Canadian Grain Commission | Commission canadienne des grains

Food Safety Identity Preserved Quality Management System Standard

CGC FSIP-STAN 1.1.0

Copy No. Uncontrolled

June 15, 2022
Revision 6

Canadian Grain Commission
Process Verification and Accreditation
Industry Services
800 - 303 Main Street
Winnipeg, Manitoba
Canada R3C 3G8

Canada

Contents

Food Safety Identity Preserved Quality Management System Standard

Review

This Canadian Grain Commission standard is subject to annual review. Amendments will be issued to ensure the standard continues to meet current needs.

Revision Record

Revisions to this standard will be given a consecutive number and will be dated.
Please ensure that all revisions are inserted, obsolete pages removed, and the record below is completed.

Revision No.	Revision Content and Pages	Entered by	Date
Initial Release	Supersedes CGC IP-STAN 1.1.0	J. Sutherland	May 20, 2009
Revision 1	Wording and format changes to entire document	E. Bernardin	January 14, 2010
Revision 2	Layout changes and updates based on 2010 TEAC meeting recommendations	M. Stoughton	August 1, 2010
Revision 3	Updates based on 2011 & 2012 TEAC meeting recommendations	E. Bernardin	November 1, 2012
Revision 4	Updates based on 2013-2017 TEAC meeting recommendations	E. Bernardin	April 1, 2017
Revision 5	Updates based on the 2018 TEAC meeting recommendations and GFSI Technical Requirements	M. Le Dorze	September 4, 2018
Revision 5.1	Updates to PPR-010 based on TEAC recommendations	M. Stoughton	August 12, 2019
Revision 6	Updates based on the 2021 TEAC meeting recommendations and GFSI Technical Requirements v. 2020	M. Stoughton	June 15, 2022

Distribution

Name	Position
Gino Castonguay	Director, Industry Services, Canadian Grain Commission (CGC)
Sanjiv Sharma	Program Manager, National Inspection Procedures and Regulatory Compliance, CGC
Matthieu Le Dorze	Certification and Accreditation Advisor Process Verification and Accreditation, CGC
Melonie Stoughton	HACCP Technical Advisor Process Verification and Accreditation, CGC
Accredited Service Providers	Master List at Process Verification and Accreditation Office

CANADIAN GRAIN COMMISSION
FOOD SAFETY AND IDENTITY PRESERVED
QUALITY MANAGEMENT SYSTEM STANDARD

1.0 INTRODUCTION

1.1	This Canadian Grain Commission Food Safety and Identity Preserved Quality Management System standard sets out the requirements grain companies must meet if they wish to: a) have their Identity Preserved Quality Management System certified under the Canadian Identity Preserved Recognition System Program (CIPRS); or b) have their Food Safety and Identity Preserved Quality Management System certified under the Canadian Identity Preserved Recognition System Plus HACCP Program (CIPRS+ HACCP); or c) have their HACCP-based Food Safety Quality Management System certified under the CGC HACCP Program.
1.2	The quality management system requirements common to all three programs are listed first under each heading and are not shaded. All references to Quality Management System (QMS) requirements apply to an Identity Preserved QMS for CIPRS certification and/or the food safety QMS for CIPRS+ HACCP or CGC HACCP certification.
1.3	Additional requirements for identity preservation (CIPRS) are **presented with this shading.**
1.4	Additional requirements for a HACCP-based food safety system (CIPRS+ HACCP or CGC HACCP) are **presented with this shading.**

2.0 GENERAL REQUIREMENTS

2.1	The company shall establish a Quality Management System (QMS) by: • determining the processes and the interrelation of those processes needed; and • determining how the processes will be monitored, measured and verified to ensure they are effective.
2.2	The company shall document, electronically or in hard copy, and implement the processes. The company shall provide sufficient resources and information to enable the implementation and monitoring of the processes.
2.3	The company shall define the scope of crop types, operations, business activities and company-owned facilities to be included within their QMS. The scope shall include the head office where the central function of the QMS shall be controlled, and any contracted suppliers and facilities owned and operated by other companies if they are involved in the shipment of product under CIPRS, CGC HACCP or CIPRS+ HACCP certification.
2.4 	The company shall develop, document, implement, maintain and continually improve a food safety management system designed to control the risk of physical, chemical and biological contamination of the product. The food safety management system shall meet all quality and food safety system requirements of this standard, including Annex 3.

3.0 DOCUMENTATION REQUIREMENTS

3.1 General Requirements

3.1.1	The documented quality system shall consist of, as a minimum: • quality policy and objectives; • quality manual which includes the scope of the QMS; • quality system procedures required by this standard; • an organizational structure defining the duties of the key employees that have been assigned by senior management responsibility for the quality and safety of the product; and • documents needed for the planning, operation and control of its processes.
3.1.2 	The IP documentation shall be approved by the manager responsible for the IP program.
3.1.3 	The documented system shall include food safety objectives, a HACCP Plan and documents required for the food safety requirements of this standard, including Annex 3 – Grain Safety Prerequisite Program Requirements. The food safety documentation shall be approved by the Food Safety Team Leader.

