shall have full Non-GMO traceability back to the source where testable protein or DNA is present. This shall include testing which demonstrates that tolerances have been met.
- **4.3** Input specifications shall be congruent with the Targeted Threshold Tolerance Level(s) of the FoodChain ID Non-GMO Global Standard certification program selected with respect to the target market.
  - **4.3.1** Input specifications shall be reviewed at a minimum of annually.
  - 4.3.2 Specification sheets shall include country of origin.
  - **4.3.3** Input specifications shall be updated when a new supplier is sought or if changes have been made to the specification.
- 4.4 At-risk inputs shall be cross-checked with specification sheets to verify conformance has been met.
- 4.5 Inputs used in products certified under the FoodChain ID Non-GMO certification program shall not be produced from or with genetically modified materials or derivatives thereof even if the genetically modified material is not present in the final product.
- **4.6** Micro-inputs produced by or with genetic modification shall be in conformance with the target threshold and target market region requirements concerning micro-inputs.
- **4.7** Use of GM varieties of livestock and/or animals including cloned livestock animals is prohibited.
  - 4.7.1a Best Practice Livestock and/or animals, e.g., cattle, swine, poultry, fish, bees, either raised for slaughter or raised for their by-products, shall be fed a Non-GM diet from birth or not later than the time of weaning or no later than three days after hatching; or
  - 4.7.1b Acceptable Practice Livestock/Animals must pass through the following conversion periods to qualify for FoodChain ID Non-GMO certification status:
    - i. For swine the entire fattening period, starting with a maximum weight of 35 kilograms;
    - ii. For cattle and equidae for meat production 12 months;

- iii. Livestock for milk production 3 months or, 2 weeks in case of acquisition of new animals already in milk for the renewal of the herd;
- iv. Laying hens and poultry for egg production 6 weeks;
- v. Poultry and aquaculture animals the entire fattening period;
- vi. Other farm animals during the year prior to slaughter; for those whose life span is less than 1 year, for the three quarters of their life span;
- vii. Bees there is no specific conversion period.
- **4.8** The use of GMO drugs or hormones for livestock and/or animals other than for medical reasons are prohibited.

#### Guidance: The use of rBGH growth hormone is prohibited.

- **4.8.1** The prohibition on use of GMOs and products produced by and from GMOs shall not apply to veterinary medicinal products.
- **4.9** Organizations seeking seed as an input for growing as a grain or for seed production should consider that GMO presence in seed should be significantly below their selected Targeted Threshold Tolerance Level(s).

## 5.0 Internal Audit

- 5.1 An annual internal audit against the FoodChain ID Non-GMO Global Standard shall be carried out by the Organization to identify areas of non-conformance.
- 5.2 The Organization shall have a documented internal audit procedure.
  - **5.2.1** The procedure shall identify those responsible for conducting the internal audit.
  - **5.2.2** The procedure shall include responsibilities for investigation into non-conformities resulting from the internal audit.
  - 5.2.3 The investigation into non-conformities shall include documented:
    - 5.2.3.1 Corrective action;
    - 5.2.3.2 Root cause analysis;
    - 5.2.3.3 Risk assessment; and
    - 5.2.3.4 Preventative measures.
- **5.3** A review of the effectiveness of corrective actions where non-conformities are identified shall be part of the corrective action program. The review shall include but not limited to the following:
  - 5.3.1 Feedback and findings from internal audits;
  - **5.3.2** Legislative, technical, and industry developments relevant to the Non-GMO program;

- **5.3.3** Verification that the quality system, quality manual, procedures, testing methods, training programs, etc., are current and in compliance;
- **5.3.4** Supplier performance;
- 5.3.5 Corrective actions and out-of-specification product; and
- 5.3.6 Customer complaints and complaint trend analysis.
- 5.4 A trend analysis shall be used to identify re-occurring non-conformance to eliminate the re-occurrence and assess risk of re-occurrence.
- 5.5 Contractors or subcontracted organizations performances shall be reviewed minimum annually, based on risk and be documented.

