NON-GMO STANDARDS

(EGS-1001: 2022, Issue 6, 05-05-2023)

EKO-GUARANTEE PRIVATE LIMITED

Index

Appendices

Section-1- Scope of Eko-Guarantee Non-GM Standards

1. Product Classification:

a. Seeds and Planting Material,

b. All Agro Products, ingredients, inputs including unprocessed and processed,

c. All Processing aids and additives used in Food Industries,

d. All Products of Animal Husbandry (e.g., Honey, Beeswax, wool, hides, dairy, meat, etc.),

e. Animal Feed

f. Cosmetic and Textiles

2. Exempted Products:

All Genetically Modified Products and Derivatives are Exempted from this Standards. All genetically modified animals are also exempted from this standard and certification.

(In case of any product NOT mentioned in this standard subject to evaluation by Eko-Guarantee prior to evaluation and certification. Formal application for the same shall be made to Eko-Guarantee to initiate the process.)

Section-2- Requirements for Crop Production and Farmers Group

Crop production activities including farmers group shall comply with the requirements given in this section standard. These requirements shall be applicable for all crops including perennial as well as annual crops cultivated.

Operators or producers seeking Non-GMO Certification shall have following requirements implemented in their system plan and activities to develop the quality management system suitable with Non-GM standards for certification.

1. Conversion Requirements:

Non-GM system of production is a process of production which is without the use of any GM organisms in all the farming operations from seed to harvest. There is no requirement of conversion period. The farming unit is deemed converted to Non-GM system of production when any crop is produced without any GM organisms.

Simultaneous production of GM production and Non-GM production of crops or animal products which cannot be clearly distinguished from each other, will not be allowed.

2. **Fertilization Policy:**

No GM products or products with GM are allowed to be used as fertilizers in any form to be used for fertilization and soil nutrient management.

All GM and GM derived inputs are prohibited for Non-GMO certification under this standard.

3. **Pest, Disease and Weed Management including Growth Regulators:**

No GM products or products with GM are allowed to be used as pest control and weed control or as growth regulators.

4. **Contamination Control:**

All relevant measures should be taken to avoid all possible contamination of GM organisms from outside and from within the farm.

5. **Organization for Group Production of NON-GM Crops and Livestock Production:**

This system shall be based on the internal quality system and shall apply to producer groups, farmer's cooperatives, contract production and small-scale processing units. The producers in the group must apply similar production systems and the farms should be in geographical proximity.

Farms with land holding of 4 ha and above can also belong to a group but will have to be inspected annually by the external Inspection and Certification Agency. The total area of such farms shall be less than 50% of the total area of the group. Processors and exporters can be a part of the same group but will have to be inspected annually by the external Inspection and Certification Agency.

i. **Constitution Of The Group Organization:**

The group will have a legal status or constitution of the organization and shall be presented by an organizational chart.

For implementation of the procedures to maintain the internal control system, responsibilities shall be delegated to individual members / committees for carrying out specific activities.

ii. Internal Quality System (IQS):

Group certification is based on the concept of an Internal Quality System comprising of the following:

- Implementation of the internal control system
- Internal standards
- Risk assessment

An external inspection and certification body should be identified for conducting annual inspection of the individual group / unit. The external inspection agency shall evaluate by checking the IQS documentation, staff qualifications and re-inspecting some farms.

iii. How To Develop An IQS:

The following are the minimum requirements for setting up an IQS for grower groups:

- Development of Internal Control System (ICS)
- Identification of producer groups
- Creation of awareness about group certification
- Identification of qualified personnel for maintaining the internal control system
- Give necessary training in production and IQS development
- Preparation of IQS manual containing policies and procedures
- Implementation of the policies and procedures
- Review and improvement of the IQS document for maintaining a harmonized IQS.

iv. Internal Quality System Manager (IQS Manager):

IQS manager shall develop and implement the IQS and would be responsible to organize internal inspections, coordinate between field staffs, approval staff, and the external inspection agency. The IQS manager shall have defined procedures to approve or sanction farmers.

The responsibility of IQS manager shall be to ensure that all the standards requirements are fully implemented by the group.

v. Internal inspectors:

Adequate number of internal inspectors shall be identified from within the group. The inspectors shall be qualified and well versed with the standards to perform internal inspections.

Internal Inspectors shall be familiar with the location, conditions and actual field situations in order to perform internal inspections. Group shall ensure conflict on interest for all internal inspectors to implement the standard requirements.

vi. Approval manager / committee:

Qualified person or approval committee shall be designated from within the group to take the approval decision. The approval manager/committee shall be well versed with Non-GM procedures of IQS, internal standards and Non-GM standards.

vii. Field officers:

Field officers should be identified among the group, one at each production area. The field officer shall train the farmers by organizing field extension services. Farmer training and field officers training shall be regulated by the group.

viii. Purchase officers:

Purchase officers shall be identified who would be responsible for correct purchase of produce from the farmers. The purchase officer is required to be well versed with Internal Standard and Non-GM Standard requirement.

ix. Warehouse manager:

If there are separate warehouses, it may be necessary to have a warehouse manager who would be responsible for handling the produce. He / she shall be well versed with the procedures of IQS for proper implementation.