3.2 Control of Documents

3.2.1	The company shall have a documented quality system procedure, which addresses the controls for: • reviewing and updating procedures; • providing current versions of documents to staff that are clearly identified with version numbers and date of issue; • the use of written notes or temporary changes to documentation; • identifying and controlling external documents; and • preventing the use of obsolete documents and, if they are retained, ensuring their status is clearly identified.

3.3 Records

3.3.1	The company shall maintain and control quality and process records as objective evidence that the QMS meets the requirements of this standard.
3.3.2	Records shall be stored in a manner that provides for their safekeeping and retrievability and be retained for the time period required to meet customer and regulatory requirements, or a minimum of two years, whichever is greater. Only authorized persons shall dispose of records.
3.3.3	Customer records should be reviewed and authorized before being made available to the customer and a method employed that will prevent damage or distortion if records are being transported to the customer.
3.3.4 	The company shall maintain or have access to process control records which shall include the following, where applicable, and any other records deemed essential to process control by the company: • field maps; • grower contracts; • field history records; • planting records; • internal and external field inspection reports; • harvest records; • equipment clean-out records; • stock seed tags; • sampler declarations; • testing records; • storage records, bin records; and • shipping records and bills of lading.

3.3.5	Process control records shall include the following, where applicable, and any other records deemed essential to process control by the company and/or its suppliers: • CCP logbooks; • monitoring records or checklists; • minutes of food safety-related meetings; and • process control charts.

4.0 MANAGEMENT RESPONSIBILITY

4.1 Management Commitment

4.1.1	The company's senior management shall demonstrate its commitment to the QMS and continual improvement by: • developing, documenting and approving a quality policy and objectives; • assigning responsibility for developing and documenting quality objectives; • regularly communicating to staff the importance of meeting customer as well as statutory and regulatory requirements through the effective implementation of the QMS; • conducting regular senior management reviews of the QMS; and • ensuring there are sufficient resources for staff to effectively implement the QMS.
4.1.2	The company's senior management shall demonstrate its commitment to the food safety management by: • regularly reminding staff of the importance of food safety requirements; • developing and documenting food safety policy and objectives; and • establishing the legal requirements policy.
4.1.3	The company's senior management shall demonstrate its commitment to supporting a culture of food safety within the company by: • communicating food safety responsibilities to staff, as well as the risks posed to product safety when food safety responsibilities are not met; • implementing a system to encourage employee feedback on food safety-related issues and opportunities for improvement; • conducting performance measurement of the efficacy of the food safety management system based on the food safety policy and objectives, customer feedback and other key performance indicators; and • ensuring resources are available to meet food safety system performance goals and objectives.

4.2 Customer Focus

4.2.1	The company's senior management shall ensure that customer requirements are determined and satisfaction is evaluated to ensure products meet expectations.

4.3 Quality Policy

4.3.1	The quality policy approved by the company's senior management shall: • be appropriate to the company's business and operations; • state the company's commitment to follow established procedures and work at continually improving the QMS; • set out the overall purpose of the QMS and establish measurable quality objectives; • be communicated and explained to all staff; and • be regularly reviewed to ensure it continues to be relevant to the company's operations.
4.3.2	The quality policy shall be a food safety and quality policy.

4.4 Legal Requirements Policy

4.4.1	Senior management shall ensure that a legal requirements policy is developed that: • commits the company to observing and following all applicable legal requirements, both domestically and in countries to which product is exported; • includes a documented method for identifying all applicable legal requirements and changes in those requirements; and • identifies a person designated by senior management to implement the legal policy.

4.5 Planning

4.5.1	Senior management shall assign the responsibility for developing and documenting measurable quality objectives that are consistent with the quality policy to the appropriate staff. Quality objectives shall include those needed to meet requirements for the grading and labelling of the final product.
4.5.2	Senior management shall assign the responsibility for developing food safety objectives to the appropriate staff. The food safety objectives shall conform to statutory and regulatory requirements, and the food safety requirements of customers.

4.5.3	Senior management shall assign the responsibility for developing QMS processes that will result in the production of products that meet the quality objectives and customer requirements to the appropriate staff. These staff shall be responsible for ensuring the continued integrity of the QMS when changes are implemented.
4.5.4	Senior management shall assign the responsibility for developing Food Safety and Quality Management System (FSQMS) processes that meet the food safety objectives to the appropriate staff. These staff shall be responsible for ensuring the continued integrity of the FSQMS when changes are implemented.