## 6.0 Records

- 6.1 Records and data shall be maintained for all processes essential for the integrity of the FoodChain ID Program.
- 6.2 All records shall be legible.
- **6.3** Records that have been amended shall be countersigned and dated by the person authorizing the change.
- 6.4 All records used to demonstrate conformance to the FoodChain ID Non-GMO Global Standard shall be retained for a minimum of five (5) years.

*Guidance: Five (5) years are standard best practices, longer retention of records should be considered for products with a long shelf line.* 

## 7.0 Training

- 7.1 The Organization shall have a documented training program for employees, agency personnel, temporary staff, and contractors.
- **7.2** The Organization shall demonstrate that employees are competent in their job responsibilities and functional positions through training, work experience and/or qualification.
- 7.3 GMO awareness training shall be provided to all employees, agency personnel, temporary staff, and contractors to enable them to understand the aims and objectives of the Organization's Non-GMO program including the FoodChain ID Non-GMO Global Standard.
- 7.4 Procedure training shall be provided to all employees managing or executing any key function of the certification program that will enable them to understand their designated tasks and responsibilities.
- **7.5** Changes in processes, procedures, and revisions of documentation shall require a training update for the employees responsible for those functions of the program.

*Guidance: Training updates shall focus upon those aspects of the process that have been changed and the reasons for the change.* 

- 7.6 Training records shall include:
  - 7.6.1 The full name and signature of the person who delivered the training;
  - 7.6.2 The date and duration of the training;
  - 7.6.3 The title of or course content; and
  - 7.6.4 The full name(s) and signature(s) of the person(s) who received the training.
- 7.7 Where training is undertaken by agencies on behalf of the Organization, records of the training shall be documented and training materials made available.
- **7.8** Refresher training shall take place at appropriate intervals based on risk to ensure that staff maintains the required level of knowledge for the effective operation of the program.

## 8.0 Segregation

- 8.1 Areas that have been identified as a contamination risk shall have a written Risk Assessment Plan which provides the instructions to eliminate or reduce the risk.
- 8.2 Where appropriate and based on the Risk Assessment Plan, areas identified as a contamination risk shall be inspected, cleaned, and/or purged.
- 8.3 Areas identified as a contamination risk that are required to be inspected, cleaned, purged and/or sampled for testing shall have records of the action taken.
- 8.4 Records for inspection, cleaning, purging and/or sampling for testing shall include:
  - 8.4.1 Description of the action taken to reduce the identified risk;
  - 8.4.2 Full name and signature of the person who completed the action taken; and
  - 8.4.3 Date the action taken.
- 8.5 Segregation of Livestock and/or animals (if applicable) Livestock and/or animals used for the production of FoodChain ID certified products shall be segregated from other livestock throughout their lifespan.
  - **8.5.1** Segregation shall be effective and, where appropriate, individual livestock and/or animals shall be marked or tagged to facilitate segregation.

*Guidance: Identification may be accomplished by a variety of methods such as ear tags or other physical means.* 

- **8.5.2** Grazing animals certified to the FoodChain ID Standard shall be prevented from feeding on GM crops.
- 8.6 Segregation of Seed Sources (if applicable) Procedures shall be in place to prevent previously planted GMO crops from germinating and contaminating fields intended for production of certified Non-GMO crops.

*Guidance: The practice of good field hygiene should be adopted in order to minimize GM volunteer plants.* 

## 9.0 Traceability

- 9.1 The QMS shall have a Traceability Program to ensure that traceability can be demonstrated both backwards (trace) and forwards (track) from inputs, through work in process, to finished product.
- 9.2 Full traceability shall be achievable within 4 hours.
- **9.3** Records must link inputs and/or finished product both backwards and forwards; this includes consignments managed under chain of custody.
- **9.4** Processing or production records must include production period, ingredients and inputs used, input identification (SKU number(s), lot number(s), amount, and product loss during processing.
- **9.5** The Traceability Program shall include primary packaging/labelling and raw materials relevant to its certified products.
- **9.6** The Organization shall annually test the effectiveness of the Traceability Program (including packaging/labelling) both backwards (trace) and forwards (track) to ensure traceability can be demonstrated.
- **9.7** A running mass balance shall be maintained for inputs and outputs correlating the amounts of compliant (or certified) inputs with amounts of certified outputs.
  - **9.7.1** The use of rework in the production of product certified to the FoodChain ID Non-GMO Global Standard must be recorded in the product mass balance.
- **9.8** A running mass balance shall include identification of constituent batches and their proportions by lot number. A new lot number or proper identification must be assigned for the composite lot as well as for the composite or split consignment.