Warehouse manager shall be well versed with Internal standard of the group along with Eko-Guarantee Non-GM Standard.

x. Processing manager:

If a processing unit is operated by the IQS operator/ Group, it may be necessary to assign a processing manager. The processing manager is required to be trained in the handling procedures. When the processing of the produce is being organized in a company, the latter needs to be inspected by the certifier and would be responsible for processing according to the internal handling rules as well as according to Eko-Guarantee Non-GM Standard. In such case, the processing unit shall have a formal contract with the grower group.

6. Internal Standards:

The internal standards shall be prepared in local language by the IQS/Group manager for the region of operations under the framework of Eko-Guarantee Non-GM standard. If the farmers are illiterate, the internal standards shall contain illustrations in the text for better understanding. The internal standards would contain: -

- Definition of production unit,
- Group constitution and functions,
- Farm production norms for the entire production unit (e.g., seeds, nutrient management, pest management, soil management, approved inputs, prevention of drifts, livestock husbandry management),
- Harvest and post-harvest procedures.

7. Conflict Of Interest:

The IQS personnel shall not have any conflict of interest that might hinder the work. All possible conflicts shall be declared in a written statement. In such cases, the IQS shall ensure that alternative solutions are found.

Documented conflict of interest shall be recorded for all the personnel included in the group and shall be presented as and when required by the certification body.

8. Trade:

The group shall market the products under a single entity. For trading the products from the group of producers, the IQS shall draw up relevant procedures.

All procedures developed for the operations shall be documented and communicated to all staff members responsible and included in the activities.

9. Procedures For Implementation Of Internal Control System:

For maintaining the internal control system, the following procedures shall be adopted by the grower group which shall be verified during internal and external inspections:

i. Registration of members:

All members of the group will be formally (legally) registered under a single entity. All farmers included in the group shall be admitted through a documented inclusion procedure. All documents relevant to the group members shall be recorded with the group which is subjected to verification by external inspection by certification body.

ii. Provision of documents to the members of the grower group:

Each member of the grower group will be supplied with docket in preferably in the local languages, which will contain the following:

- Copy of IQS manual
- Internal standards document
- Eko-Guarantee Non-GM Standard document (Each member / staff shall be communicated when there is a revision in the standards)
- Definition of the production unit
- Farm Entrance Form (farm data sheet), including last use of prohibited inputs
- Field records (main cultivation measures, use of inputs, harvested quantities, post-harvest procedures):

remark: may be included in internal farm checklist.

- Prevailing farming system and package of practices available for the area
- Details and description of the various steps required for the process flow right from cultivation to harvest and sales of the products.
- Written contract (for formal commitment) of each grower within the group
- Annual farm inspection checklist
- Information on training programmes and provision of advisory services by the field officers.

iii. Operating Document:

The quality manager shall prepare the operating document, which shall be followed by all the members of the group. The operating document will contain the following: -

An overview map (village or community map) showing location of each member's production unit. The map should indicate the crops cultivated in rotation and also mark any farm in an area, which could be identified as high risk due to drift from GM producing/cultivating farms.

Farmer's list with code and name of the farmer, total area, area under crop (or number of plants), date of registration with the group, date of last use of forbidden products, date of internal inspection, name of internal inspector, result of internal inspection.

List of farmers who have been issued sanctions with the reason and the duration of the sanction (if relevant).

The risk shall be assessed by IQS manager for the grower group every year. The risk assessment should be made at the farm level, processing, transporting and during trade. The IQS will take all measures to minimize the identified relevant risks.

iv. Critical Control Points For Risk Assessment:

- Measures taken by the farmers to deal with part conversion (if farmers still grow some GM crops).
- Production rules for the whole production unit, e.g., seeds, fertilization and soil management, pest management, approved inputs, prevention of drifts, animal husbandry.
- Harvest and post-harvest procedures.
- Processing and handling standards

v. Internal Inspections

- At least two inspections of the group (one in growing season of each crop) shall be carried out by the internal inspector and will be documented.

- The inspection will be carried out in presence of the member or his representative and must include a visit of the whole farm, storage of inputs, harvested products, post-harvest handling and animal husbandry.
- The internal inspector will also verify if the internal standards have been followed and whether the conditions of the previous internal inspection have been fulfilled.
- The visit of the internal inspector will be documented in the farm inspection checklist duly signed by the inspector and counter-signed by the member or his representative.
- In case of severe non-compliance, the results will be reported immediately to the IQS manager and all measures will be taken according to the internal sanction procedures.

vi. External Inspections:

The external Inspection and Certification Agency will inspect some of the farms for the evaluation of the grower group for efficient internal control system for compliance with the NPOP Standards.