4.6 Responsibility, Authority and Communication

4.6.1	Senior management shall assign to a management representative the following responsibilities and authorities: • ensuring that QMS processes are developed, put into practice, regularly assessed, and revised when needed; and • advising senior management of the effectiveness of the QMS and needed revisions to better meet quality objectives and customer requirements.
4.6.2	The company shall designate a person or persons responsible for the authorization of load certificates.
4.6.3	**Food Safety Team Leader** The food safety team leader assigned by senior management shall have the responsibility and authority to manage the food safety team. The food safety team leader must be an employee of the grain company.
4.6.4	**Internal Communication** All company staff shall be responsible for reporting any incidents that may impact food safety or indicate a problem with the FSQMS to their supervisor or the food safety team leader. The supervisor and/or the food safety team leader shall be responsible for initiating and recording appropriate corrective action.
4.6.5	**External Communication** The company shall establish, implement and maintain effective arrangements for communication with suppliers, customers, statutory or regulatory authorities.

4.7 Management Review

4.7.1	Senior management shall review the QMS at predetermined intervals to ensure it continues to be effective in satisfying the requirements of this standard and to determine if there are opportunities for improvement.
4.7.2	Senior management shall review the food safety system at predetermined intervals to ensure it continues to be effective in satisfying the food safety requirements of this standard and to determine if there are opportunities for improvement.

4.7.3	The management review shall include consideration of: • internal and external audit results; • analysis of results of monitoring and/or verification activities; • product conformance with customer requirements; • effective corrective and preventive actions taken as a result of non-conformances issued during audits or identified in previous management reviews; and • operational or product changes that could affect the QMS.
4.7.4	Minutes of management reviews shall be kept and a record of any actions decided on to improve the QMS or the company's product, address additional resource requirements, and/or revise the company's quality policy and related food safety and quality objectives.

5.0 RESOURCE MANAGEMENT

5.1 Provision of Resources

5.1.1	The company shall determine and provide resources to: • develop, put into practice, regularly assess, and revise when needed, the QMS processes; and • meet and enhance customer satisfaction.
5.1.2	The company shall determine and provide resources to develop, put into practice, regularly assess and revise the food safety system when needed to improve its effectiveness.

5.2 Employee Training and Records

5.2.1	The need for training of staff whose work affects product quality and safety shall be identified and provided on an ongoing basis. Evaluations of the training to ensure its effectiveness shall be undertaken. Records of education, training, skills and experience shall be retained.
5.2.2	Whenever possible, staff training should provide redundancy of skills to ensure continuity of service during absences.
5.2.3	Staff responsible for conducting analytical testing shall be appropriately trained on the methods.

5.2.4	All staff shall be trained on appropriate personnel practices (see Annex 3 PPR-007 - Personnel Training).
5.2.5	Staff with responsibilities that affect the safe production, handling, storing, conditioning, sampling, labelling, shipping and/or distribution of product shall have an awareness of food safety concepts.
5.2.6	Staff with direct responsibility for processes within the company's prerequisite program or HACCP plan shall be appropriately trained (see Annex 3: PPR-007 - Personnel Training).
5.2.7	The Food Safety Team Leader shall be trained and demonstrate competencies on the principles and implementation of HACCP-based food safety programs for grain handling.
5.2.8	Training and competencies for staff with responsibility for internal audits shall be defined. Only staff who have completed the defined training and have been deemed competent shall conduct internal audits.

5.3 Infrastructure and Work Environment

5.3.1	The company shall ensure that the buildings, workspaces, processing equipment, software, and supporting services are adequate to achieve product requirements.

6.0 PRODUCT REALIZATION

6.1 Planning and Product Realization

6.1.1	The company shall plan, document, put into practice, and regularly assess and revise as appropriate, the processes needed to produce products that meet customers' specifications. In planning production, the company shall assess: • customers' requirements for the product; • required processes specific to the product; • criteria for product acceptance; • how the quality criteria will be measured; and • what records will be kept to provide evidence that production processes and resulting product meet requirements.

6.2 Food Safety Team

6.2.1	The company shall establish a food safety team. The food safety team must possess knowledge that includes the company's products, processes, equipment, and food safety hazards within the scope of the food safety system.

6.3 Prerequisite Programs

6.3.1	The company shall establish, document, implement and maintain prerequisite programs that meet the requirements set out in Annex 3 of this standard. The prerequisite programs shall be evaluated by the food safety team to ensure that these requirements are met, and that they are appropriate to the size and operations of the company.