*Guidance: Consolidation of batches to create a new master batch is accepted provided the organization can identify the constituents. One should consider (a) production lots and (b) split consignments therefrom; (d) composite lots made from other production lots in various proportions, and (d) split consignments from composite lots.* 

- **9.9** A procedure shall be in place for customer service, inventory management, and order fulfilment procedures to verify that the correct certified product consignments or product lots have been shipped to the correct customers.
- **9.10** All finished products in packages must be lot marked, enabling traceability to raw materials used in their production. Where the material is supplied in bulk, a unique lot identifier must be associated with each specific lot.
- **9.11** All goods shipped in bulk, where packaging or labels are not feasible, shall be duly identified on associated documentation with a lot or production code which allows for traceability back through all links in the chain of custody of the goods involved.

## 10.0 Sampling

**10.1** The QMS shall have a documented Sampling Plan that is risk based and established for inputs and finished product identified as at-risk for GM contamination.

Guidance: Established codes of practice, GMPs or industry standards are useful when planning a risk based sampling protocol; however, organizations still need to ensure the objectives of the Non-GMO certification program are met.

- **10.1.1** Inputs or Products that have no testable protein or DNA based on Risk Assessment may be exempt from sampling.
- **10.1.2** Immunologically screening (strip tests) may be used for unprocessed raw material (inputs) as appropriate and based on risk assessment as an adjunct approach when rapid testing for the presence of GM contamination is essential.

*Guidance: When* Immunologically screening is used, the spent test *strip should be photographed or digitally scanned for record keeping. If test strips are retained for records, appropriate measures must be made to stop the immunological reaction by removing the respective parts of the strip, otherwise the result may change over time.* 

- **10.2** The sampling shall be carried out according to a scheduled plan, based on the Risk Assessment Plan.
- **10.3** Sampling method shall not itself cross-contaminate either the input/product or sample.
- **10.4** Archive samples or retainers shall be held for the time frame during which the product would reasonably be expected to remain in the supply chain or based on risk assessment.
  - **10.4.1** Individual sub-samples which made up a composite sample should be retained to permit individual sample testing in the event of a non-conforming composite result.

## 11.0 Testing

- **11.1** The QMS shall have a documented Testing Plan that is risk based.
- **11.2** Test results shall confirm the GM allowance thresholds for the presence of GM have met the Targeted Threshold Tolerance Level(s) of the FoodChain ID Non-GMO Global Standard.
- **11.3** PCR testing used to validate the GM allowance thresholds for the presence of GM has met the Targeted Threshold Tolerance Level(s) shall be through a FoodChain ID approved laboratory.

Guidance: For consistency, uniformity and to reduce variation and error in the FoodChain ID Non-GMO Certification Program, it is essential that GMO testing procedures and the analysis of test results be conducted in a uniform, consistent, and scientifically robust manner. The testing methods selected for this purpose are those that have been internationally established by the Global Laboratory Alliance (GLA).

Laboratories that are not GLA members may either join, or license relevant methods from the GLA to satisfy the requirement of conducting PCR testing according to FoodChain ID approved methods. Such laboratories must be and maintain ISO ISO/IEC 17025:2005 (BS EN ISO/IEC 17025:2005) accreditation by their national accreditation body.