The sampling plan for inspection shall be based on the inspector's perception of risk based on the following factors:

1. Size of holding
2. Number of the members in the group
3. Degree of similarity between the production system and crop system
4. Inter-mingling / contamination
5. Local hazards

Inspection man day sampling methods for different size of the grower group shall be based on the square root of the total number of farmers in the ICS. Inspection Man day shall be estimated on the basis of the following:

- For farmers with land area below 4 hectares will be estimated as 8 to 10 farmers in one man day
- For farmers with land area above 4 Hectares will be estimated as .5 manday for each farmer.
- For Trading and Processing man day calculation will be done on the basis of total no. of products and number of transactions(domestic/international) on case-to-case basis.
- The Actual man day may vary from the estimated manday calculated at the time of inspection assignment depending on the complexity involved on site and actual time required by the auditor.

Details as per following table given below: -

Number in the grower group (N)	Number of Farmers to be inspected					
	Initial audit		Reassessment		Surveillance visit	
	Number to be inspected (n=— N)	% of total	Number to be inspected (n=0.8— N)	% of total	Number to be inspected (n=0.6— N)	% of total
< 25	5	20	4	16	3	12
26-50	5-7	19-14	4-6	15-12	3-4	12-8
51-100	7-10	14-10	11-8	22-8	4-6	8-6
101-250	10-16	10-6	8-13	8-5	6-10	6-4
251-500	16-22	6-4	13-18	5-4	10-13	4-3
501-750	22-27	4	18-22	4-3	13-16	3-2
751-1000	27-32	4-3	22-26	3	16-19	2
1001-1500	32-39	3	26-31	3-2	19-23	2
1501-2000	39-45	3-2	31-36	2	23-27	2-1
2001-2500	45-50	2	36-40	2	27-30	1
>2500	50	2	40	2	30	1

vii. Yield Estimates:

Yields will be estimated for each crop for individual farmer in the group. This activity should be carried out especially during harvesting and should be counter-checked with the estimates during buying. Yield Estimates and actual yield subjected to verification during the external inspection by the certification body.

viii. Internal Approvals:

The IQS manager will have a defined procedure to approve or impose sanction on the farmers in the group. All internal farm checklist is screened by internal approval staff with special focus on the critical control points of risk / difficult cases.

- The approval committee for providing internal certification status will check the assessment of the internal inspector. If necessary, conditions will be set out for achieving compliance with the Eko-Guarantee Non-GM Standard.
- The next competent person or committee must confirm results of the internal inspection in an approval procedure.

- Above mentioned procedure shall be recorded and documented by the group to comply with the requirements of this standard.

ix. Non-Compliances And Sanctions:

In case of non-compliances, the IQS shall take corrective or mitigating measures.

- Procedures for implementation of sanctions will be defined in case of non- compliance.
- Sanctions have to be documented (list of farmers issued sanctions, documentation of identified non conformities in the files).
- Farmers who have used prohibited inputs on their farms must undergo again the full conversion period (if they remain in the group). In such cases, it has to be checked whether the farmers have already delivered produce and whether this (now no longer certified) produce has been mingling with other produce. If this has been the case, the certification body needs to be notified immediately and the mingled produce kept separate until further instructions.

10. Training Of IQS Personnel:

Group shall be responsible for providing technical knowledge about the pre-requisites and requirements of Eko-Guarantee Non-GM Standards through a capacity building programme or training programme.

- Training programme shall be focusing on building competence among the staff personnel of group involved in unit operation mentioned in this standard. Training programme shall be subjected to annual revision and evaluation.
- Each Internal inspector available with the group shall be trained annually by a competent person either from the group or group can use external resources, such records and documents shall be recorded.
- Date of training sessions conducted along with list of participants shall be documented which is subjected to verification during internal inspection by the group as well as during the external inspection by the certification body.
- Group shall also maintain content (training material) of all training sessions conducted by the group and shall be available for verification.

11. Training Of Farmers:

Group shall be responsible for conducting training sessions for the farmers in the group and providing them technical knowledge about the requirements of Internal Standards of the group and requirements of Eko-Guarantee Non-GM Standard.

Each farmer needs to receive at least one initial advisory visit by the extension service or in an organized training.

Records of each training session conducted for farmers shall be documented including the training material used for training and information of trainer which is subjected to verification during external inspection by the certification body.

Group may also conduct demonstration of farming practices in par with Eko-Guarantee Non-GM Standard, evidences of such activities shall be recorded.