6.4 Establishing the Food Safety HACCP Plan

6.4.1	The company shall develop, implement and maintain a food safety plan. The company's food safety plan shall be based on the CGC generic HACCP plan that was developed by a committee of technical experts following the Codex Alimentarius Commission principles of HACCP.
6.4.2	The food safety team shall evaluate the CGC generic HACCP plan against the operations of the facility(ies) within the scope of their FSQMS. This shall include verification that the product description, incoming materials, and the process flow diagram in the generic HACCP plan accurately describe the operations of the company. The results of this verification shall be recorded (e.g. through food safety team meeting minutes). Any deviations in the company's operations from the product description, incoming material and process flow diagrams must be noted and assessed to determine if the deviations introduce biological, chemical or physical hazards not addressed by the company's prerequisite programs or the generic HACCP plan. If so, these additional hazards must be addressed in the food safety system. If inputs or processes are significantly different than the generic plan, they will be subject to evaluation by the CGC technical expert advisory committee made up of CGC grain safety experts, audit firms, provincial food safety experts and grain industry representatives.

6.5 Identification of Critical Control Points (CCPs)

6.5.1	The CGC generic HACCP plan does not identify any CCP, as all hazards are controlled by prerequisite programs that meet the requirements of Annex 3. Companies may choose to identify CCPs that they deem necessary to meet customer requirements or better control hazards within their unique operation. If CCPs are identified, the company must include the information listed below in their HACCP plan(s): • CCP hazard number; • hazard description; • monitoring procedures; • deviation procedures and corrective actions; • verification procedures; • responsibilities; and • HACCP monitoring records.

6.5.2	Critical limits shall be determined for each CCP. These limits shall be scientifically established and validated.
6.5.3	Companies shall document the planned deviation procedures and corrective actions to be taken when critical limits are not met. The corrective actions shall ensure that the cause of the nonconformity is identified, that the hazard controlled at the CCP is brought back under control, and that a recurrence is prevented.
6.5.4	A documented procedure shall be established and maintained for the appropriate handling of potentially unsafe products to ensure that they are not released until they have been evaluated (see 7.2.3) and appropriate disposition determined.

6.6 Review and Update of Company HACCP Plans

6.6.1	The CGC generic HACCP plan is reviewed annually by the CGC technical expert advisory committee. The CGC updates the generic plan as required as a result of the review process and advises all CIPRS+ HACCP, CGC HACCP clients and ASPs of the changes, the rationale for those changes, and that a revised generic HACCP plan is available on the CGC website. Companies certified under CIPRS+ HACCP and CGC HACCP will be informed of any revisions and must implement the applicable revision(s) within one (1) year of the release of the revised CGC generic HACCP plan. ASPs verify that the revisions are implemented appropriately for the facility during the next annual audit.
6.6.2	The company shall review its food safety system at least annually and when changes occur that could impact food safety. Changes to inputs, processes or products shall be evaluated to assess if they result in the introduction of new hazards and the need for new controls within the prerequisite program or the HACCP plan. A record shall be kept of this analysis.

6.7 Product Specifications and Customer Requirements

6.7.1	The company shall determine: • customers' specific product requirements, including testing, shipping, packaging, labelling, shipping documentation, and certification requirements; and • statutory and regulatory requirements, both domestic and of countries to which product is exported, associated with the testing, shipping, packaging, labelling, and certification of the product.
6.7.2	The company shall determine any customer specific food safety requirements beyond those required to meet statutory and regulatory requirements.

6.7.3	Prior to committing to supply a product to the customer, the company shall review and determine that it has the ability to meet those requirements and ensure that customer requirements are communicated to appropriate staff. When the customer provides no written requirements, the company shall confirm and document the requirements. Records of the review shall be maintained.
6.7.4	Sampling and testing of grain shall be conducted to verify non-GM IP systems. The company shall identify: • the stage in the process where grain will be sampled; • the sampling methods and procedures for obtaining a representative sample of grain; and • analytical testing methodology and sensitivity requirements for product testing.
6.7.5	Any grain safety testing methods and sensitivity requirements shall be defined. For any testing that is critical to ensuring grain safety, the company shall identify: • the stage in the process where grain will be sampled; • the sampling methods and procedures for obtaining a representative sample of grain; and • analytical testing methodology and sensitivity requirements for product testing, ensuring that the testing sampling and methodology are in accordance to ISO/IEC 17025 requirements.
6.7.6	The company shall communicate with customers as required to exchange information on product, contracts and handling of orders. Customer feedback methods shall be developed to allow for inquiries, amendments to product and shipping requirements and complaints.

6.8 Purchasing

6.8.1	Purchase orders for non-grain inputs shall only be placed with approved suppliers that have the resources and capability to meet the specified purchasing requirements of the company. Purchased non-grain inputs shall be checked to ensure they meet the specified requirements. If work is subcontracted, the subcontractor shall have the resources and capability to meet specified requirements.
6.8.2	Purchased grain and grain products shall be inspected upon receipt to ensure they can meet the requirements of the CGC's Official Grain Grading Guide and/or customer specifications and that they are free of grain safety hazards.