- **11.4** All FoodChain ID certified products must demonstrate Non-GMO status through PCR testing of product at a point where sufficient DNA is present to validate the requirements of the Targeted Threshold Tolerance Level(s) of the FoodChain ID Non-GMO Global Standard.
- **11.5** PCR testing methods shall include the screening of specific GM traits, non-approved varieties and appropriate GM tolerance levels as identified in the Testing Plan.
  - **11.5.1** The Testing Plan shall include consideration of possible risks of contamination by commercialized varieties that are unable to be tested due to unavailability of the genomic map and/or the absence of testing reagents.
- **11.6** Inputs or Products that have no testable protein or DNA based on the Risk Assessment shall be required to have evidence through testing that the input or product was sourced from Non-GMO inputs.
- **11.7** Organizations shall retain all applicable test results to validate Targeted Threshold Tolerance Level(s) have been met.

## 12.0 Labeling and Label Claims

- **12.1** The Organization shall claim FoodChain ID certification only for the facilities or sites for which FoodChain ID certification status has been awarded.
- 12.2 Where the Organization deals with both certified and uncertified products, it must ensure that the FoodChain ID Non-GMO logo is only used in respect to FoodChain ID certified products and that certified products are clearly distinguished from uncertified products.
- **12.3** Where the Organization elects to use the FoodChain ID Non-GMO logo or another Non-GMO related claim, the product bearing the claim shall satisfy the requirements set forth within the countries where the products are produced and where final products are intended for sale.
- 12.4 The FoodChain ID Non-GMO logo shall only be applied to products that meet the Targeted Threshold Tolerance Level(s) of the FoodChain ID Non-GMO Global Standard.

# Section IV - CERTIFICATION PROCESS

The flow diagram provides essential background information detailing the steps involved in gaining and maintaining certified status.



#### Self-Assessment

As a first step to certification, it is recommended that the Organization carries out a self-assessment against the Standard to ensure that it understands the requirements and has the appropriate systems in place to meet those requirements.

Optionally, the Organization may request that a pre-audit be carried out by FoodChain ID to act as a gap analysis to identify any further work that may be required before the certification inspection (audit) is requested. The service proposal issued by FoodChain ID will confirm its status as a pre-audit but will not lead to certification irrespective of the outcome. During a pre-audit the auditor can explain what the Standard expects in relation to its requirements but cannot offer specific solutions to the Organization where compliance is not demonstrated.

The Organization may be asked to provide FoodChain ID with background information prior to the audit to ensure the auditor is fully prepared and to provide the best opportunity for the audit to be completed efficiently. Information that may be requested may include but is not limited to:

- Organizational Policy Statement that demonstrates commitment to the supply of Non-GMO products;
- Organizational chart;
- Process flow diagram(s) related to Non-GMO;
- Floor plan;
- Risk Assessment Plan which identifies GMO risks;
- Inputs and final products lists; and
- Sampling and testing plans.

### FoodChain ID Application

Certification is sought through an application form provided by FoodChain ID. The application requests specific information related to its products and processes which are used to identify possible risks of GM contamination and to define the scope of your certification.

#### Service Proposal

A Certification proposal and agreement is provided for certification which will set out the certification plan, fee structure and payment terms and conditions. The Organization returns the signed proposal and agreement, agreeing to the terms and conditions so that the audit may be scheduled.

#### FoodChain ID Certification Scope

The scope includes the products the Organization seeks certification against and agreed GM allowance thresholds for the presence of GM. Once certified, this allows the Organization to use the FoodChain ID Non-GMO logo on compliant products and/or request Traceability Certificates of Compliance (TCC) to be issued for each lot or batch of certified product to be sold to a named buyer.

Compliance with and certification to this Standard demonstrates the Organization has the capability to produce, process, handle, supply, store and or distribute Non-GMO materials, maintaining Non-GMO Identity Preservation and traceability. Certified Organizations may request to apply the FoodChain ID Trademark which demonstrates the product is in conformance to the Targeted Threshold Level(s). Organizations may also request Traceability Certificates of Compliance or TCCs for lots or individual lots of product that are within the scope of their certification. TCCs are requested by the Organization and are issued by FoodChain ID for the Organization to forward to the purchaser of Non-GMO materials as a PDF certificate providing an additional layer of assurance.

FoodChain ID Non-GMO Trademark and TCCs are issued according to the agreed Targeted Threshold Level(s); Certification is not issued based on the Organization's geographical location, instead it is issued based on the markets and agreed Targeted Threshold Level(s) of the regions of its customers.