12. Buying Procedures:

To ensure genuineness of the products from the group, the following minimum requirements should be followed during buying: -

- The status of the farmer in the group should be checked.
- The supplied amount should be compared with the harvested amount and estimated yield. In case of doubt, the produce is kept apart until clarified by the IQS Coordinator.
- The delivered quantity of the product will be registered in the purchase record.
- Farmer will be issued a receipt duly signed by the purchase officer stating the quantities of the product delivered with date.
- All documents have to indicate the status of the certified product (Non-GM).

All these procedures along with the documents and records are subjected to verification during the external inspection by the certification body. Traceability verification by the certification body may also include verification of these documents.

13. Storage And Handling Procedures:

The purchase or the warehouse manager during the handling of produce shall check the document to ensure the compliance with the Eko-Guarantee Non-GM standard. The following are the minimum requirement that will be followed during storage and handling: -

- Identification of the product at all stages of product flow during transition.
- Segregation of Non-GM products from Other products.
- The location in the warehouse during storage must be labelled as 'Non-GM'.

14. Processing:

During the handling of the produce, the documentation must be checked for compliance with the Eko-Guarantee Non-GM standard.

- Central Processing Units will be inspected by the external inspection and certification body.
- During the product flow (transition), the products should be separated from other products.
- The processing steps will be documented.

There should not be use on any prohibited GM or GM derived input throughout the processing activities such as storage, transportation.

15. Packaging:

i. All agricultural produce of the group member shall be packed in appropriate packaging material which shall not affect the packed material.
ii. Packaging material shall be sealed properly, temper proof and shall not be easily manipulated.
iii. Packaging material shall be free from all GM or GM derived material, such packaging material with GM and GM derived material is Prohibited.

16. Labelling:

i. Labelling used shall clearly provide information about the product packed and labelled.
ii. Certification body shall verify the label and its compliance with the standard before approving the use of label by the certified operators.
iii. Legally responsible authority of the product or production shall be clearly mentioned on the label.
iv. Label shall also include name and logo of certification body on the label.
v. Additional information shall be provided by the operator upon request.

vi. Products shall not be labelled as “GE FREE” or “GM FREE”, 100% GM FREE. Operators can use “Certified Non-GMO” phrase on their labels.

17. **Storage:**

i. Dedicated storage facility shall be used by the operators for storage of Non-GM produce and products.
ii. Co-mingling shall be avoided with any uncertified or prohibited substances and products.
iii. Storage area shall be clearly labelled and segregated to avoid any mixing with prohibited substances and products.
iv. Storage area shall NOT be cleaned using with GM or GM based inputs and cleaning records shall be recorded and maintained.

18. **Transportation:**

i. Separate or dedicated transport facility shall be used for Non-GM products.
ii. Non-GM product shall not be transported or stored during the transportation with prohibited or not permitted materials.
iii. Non-GM products shall be clearly identified during the transportation.
iv. Transportation facility shall be cleaned prior to use and cleaning records shall be recorded and maintained.

Section-3- Requirements for Food Processor and Handlers:

All food processors and handlers involved in operating Non-GM products shall comply with this section of the standards in order to obtain the certification.

Operator must have a systematic plan in place to ensure the implementation and compliance with Eko-Guarantee Non-GM standard. Systematic plan shall cover all the operations and activities being performed by the operator.

Following given requirements shall be applicable for the food processors and handlers to ensure the Non-GM integrity of the products:

1) **Raw Material:**

i. All Raw material(s) used in processing shall be certified Non-GM. Raw material shall be verified with a valid Non-GM Certification / Transaction Certificate and in case of

unavailability of certificates, Valid ISO 17025 Accredited Lab certificate ensuring Non-GM integrity shall be available for verification.

ii. Genetically engineered microorganisms and their products are prohibited and cannot be used in any activity or product.

iii. All other processing aid including preservative, colouring agent, flavouring agent are permitted to be used, complete information of such ingredients shall be provided to certification body prior to evaluation.

iv. All ingredients shall tested for GM residue at least once annually and records of such test shall be recorded and made available for verification during external inspection by certification body.

v. In case of non-testable ingredients and raw material, Operator shall provide a valid declaration taking responsibility of Non-GM integrity.

2) **Processing:**

i. All mechanical and physical processing methods are allowed in food processing and handling.

ii. Biological activities except those which involves GM or GM derived raw material or products are Prohibited.

iii. Fermentation and such biological processes shall be considered under high-risk process category. Complete information about such processes shall be provided to certification prior to evaluation.

iv. Smoking, Drying and Precipitation processes are allowed in food processing and handling activities.

v. Extraction processes are permitted. Complete information of such processes shall be provided to certification body prior to evaluation.

vi. Irradiation process is prohibited in food processing and handling activities.