6.8.3	The company shall have a system for evaluating and recording the work of suppliers. The criteria for selection, evaluation, and re-evaluation shall be defined, documented and reviewed on a predetermined basis. This may be based on past performance, ability to meet deadlines and ability to supply product that meets the specified requirements and/or supplier inspection. The evaluation shall be the basis upon which satisfactory suppliers are chosen. The extent of the evaluation shall be based on the impact of the purchased product on the quality and safety of the final product and may be determined by a risk analysis. Unapproved supplies may only be used in emergency situations, and only if product meets specifications.

6.9 Production and Service Provision

6.9.1	Producing, handling, conditioning, sampling, grading, labelling, storing, distribution, and disposition of product shall be controlled through documented processes, including but not limited to, contracts, customer specifications and the regulatory requirements of the country of intended sale. Such control shall extend to approved suppliers, including outsourced services such as pest control and cleaning services.
6.9.2	Processes to be documented and controlled shall include such items as defined by the scope of operations described in section 2.0. This shall also apply to suppliers. Control measures may include, as applicable: • the availability of information that describes the characteristics of the product; • the availability of work instructions; • the use of suitable equipment; • the availability and use of monitoring and measuring equipment; • the implementation of monitoring and measurement; • the implementation of release, delivery and post-delivery activities; and • the use of production contracts.
6.9.3	The use of production contracts shall be controlled.
6.9.4	If the IP program is for soybeans, the processes must be compliant with Soy Canada's Approved Identity Preservation Procedures (Annex 1).

6.9.5	**Planting** The company shall ensure that: • appropriate stock seed is selected to fulfil the IP contract, and that the seed is traced to the grower. Where the IP contract is variety specific, certified seed shall be used; • the previous land use and isolation requirements shall be defined to meet the requirements of section 6.7; and planters and seed drills shall be clean before planting an IP crop.
6.9.6	**Cross-contamination** The company shall ensure that: • cultivation practices have been defined and implemented to prevent cross-contamination; • appropriate measures shall be in place to prevent cross-contamination of the crop during pollination; and fields shall be inspected during the growing season and the presence of any volunteer crops and their removal recorded.
6.9.7	**Harvesting** The company shall ensure that: • processes have been defined and implemented to maintain product quality and prevent contamination during harvest; • combine harvesters and trailers shall be clean and free from any seeds of other crops before harvesting; • silos and storage bins shall be cleaned before harvesting; • handling equipment used to load and unload silos and storage bins shall be cleaned prior to use; and • if any of the harvested crop is found to be contaminated beyond the requirements of the customer, this part of the crop shall not be mixed with the rest of the harvested fields, and the method of disposal shall be documented.
6.9.8	**Transportation** Processes shall be defined and implemented to prevent cross-contamination of the crop during the transportation from the farm to the final destination: • the mode of transportation shall be clean and free from other crops before being used for transportation; • a process for the inspection and if necessary, cleaning of the mode of transportation shall be defined and records of the inspections retained; and • where a supplier is used to transport the harvest, a documented procedure for the inspection and if necessary, cleaning of the mode of transportation shall be defined and records of the inspections retained.

6.9.9	**Discharge and Storage at Collection Points** To prevent cross-contamination at collection points: • purchased product shall be checked upon receipt to ensure that production requirements have been met by the grower; • on receipt, purchased product shall be sampled, inspected and/or tested. The sample shall be kept for at least six months after the received grain lot has been shipped; • where the use of dedicated facilities is not possible, cleaning and flushing processes shall be in place; and • processes shall be in place to ensure that product is not discharged into incorrect silos and out loading is carried out from the correct silo for each mode of transportation.

6.10 Identification and Traceability

6.10.1	The company shall establish and maintain procedures to ensure that all grain handled by the company is controlled and identified, including grain handled by approved suppliers. The procedures shall identify and outline the steps required to trace and recall product should a product withdrawal or food safety recall occur. An annual mock recall of both a grain and non-grain inputs shall be conducted to identify gaps in traceability and to test the efficacy of the procedures.
6.10.2	The identification and traceability system shall be such that product can be traced through the entire production and distribution system, and segregation is maintained between different product types.
6.10.3	Traceability records shall be kept for a period defined to allow for recalls of potentially unsafe products (see Annex 3: PPR-014 - Recall and Traceability).

6.11 Storage and Packaging

6.11.1	Stored grain shall be periodically checked to ensure they continue to conform to the company's food safety product specifications. The storage area shall meet all the relevant requirements regarding temperature, humidity, light, exposure, safety etc. to maintain quality and safety.
6.11.2	Any packaging or non-grain inputs used shall be food grade, clean and meet the specifications of the customer. Stored packaging and non-grain inputs shall be checked periodically to ensure that they continue to conform to the company's food safety product specifications.