FoodChain ID Non-GMO certified Organizations are provided with TCCs consistent with the incoming TCC from their FoodChain ID certified supplier. A TCC for product originally with a lower threshold tolerance would qualify as in compliance with a region that has a higher threshold tolerance but not the other way around. For regions where certified product is sold and there are no designated Targeted Threshold Level(s) the target level is 0.1% with an adventitious GM presence level of up to 0.9%.

## FoodChain ID Fees

Details of fees are provided with the certification proposal and agreement. Fees are dependent upon the nature of each Organization's requirements and if applicable, products to be certified.

### Audit

FoodChain ID will assign a trained auditor to complete the certification audit.

Your auditor will:

- Confirm your intentions set forth in your application for FoodChain ID certification during the opening meeting;
- Audit your Organization to determine compliance;
- Conduct a sampling of inputs or final product for validation of sampling protocols;
- Present overall findings of the audit; and
- Provide a list of findings to the Organization.

#### Report

The auditor will produce and submit a written report of the audit, which will include:

- An introduction which summarizes the findings of the audit, the scope of audit, and details of the Organization; and
- Detailed audit findings for all the aspects observed during the audit.

The Organization will receive a copy of the report once the certification process has been completed.

Where the number or nature of any non-conformances raises doubt as to the effectiveness of systems or procedures, FoodChain ID may conduct a further on site visit to verify corrective actions have been met.

#### Corrective Action

The Organization will have 28 days to submit their corrective actions. Organizations submitting corrective actions after the 28 days may be required to undergo an additional on-site visit or forfeit their application for FoodChain ID certification.

#### Certification

A certification decision will be made by FoodChain ID based on the report, corrective actions and closeout of non-conformances. If the decision is that certification is granted, a certificate will be issued to the Organization with an annual expiration date.

#### Maintenance of Certification

FoodChain ID will contact the Organization prior to annual expiry. This is generally 5 months before the expiration date of the current certification certificate. If recertification is not sought, the use of the FoodChain ID certification certificate and logo, if applicable, shall cease on its annual expiry date and no new claims related to the FoodChain ID status shall be made. It is the responsibility of the Organization to maintain certification.

### Suspension of Certification

If the certified Organization cannot provide satisfactory objective evidence of corrective actions to discharge non-conformances, certification may be suspended or withdrawn. If FoodChain ID becomes aware of circumstances that raise doubt as to the ability of the certified Organization to meet the responsibilities and requirements of the Standard, it may ask the Organization for further information to clarify the situation. If no satisfactory explanation or assurances are received, FoodChain ID may revoke, suspend or withdraw certification. Organizations may also choose to withdraw from the program through a formal withdrawal request in writing.

### Complaints

Organizations have the right to file a complaint. Complaints should be submitted in writing to FoodChain ID, detailing the nature of the issue, the personnel involved, and any relevant dates. Complaints will be handled according to FoodChain ID's complaint procedure.

### Appeals

Should an Organization disagree with the certification decision, it has the right to appeal. Appeals shall be submitted in writing, stating the decision made by FoodChain ID and the reason for dispute. Appeals shall be submitted to FoodChain ID. An Appeals committee will be assigned to adjudicate the matter. The decision of the committee will be final. In circumstances of suspension, withdrawal, complaint, or appeal, the Organization will be informed in writing of the action taken/decisions made. FoodChain ID will not reimburse any fees incurred.

### Trademark (seal) use and marketing claims

The certified Organization's use of FoodChain ID Trademark shall be limited to claims regarding the certification scope. The certified Organization, by advising FoodChain ID, may request a change of scope from time to time in which case FoodChain ID reserves the right, with due justification, to reaudit at that time or at a later time and may require an additional administrative and/or audit fee.

The certified Organization agrees not to use its certification in such a manner to discredit FoodChain ID or make statements regarding its product certification which FoodChain ID may consider false or misleading or otherwise unauthorized. Use of the FoodChain ID Trademark in any media including but not limited marketing materials, specifications, datasheets, websites electronic or hardcopy shall not mislead.