3) **Pest Management:**

i. GM or GM derived inputs shall not be used for pest management in the food processing handling facility.

ii. Physical methods of pest managements such as light traps, rat traps, temperature control and controlled atmospheric conditions are permitted.

iii. In case of biological method being used for pest management, complete information about the method and inputs shall be provided to certification body.

iv. Inputs shall be avoided with direct contact with Non-GM products and same shall be ensured with pest management records.

v. Irradiation is prohibited to be used in pest management.

4) **Packaging:**

i. Recyclable, reusable or eco-friendly packaging material for Non-GM food product packaging shall be used by the operator.

ii. Packaging material shall be appropriate with the packed food material, packaging material shall be temper proof, seal proof and shall not be manipulation susceptive.

iii. Packaging material shall be free from all GM or GM derived material, such packaging material with GM and GM derived material is Prohibited.

5) **Labelling:**

i. Labelling used shall clearly provide information about the product packed and labelled.

ii. Certification body shall verify the label and its compliance with the standard before approving the use of label by the certified operators.

iii. Legally responsible authority of the product or production shall be clearly mentioned on the label.

iv. Label shall also include name and logo of certification body on the label.

v. Additional information shall be provided by the operator upon request.

vi. Products shall not be labelled as “GE FREE” or “GM FREE”, 100% GM FREE. Operators can use “Certified Non-GMO” phrase on their labels.

6) Storage:

i. Dedicated storage facility shall be used by the operators for storage of Non-GM produce and products.

ii. Co-mingling shall be avoided with any uncertified or prohibited substances and products.

iii. Storage area shall be clearly labelled and segregated to avoid any mixing with prohibited substances and products.

iv. Storage area shall NOT be cleaned using with GM or GM based inputs and cleaning records shall be recorded and maintained.

7) Transportation

i. Separate or dedicated transport facility shall be used for Non-GM products.

ii. Non-GM product shall not be transported or stored during the transportation with prohibited or not permitted materials.

iii. Non-GM products shall be clearly identified during the transportation.

iv. Transportation facility shall be cleaned prior to use and cleaning records shall be recorded and maintained.

8) Staff Training

i. All the staff members working in the processing and manufacturing facility should be trained as per the roles and responsibilities they perform.

ii. Training session should be conducted with the objective of safeguarding Non-GM Integrity.

iii. Annual Training schedule shall be prepared by the operator for the training of staff members.

iv. Training schedule should cover and provide training to staff members about the requirements of this Non-GM Standard.

v. Records and evidences of training sessions conducted by the operator shall be documented and recorded which will be subjected to verification by the certification body.

Section-4- Requirements for Agricultural and Food Products Traders:

All the food and agricultural traders shall comply with the following given requirements to obtain the certification and to ensure the Non-GM integrity:

1) Raw Material:

i. All products traded by the operator shall be certified Non-GM. Raw material shall be verified with a valid Non-GM Certification / Transaction Certificate and in case of unavailability of certificates, Valid ISO 17025 Accredited Lab certificate ensuring Non-GM integrity shall be available for verification.

2) Pest Management

i. GM or GM derived inputs shall not be used for pest management in the trading facility.

ii. Physical methods of pest managements such as light traps, rat traps, temperature control and controlled atmospheric conditions are permitted.

iii. In case of biological method being used for pest management, complete information about the method and inputs shall be provided to certification body.

iv. Inputs shall be avoided with direct contact with Non-GM products and same shall be ensured with pest management records.

v. Irradiation is prohibited to be used in pest management.

3) **Storage:**

i. Dedicated storage facility shall be used by the operators for storage of Non-GM produce and products.

ii. Co-mingling shall be avoided with any uncertified or prohibited substances and products.

iii. Storage area shall be clearly labelled and segregated to avoid any mixing with prohibited substances and products.

iv. Storage area shall NOT be cleaned using with GM or GM based inputs and cleaning records shall be recorded and maintained.

4) **Labelling:**

i. Labelling used shall clearly provide information about the product packed and labelled.

ii. Certification body shall verify the label and its compliance with the standard before approving the use of label by the certified operators.

iii. Legally responsible authority of the product or production shall be clearly mentioned on the label.

iv. Label shall also include name and logo of certification body on the label.

v. Additional information shall be provided by the operator upon request.

vi. Products shall not be labelled as “GE FREE” or “GM FREE”, 100% GM FREE. Operators can use “Certified Non-GMO” phrase on their labels.

5) **Transportation:**

i. Separate or dedicated transport facility shall be used for Non-GM products.

ii. Non-GM product shall not be transported or stored during the transportation with prohibited or not permitted materials.

iii. Non-GM products shall be clearly identified during the transportation.

iv. Transportation facility shall be cleaned prior to use and cleaning records shall be recorded and maintained.