6.12 Use of Certification Marks

6.12.1	Certified companies may use the CIPRS, CIPRS+ HACCP, CGC HACCP certification marks on business cards, letter head and in promotional material to indicate their certified status. When using the certification marks, certified companies shall comply with the graphics standards set out in CGC QSP 1.1.0 as provided from CGC on request.
6.12.2	The CIPRS, CIPRS+ HACCP, CGC HACCP certification marks may only be used to identify shipments that have been processed, packaged and shipped to final customer by facilities within the scope of the certified company as defined in Section 2.0.

6.13 Identifying CIPRS-certified shipments

6.13.1 	CGC load certificates may be used by a certified company to identify shipments made under a CIPRS or CIPRS+ HACCP certified program. The use of CGC load certificates is voluntary; however, if a company chooses not to use the CGC load certificates, an alternate method shall be used to distinguish identity preserved product. i.e. tags or CGC certification marks on accompanying documents. See Annex 2 for Load Certificate template.

7.0 MEASUREMENT, ANALYSIS AND IMPROVEMENT

7.1 General

7.1.1	The company shall develop and implement the methods to monitor, measure, analyze and improve the QMS.

7.2 Monitoring and Measuring of Customer Satisfaction

7.2.1	The company shall monitor customer perceptions as to whether the company has met their requirements. The methods for obtaining and using this information shall be determined.
7.2.2	The company shall document a procedure to monitor and resolve customer complaints. The procedure should identify the person(s) responsible for the receipt, investigation and follow-up activities after the complaint is addressed. The documentation addressing the complaint should include: • date the complaint is received; • name, address and phone numbers of the complainant; • description of product affected, including lot or batch numbers, packaging description (if applicable) and date of production; and • nature and details of the complaint, such as physical contamination, illness, product or packaging quality issue or allergic reaction.

7.2.3	A documented procedure shall be in place for the determination of the potential cause and scope of the issue. Complaints shall be investigated by personnel with knowledge in the area of concern. Records of customer complaints and investigation findings shall be maintained. Appropriate corrective action procedures shall be taken when an investigation finds the complaint is a result of non-conformance to the QMS.

7.3 Internal Audit

7.3.1	The company shall document a procedure for planning the scope, method and frequency of internal audits designed to ensure that the QMS meets the requirements of this standard, and that procedures are effectively maintained and complied with. This procedure shall identify the responsibilities for planning and conducting internal audits. Internal audits shall be conducted to cover the entire scope of the Food Safety and/or Identity Preserved Quality Management System standard at least annually.
7.3.2	Internal audit planning shall: • consider the impact of the processes and areas to be audited to the quality and safety products; • ensure the results of previous audits are addressed; • ensure that the competency of the internal auditors has been reviewed; and • where possible, ensure that internal auditors are independent of the audited area or process.
7.3.3	Internal audits are required at all sites included within the scope of the certification that are involved in the production, handling, conditioning, sampling, grading, labelling, storing, distribution, and disposition of product.
7.3.4	Results of internal audits shall be reported to the manager responsible for the area being audited, and corrective actions and time frames for their implementation shall be established. The implementation of corrective actions shall be verified. Results of internal audits, corrective actions and verification of corrective actions shall be recorded and reviewed by senior management during management review meetings.
7.3.5	Internal audits shall be used to confirm all prerequisite programs are implemented and the monitoring activities of the FSQMS are being conducted as documented.

7.4 Monitoring and Measurement of Product and Processes

7.4.1	The company shall develop and implement processes for monitoring and measuring criteria to verify that product meets quality, safety and customer requirements. Monitoring and measuring shall be planned to occur at points in the production process that will allow for control of non-conforming product.
7.4.2	Product shall not be shipped until authorized by designated staff. Records shall be kept of monitoring and measuring activities and authorization to provide evidence of conformity with quality and safety criteria.
7.4.3	Equipment to measure quality, safety and customer requirements shall: • be calibrated at predetermined intervals; • be calibrated against international or national measurement standards, or where there are no international or national standards, be calibrated to a recorded basis; and • be labelled such that the calibration status can be determined.
7.4.4	When product requirements have not been met, the company shall review their processes, identify where improvements are needed, and take appropriate corrective action to ensure conformity of the product.
7.4.5	All prerequisite programs shall be monitored at predetermined intervals to ensure that they are implemented and operating as intended. Verification shall be done by competent personnel. Internal audits may be used to verify that these monitoring activities are occurring as defined.