The FoodChain ID name and the FoodChain ID Trademark shall be used in accordance with necessary restrictions to preserve FoodChain ID's ownership of the name and trademark. Certified Organizations shall notify FoodChain ID in writing of any actual or suspected infringement of the trademark of which the certified Organization becomes aware, and will fully cooperate with and assist FoodChain ID in ascertaining the facts if it is reported that non-compliant products bear the trademark. The certified Organization agrees to take all necessary corrective action and report the actions taken to the FoodChain ID regarding all non-complying products, activities, or processes.

## Section V – DEFINITIONS

**FoodChain ID Approved Laboratory** - a laboratory that is a member of the Global Laboratory Alliance (GLA) or licenses and uses standardized operating procedures established by the GLA. **Chain of Custody** - chronological trail showing the ownership, control, transfer and disposition of the

product.

Consignment - volume of a shipment of product changing custody or ownership in the supply chain,

composed of one or more production lots, or split from a given single or composite lot. A consignment can be comprised of merged consignments and can be split into various consignments. Each consignment is assigned a unique identification number for traceability purposes and inventory control, linked to the original production lots.

**Contractors or subcontracted organizations** - a person or company that provides services or products to the certified Organization under a signed agreement or contract.

**Control Point** - a condition of which has been identified through risk assessment to eliminate failure of an identified risk. Control Points are most easily identified in the form of a process flow chart.

**Deputies** - employees that have been assigned responsibilities and authority over specific job duties in the absence of the employee who has the designated primary responsibility and authority.

**Distribution, Storage and Handling Operations** - services provided in relation to certified product whether by water, land or air including transshipment services which involve no physical change in the state of the product, its packaging, or its labelling

**DNA -Deoxyribonucleic acid (DNA)** - is a molecule that carries most of the genetic instructions used in the development, functioning, and reproduction of all known living organisms and many viruses.

**Document Control Procedure** - a written procedure, which provides the ability to track documents within the organization's authority to maintain a record of revisions and removal.

**GM (Genetically Modified or Genetic Modification)** - products or processes employing gene splicing, gene modification, recombinant DNA technology, or transgenic technology. Also refers to products produced using one or more GM inputs or process elements.

GMO - Genetically Modified Organism

HACCP-based - Hazardous Analysis Critical Control Point

A systematic approach through identifying measurements or control points, which reduce risks of biological, chemical, and physical hazards in a process that can cause a finished product to not meet targeted controls.

**Identity Preservation/Identity Preserved (IP)** - use of segregation and traceability procedures to maintain the identity of specific lots of agricultural or processed products throughout all stages of production, maintenance, transportation, storage and processing. IP is primarily used to preserve the authenticity of defined traits or characteristics of products, one of which is the Non-GMO status of the product.

**Inputs** - any material or substance that becomes a part of the final product, or a component of which becomes a part of the product. These include the following:

- Agricultural inputs, such as seeds;
- Unprocessed agricultural products, such as vegetables, grains, fruit, greens, herbs, and other fresh foods etc.;
- Feed components, such as grains, forage plants, vitamins, enzymes, minerals; and/or
- Manufacturing and processing inputs, including ingredients, flavorings, seasonings, colorings, additives, enzymes and all other substances present in final, manufactured products, such as residues of processing aids.

Inspection - an on-site audit, assessment or evaluation.

**Isotope Analysis** - Most chemical elements exist as two or more isotopes. Isotopes of the same element have the same chemical properties but different mass and this affects various chemical, biological and physical processes. This can lead to small but measurable variations in the isotopic composition of the product/material, which is affected by climatic, geochemical, hydrological and anthropogenic factors at the site of production. Thus, each product/material acquires a natural marker, the so-called "isotopic fingerprint." This fingerprint is specific and cannot be easily altered by processing or by chemical additives.

**Lot** - a volume of product originated in agriculture or in industrial processing and assigned a unique identification number identifying that production volume.

**Micro Inputs** - A micro input is one that comprises less than 0.3% of the product's weight. Water added during processing and/or manufacturing shall be excluded from the calculation of the percentage of the inputs in the final product.