6) Staff Training

i. All the staff members working in the trading facility should be trained as per the roles and responsibilities they perform.
ii. Training session should be conducted with the objective of safeguarding Non-GM Integrity.
iii. Annual Training schedule shall be prepared by the operator for the training of staff members.
iv. Training schedule should cover and provide training to staff members about the requirements of this Non-GM Standard.
v. Records and evidences of training sessions conducted by the operator shall be documented and recorded which will be subjected to verification by the certification body.

Section-5- Cosmetic Requirements:

All the raw material and products along with processes shall comply with the requirements outlined in this standard document. any type of GM or GM derived raw material or product is strictly prohibited to be used.

1) Processes:

i. All the following processes are allowed to be used by the operators, documented procedure and records shall be maintained for the same which is subjected to verification by the certification body during evaluation:

- ✓ Absorption
- ✓ Blending
- ✓ Bleaching
- ✓ Centrifuging
- ✓ Decoction
- ✓ Deodorisation
- ✓ Decoloration
- ✓ Drying
- ✓ Deterpenation
- ✓ Distillation
- ✓ Expression
- ✓ Extraction
- ✓ Filtration
- ✓ Purification
- ✓ Freezing
- ✓ Grinding
- ✓ Infusion
- ✓ Lyophilisation
- ✓ Maceration
- ✓ Microwave
- ✓ Percolation
- ✓ Pressure
- ✓ Roasting
- ✓ Settling And Decanting

- ✓ Sifting
- ✓ Squeezing
- ✓ Crushing
- ✓ Sterilisation
- ✓ Ultrasound
- ✓ Vacuum

ii. Extraction process is allowed only if water or any other plant-based solvent is used in the process including honey, non-gmo vegetable oil.

iii. Decolorization agents permitted for use are activated charcoal, bleaching earth, ozone, hydrogen peroxide and bentonite.

iv. Deterpenation, Distillation and Expression processes are allowed if carried out with steam only. If any other agent is being used, It will categorize these processes under Not allowed category.

v. Sterilization process shall be carried out with physical thermal method and temperature should be in accordance with the raw material or products involved.

vi. Animal origin Bleaching agent is not allowed to be used in the process.

vii. Decolorizing agents such as animal origin, sodium hypochlorite is prohibited.

viii. Radiation is NOT allowed in any form in the processes.

ix. Mercury based processes or processes which involves use of mercury is prohibited.

x. Ethylene Oxide, Propylene Oxide or Other Alkylene Oxides are prohibited to be used in the manufacturing process of cosmetic products.

2) **Raw Material:**

i. All the raw material used in the manufacturing of cosmetic products shall be Non-GMO or Organic with their evidencing supporting scope certificates / transaction certificates or accredited lab test reports.

ii. Water used in the manufacturing process shall be safe for human consumption and shall comply with national safety guidelines and requirements.

iii. All the raw materials are allowed to be processed as per the allowed list given above.

iv. Alcohol and other fermented products as well as by-products shall comply with these requirements and shall be sourced from Non-GM or Organic source with supporting evidences.

v. All the oils and their derivatives used in the cosmetic products and manufacturing process shall be sourced from Non-GM source.

3) **Pest Management:**

i. GM or GM derived inputs shall not be used for pest management in the trading facility.

ii. Physical methods of pest managements such as light traps, rat traps, temperature control and controlled atmospheric conditions are permitted.

iii. In case of biological method being used for pest management, complete information about the method and inputs shall be provided to certification body.

iv. Inputs shall be avoided with direct contact with Non-GM products and same shall be ensured with pest management records.

v. Irradiation is prohibited to be used in pest management.

4) Storage:

i. Dedicated storage facility shall be used by the operators for storage of Non-GM raw material and products.

i. Co-mingling shall be avoided with any uncertified or prohibited substances and products.

ii. Storage area shall be clearly labelled and segregated to avoid any mixing with prohibited substances and products.

iii. Storage area shall NOT be cleaned using with GM or GM based inputs and cleaning records shall be recorded and maintained.

5) Packaging:

i. Recyclable, reusable or eco-friendly packaging material for Non-GM food product packaging shall be used by the operator.

ii. Packaging material shall be appropriate with the packed food material, packaging material shall be temper proof, seal proof and shall not be manipulation susceptive.

iii. Packaging material made or containing or have been derived from or manufactured using genetically modified organisms is prohibited.

iv. Carbon dioxide, Nitrogen, Oxygen, Argon and Air is allowed to be used in the packaging process.