7.5 Control of Non-conformances

7.5.1	The company shall establish and maintain documented procedures to prevent the unintended use or delivery of product that does not conform to specifications. Records of all non-conformances and dispositions shall be maintained.
7.5.2	The IP product shall be isolated from the system where there is suspicion that contamination has occurred. Records shall be kept of disposition of the non-conforming product.

7.6 Recalls

7.6.1	If products that have left the control of the company are subsequently determined to be unsafe, the company shall notify the relevant interested parties and initiate a recall (see Annex 3: PPR-014 - Recall and Traceability).

7.7 Corrective Action

7.7.1	Corrective action shall be taken when there is lack of conformity with the documented QMS or when non-conformity of the documented QMS to the requirements of this CGC standard are identified. The details of the problems encountered, their cause and the required corrective action shall be recorded and given to appropriate staff for resolution.
7.7.2	A documented procedure shall be in place to ensure that the corrective action undertaken is verified to be effective.
7.7.3	Corrective actions shall be initiated when critical limits are exceeded or there is a lack of conformity with the documented FSQMS.

7.8 Preventive Action

7.8.1	The company shall document a procedure for determining and preventing potential problems in the production and delivery of product that meet quality, safety and customer requirements. Preventive actions shall be determined based on the cause of potential problems and the need for action to prevent the problem based on its potential impact. Preventive actions shall be recorded and reviewed.
7.8.2	The company shall continually improve the effectiveness of the QMS through the use of the quality policy, quality objectives, audit results, analysis of data, corrective and preventive actions and management review.

7.9 Business Continuity Plan

7.9.1	The company shall establish, implement and maintain a documented contingency plan in the event of an emergency situation or critical incident that may potentially affect the safety and/or quality of grain. Such incidents include, but are not limited to fire, flood, natural disasters, disruption of public utilities and services and limited staff availability. The plan shall include measures to prevent product from being released from the affected site until it has been assessed for continued safety.

8.0 MONITORING

8.1	The company shall participate in an external audit program at intervals specified by the Canadian Grain Commission.

Annex 1

Soy Canada

APPROVED IDENTITY PRESERVATION PROCEDURES

Revision 2

April 1, 2017

Table of Contents

REVIEW

These Soy Canada Identity Preservation Procedures are subject to periodic review. Amendments will be issued to ensure the Standard continues to meet current needs. Amendments will only be issued to registered owners of the Standard.

Scope

These Soy Canada Identity Preservation Procedures outline specifications for the quality system that must be implemented for all non-GM IP soybeans CIPRS-certified by the Canadian Grain Commission.

Complaint Procedure

Any applicant to the CIPRS who is seeking certification of a soybean IP program, but does not wish to meet the requirements of Annex 1 of CGC FSIP-STAN 1.1.0 may lodge a complaint with Soy Canada. Complaints from CIPRS applicants are forwarded to the Soy Canada Executive for action and response. The Soy Canada Executive will deal with the complaint on a case-by-case basis by:

- confirming the exact nature of the complaint via discussions with the applicant, including the reason for not wishing to meet the requirements; the part of Annex 1 they do not wish to meet; and what steps are being taken to mitigate the risk of not meeting Annex 1.

- if appropriate, conducting a risk assessment

- making a decision on whether or not the level of risk is such that not meeting the requirements would not have any adverse effect on Soy Canada and/or the Canadian soybean industry

- communicating that decision (and the results of the risk assessment if applicable) to the applicant.

ENDORSEMENT

These Soy Canada Identity Preservation Procedures are hereby approved.

Mark Huston, President

Jim Everson, Executive Director

April 1, 2017

Soy Canada Identity Preservation Procedures

Requirements	Recommended Good Practices	Records
1.0 Seed Standards		
1.1 Certified seed accredited to Association of Official Seed Certification Agencies (AOSCA) standards or equivalent must be use to plant the IP soybean variety. **"Bin run" seed not to be used.** The contracting or purchasing grain company must have a documented internal audit process that includes the validation of the use of certified seed by reviewing seed invoices or certified seed tags.		**1.1.2** Grower must retain and be able to retrieve seed sales receipt(s) and/or certified seed tags representing as objective evidence of purchasing sufficient seed to produce the quantity of Identity Preserved (IP) soybeans being contracted or delivered. The contracting or purchasing grain company must keep a record of the internal audits of approved growers.
2.0 Planting		
2.1 Planters must be thoroughly cleaned and inspected prior to planting the IP soybean variety. This must be done regardless of whether the grower uses his/her own equipment or a custom planter. Growers must agree to these cleaning procedures in writing.	**2.1.1** Grower should endeavor to plant the IP soybean crop before the planter is used on other soybean crops. IP soybean seed should be stored separately from other crop seed. Grower should refer to cleaning procedures as detailed by equipment manufacturer, if available.	**2.1.2** The contracting or purchasing grain elevator must retain and be able to retrieve the written record that the grower has agreed to the planting cleaning procedures.
2.2 The CSGA isolation distance for certified soybean seed production of 3 metre between another soybean or pulse crop must be used for the IP crop. There is no isolation distance necessary between soybeans and other crops. The contracting or purchasing grain company must have a documented internal audit process		**2.2.2** Grower must retain and be able to retrieve field maps. GPS and/or Google Maps are acceptable. The contracting or purchasing grain company must keep a record of the internal audits of approved growers.