**Non-GMO or Non-GM** - A plant, animal, or other organism or derivative of such an organism whose genetic structure has not been altered;

• by gene splicing, gene modification, recombinant DNA technology, transgenic technology, or

• by a process or product whose production utilizes GM processes or inputs.

Organization - means the company or legal entity that is seeking certification to the FoodChain ID Non-

GMO Global Standard for specified location/s or site/s. Organizations hold title or ownership of a product even though it may or may not physically handle the product.

**PCR Testing** - a biochemistry and molecular biology technique for isolating and exponentially amplifying a fragment or sequence of interest of DNA, via enzymatic replication, without using a living organism.

**Product or Finished Product** - refers to products that are assessed as part of the FoodChain ID Non-GMO Global Standard certification process, which the certified Organization offers to the market, at whatever stage of the production chain (i.e. as a final consumer product, an ingredient for further manufacturing, a raw agricultural crop or commodity, etc.).

**Program or the FoodChain ID Program** - as described in this document, the term Program with a capitalized 'P' signifies solely the procedures, records operated to comply with the FoodChain ID Non-GMO Global Standard.

**Quality Management System (QMS)** - an organization's written goals, procedures, processes, forms, and resources needed to implement and maintain the organization's functionality including the records used to demonstrate the QMS is operating according to the QMS.

**Risk Assessment (Plan, Program)** - a HACCP based assessment to define the failure risks in order to apply appropriate Control Points.

**Segregation** - the system of facilities, equipment, and procedures through which a certified Organization keeps FoodChain ID certified product physically separated from other materials.

Shall or Must - compliance with this requirement is mandatory.

**Should or May** - a non-mandatory requirement; the implementation of which will provide a greater degree of conformance and consistency of conformance to the IP requirements or conditions at a given step in the process.

**Standard** - the 'Standard' herein refers to the FoodChain ID Non-GMO Global Standard (i.e. this document). **Strip Tests** – immunologically based screen testing strip device which analyze the protein expressed by the DNA, and used as a rapid method for the identification of GM presence.

Supplier - any party from whom an input is obtained.

**Targeted Threshold Tolerance Level** - a defined range of acceptable GM contamination levels found in a specified product for a specified region e.g. country.

**Testing Plan** - provides the organization the written procedures to ensure testing meets the risks identified from the risk assessment to ensure testing eliminates risk.

**Traceability Certificate(s) of Compliance (TCC)** - an official document issued by FoodChain ID on behalf of a FoodChain ID certified seller for a lot or specific lot(s) of FoodChain ID certified product to a buyer. The TCC documents the actual chain of custody.

**Traceability (Program)** - a system of documentation that enables any organization in the supply chain to trace the product or raw material or a derivative thereof back through the chain.

Validated - objective evidence used to verify that a control or measure can meet a specified requirement. Where appropriate - the organization will risk assess the requirements of the Standard and put in place systems, procedures or equipment to meet the requirement being mindful of legal obligations upon the business operator.

# Section VI – REVISION HISTORY

Revision History							
Title	Date	Notes	Version				
Certification Programme for Organisations Supplying Non-Genetically Modified Soya and Maize Products and Derivatives and their Inclusion in Finished Products	June 1999 - November 2002	Original standard designed for soya and maize	v1.0 - v3.0				
Cert ID Non-GMO Certification Program	March 2004	Conversion from grains to all products	v4.0				
Cert ID EU Regulatory Compliance Certification Program	March 2004	Standard related to EU Regulation requirements	v4.0				
Cert ID Non-GMO Standard	November 14 2008	Additional guidance notes added	v5.1				
Cert ID EU Regulatory Compliance Standard	October 1 2008	Additional guidance notes added	v5.0				
Cert ID Non-GMO Global Standard	June 27 2017	Combined Non-GMO Standard and EU Regulatory Compliance Standard.	v6.0				

		Implementation of threshold tolerance levels.	
FoodChain ID Non-GMO Global Standard	July 16, 2018	Re-issued as FoodChain ID Non-GMO Global Standard	v6.1