6) Labelling:

i. Labelling used shall clearly provide information about the product packed and labelled.

ii. Certification body shall verify the label and its compliance with the standard before approving the use of label by the certified operators.

iii. Legally responsible authority of the product or production shall be clearly mentioned on the label.

iv. Label shall also include name and logo of certification body on the label.

v. Additional information shall be provided by the operator upon request.

vi. Products shall not be labelled as “GE FREE” or “GM FREE”, 100% GM FREE. Operators can use “Certified Non-GMO” phrase on their labels.

7) Staff Training

i. All the staff members working in the trading facility should be trained as per the roles and responsibilities they perform.

ii. Training session should be conducted with the objective of safeguarding Non-GM Integrity.

iii. Annual Training schedule shall be prepared by the operator for the training of staff members.

iv. Training schedule should cover and provide training to staff members about the requirements of this Non-GM Standard.

v. Records and evidences of training sessions conducted by the operator shall be documented and recorded which will be subjected to verification by the certification body.

Section-6- Traceability Requirements:

i. All operators or producers should establish a system that ensures the complete traceability of their raw material as well as final products.

ii. Documented procedure must be available for ensuring traceability

iii. Traceability programme should be able to trace the ingredient(s) or final product(s) both backward and forwards, i.e., trace and track.

iv. Labelling and Packaging must be included traceability programme.

v. Operator should conduct verification of traceability system periodically and document the verification process and results.

vi. Traceability programme should be able to trace even an ingredient from a particular batch to its origin and vice versa. During on-site inspection auditor should test the effectiveness of the system.

vii. In case of any fraud or malpractice in production or trading of Non-GM ingredient(s) and product(s), Traceability system must be subjected to cross verification and examination.

Section-7- Evaluation by Eko-Guarantee:

All Operators and Producing Facilities are required to be inspected at least once annually regardless of the risk involved.

EKO-GUARANTEE may require additional inspections based on an overall risk analysis of the supply chain undergoing evaluation.

At EKO-GUARANTEE discretion, unannounced inspections may be used to ensure compliance with this Standard.

Section-8-Sampling & Analysis:

i. All raw materials and final products must comply with the sampling and analysis requirements of this standards. Certification body shall also conduct period and surveillance sampling and analysis of operators based upon risk involved.

ii. All operators shall demonstrate the compliance with this section of standards through GM residue analysis of their raw material and final products at least once annually. Testing shall be carried out through an ISO 17025 or NABL accredited laboratory. Test reports shall be recorded which will be subjected to verification during external inspection by certification body.

iii. Samples drawn for testing purpose shall be drawn through composite sampling method, providing systematic representative sample of a bulk lot or product.

iv. Eko-Guarantee shall follow the sampling protocol prepared, Authorized inspector shall collect the sample after established or perceived risk. Point of sampling shall be decided based on the risk by the inspecting officer.

v. Operators needs to submitted the test results of each lot in case of transaction certificate in needed along with the application. Each lot shall be tested through NABL or ISO Accredited certification body.

vi. Preference shall be given to Gene Screening Testing as per the Appendix D of this standards.

Section-9-Declarations:

In case of Non-Testable raw material or Final products are involved then, the operator will have to produce a valid Declaration confirming compliance with Non-GM Standards. EKO GUARANTEE shall use the submitted Declaration to apply sanctions and to take appropriate action on operator if any fraudulent activity or malpractice is observed or reported.

Document shall include name and authority of signatory along with date. All Declarations must include the definitions of Biotechnology and GM as they appear in this standard. Declarations shall be accompanied with the supporting document when submitted to Eko-Guarantee.

Section-10-Abbrivations:

- **Biotechnology:**

Integration of natural sciences and engineering sciences in order to achieve the application of organisms, cells, parts thereof and molecular analogues for products and services.

- **Compliance:**

Compliance is defined as the attachment to Non-GM standards at all stages of operations

- **Certification Body:**

The Certification Body is the body responsible for inspection and certification of the operators as per Non-GM standards.

- **Evaluation:**

Evaluation is defined as the process which involves systemic assessment of product and processes along with the system of the applicant seeking Non-GM Certification.

- **Grower Groups:**

Grower Groups are defined as the group of producers or farmers who are involved in production of Non-GM produce as per Non-GM Standards.

- **Internal Control System:**

Internal Control System is defined as the control system established by the farmers or members present in the group to ensure continuous compliance with Non-GM Standards.

- **Internal Quality System:**

A systematic, independent and documented process for continuous compliance with Non-GM Standard.

- **Labelling:**

Labelling shall mean any written, printed or graphic representation that is depicted on the label of the certified Non-GM product, for the purpose of promoting its sale.

- **Non-Conformity:**

Non-conformity is defined as a condition when a product, process, procedure, system, or structure deviates from requirements of the Non-GM standard.

- **Non-GMO:**

Any substance or organism which has not been genetically modified.

- **Operator:**

A farmer, processor, processor, handler and trader who is under Non-GM certification shall be considered as Operator.

- **Producer:**

A producer shall mean an individual farmer/group of farmers/food processors handler and traders practicing Non-GM product and processes.

- **Processing Aids:**

Any substance or raw material added in the food product during the processing in order to achieve final desired product is called as Processing Aid.

- **Scope Certificate:**

A certificate issued by the Certification Body to its operator annually for their specific activity in terms of production, processing and trading in par with the respective standards.

- **Transaction Certificate:**

A certificate issued by the Certification Body to its operator for specific batch or lot of his product to the buyer.

Appendix A

Rationale of Approving the Sampling for Testing Plan SYSTEMATIC/GRIDSAMPLING

OVERVIEW

Systematic sampling, also called grid sampling or regular sampling, consists of collecting samples at locations or over time in a specified pattern. For example, samples might be collected from a square grid over a set geographical area or at equal intervals over time. Systematic designs are good for uniform coverage, ease of use, and the intuitive notion that important features of the population being sampled will not be missed. Also, samples taken at regular intervals, such as at every node of an area defined by a grid, are useful when the goal is to estimate spatial or temporal correlations or to identify a pattern.

Sampling will be determined by the Certification officer at time of assigning the Inspection Assignment to the Inspecting officer on the basis of Established Risk (As per Appendix B and C at the time of application review) and Perceived Risk (Actual risk identifies as per appendix B and C). Established risk is the risk that the certification officer identifies or foresees after evaluation of the documents received before the onsite / offsite inspection. Perceived risk is identified by the inspecting officer at the time of the inspection which could not be established by evaluation of the documents by the certification officer (E.g., Adjoining Non-GM crop) such risk is perceived at the point of inspection. In case of established risk, the certification officer mentions the samples to be taken in the inspection assignment, but the inspector is free to take samples at the incidence of perceived risk Sampling and testing is based on the risk envisaged, sampling and testing is required where incidence of GM is prevalent in that area. On submission of the application and documents, the Certification officer will determine which part of the Plant (Seed, flower, fruit) the sample is required to be taken by the Inspecting Officer as per the GRID system (Even Row, Odd Column). The Instruction for the Sample to be taken by the Inspecting officer shall be mentioned on the Inspection assignment generated by the Certification officer at the time of filed visit. The inspecting officer shall identify on site the plant grid for which the sample is required to be taken.

In case of Warehouse audit (usually in trading units) composite samples based on row and column shall be taken from all four dimensions. No sample is required if the risk not Envisaged at all. Decision for testing shall be taken by the certification officer after evaluation of the inspection reports and other certification documents.

Samples are collected in every case of certification, however whether the samples shall be tested shall be determined by the certification officer after evaluation of the Inspection report and documents generated post inspection. In case the perceived risk is less than the established risk, sample testing may not be required unless otherwise necessary.

Sampling in case of fraudulent Declaration submitted by the client: The inspecting officer shall verify all the Declarations submitted by the client for Non-GM declaration (e.g., NON-GM Seed, NO GM Crop stored). If during verification a fraudulent Declaration is found, the inspecting officer shall take a composite sample of the product at each level of production, cultivation, processing and trading.

Appendix B – Risk List

Eko Guarantee has enlisted raw material as well as final products derived from organisms based upon their Commercial GM traceability which are as follows:

- Testable raw material and products:

Alfalfa, Canola, Corn/Maize (Except Popcorn), Cotton, Papaya, Soy, Sugar Beets, Zucchini, Yellow Summer Squash, Bean, Chicory, Cowpea, Flax Seed, Melon, Plum, Rice, Safflower, Beta Vulgaris, Brassica Napa, Brassica Rapa, Cucurbita Pepo, Mustard, Wheat, Meat, Eggs, Honey, Fish Products, Poultry Feed, Aquatic Animal Feed, Ethanol, Sucrose, Soy Protein.

- Non-Testable raw material and products:

All agricultural and food raw material(s) shall be considered under the Non-Testable category for which operator shall take responsibility of Non-GM Integrity through a written declaration. Such declarations are subjected to verification and suitable actions shall be taken in case of any fraudulent information or activity is conducted.

Appendix C

FSSAI Circular Imported crops in India

Fssai Circular.pdf

Appendix D
GM Testing Requirements

All product(s) and ingredient(s) which are testable and subjected for Non-GM Claim must be sent and tested through an ISO/IEC 17025:2017 (general requirements for the competence of testing and calibration laboratories) and/or ISO/IEC 17043:2010 (conformity assessment — general requirements for proficiency testing) and/or an NABL lab to ensure Non-GM claim and integrity of the product(s) and ingredient(s) through GM Screening of following Genes:

CaMV35S-P,

NOS-T,

FMV-P,

Cry1Ab/AC,

BAR,

PAT,

EPSPS,

nptII

mEPSPS gene.