Requirements	Recommended Good Practices	Records
that includes the validation of the required isolation distance through the review of grower field maps.		
2.3 Grower must have records of previous crop grown on IP soybean field. Growers must not plant non-GM IP soybeans on a field that was planted with GM soybeans the previous year.	**2.3.1** Growers should keep field maps or field history for 3 to 5 years.	**2.3.2** Field maps from previous crop years or other written records of crop history for fields must be retained and be retrievable for a minimum of 1 year.

3.0 Field Season		
3.1 Growers must agree, in writing, to: - inspect IP fields during the growing season to ensure proper control of volunteer crops and weeds, - verify the crop looks uniform, and - either (a) provide a field inspection report to the contracting elevator, or (b) report any problems with IP field to the contracting elevator. The elevator can choose either reporting option (a) or (b). The elevator must have a documented corrective action procedure to address non-conforming product.	**3.1.1** Contracting elevator companies should develop documented process in place that outlines for growers the criteria against which the crop is to be evaluated.	**3.1.2** The contracting or purchasing grain elevator must retain and be able to retrieve the written record that the grower has agreed to the field inspection and reporting procedures. The field inspection report must indicate whether the control of weeds and volunteers is evident, and uniformity of the soybean variety is adequate. The elevator must record any corrective action taken with respect to non-conforming product.

4.0 Harvest		
4.1 Combines must be thoroughly cleaned and inspected prior to harvesting IP soybean variety. This must be done regardless of whether the grower uses his/her own equipment or a custom combine. Growers must agree to these cleaning procedures in writing.	**4.1.1** Growers should endeavor to harvest the IP soybean crop before the combine is used on other soybean crops. Growers should refer to cleaning procedures as detailed by equipment manufacturer, if available.	**4.1.2** The contracting or purchasing grain elevator must retain and be able to retrieve the written record that the grower has agreed to the combine cleaning procedures.
4.2 Transferring equipment used during	**4.2.1** Growers should endeavor to harvest the IP	**4.2.2** The contracting or purchasing grain

harvesting of the IP soybeans must be thoroughly cleaned and inspected prior to use. This must be done regardless of whether the grower uses his/her own equipment or custom harvesting equipment. Growers must agree to these cleaning procedures in writing.	soybean crop before transfer equipment is used on other soybean crops.	elevator must retain and be able to retrieve the written record that the grower has agreed to the transfer equipment cleaning procedures.

5.0 On Farm Storage		
5.1 Storage bin must be thoroughly cleaned and inspected prior to loading. Growers must agree to these cleaning procedures in writing.		**5.1.2** The contracting or purchasing grain elevator must retain and be able to retrieve the written record that the grower has agreed to the storage bin cleaning procedures.
5.2 Equipment used to unload storage bin must be thoroughly cleaned and inspected prior to usage. Growers must agree to these cleaning procedures in writing.		**5.2.2** The contracting or purchasing grain elevator must retain and be able to retrieve the written record that the grower has agreed to the cleaning procedures for the equipment used to unload storage bins.

6.0 Transportation		
6.1 Conveyance vehicles/equipment used to transport IP soybeans from on farm storage must be thoroughly cleaned and inspected prior to transporting IP soybean crop. This must be done regardless of whether the grower uses his/her own equipment or custom trucking. Grower must record and sign a truck inspection report verifying that the truck/hopper was cleaned prior to loading. This record must be presented to the elevator at time of crop delivery. Growers must agree to these cleaning	**6.1.1** Growers should endeavor to use conveyance vehicles/equipment that have been used to transport only clean substances such as grain or food items for the previous three loads. The truck or hopper should be covered.	**6.1.2** The contracting or purchasing grain elevator must retain and be able to retrieve the written record that the grower has agreed to the conveyance vehicle/equipment cleaning procedures. The contracting or purchasing grain elevator must retain and be able to retrieve the truck inspection records provided by growers at delivery.

procedures in writing.		
6.2 If a custom trucker is used, the grower must provide the trucker with a report that identifies the IP soybean variety being delivered and the grower name. This report must be presented to the elevator at delivery.	**6.2.1** The trucker should have a completed bill of lading. The producer, trucker and receiver should sign the bill of lading.	**6.2.2** The contracting or purchasing grain elevator must retain and be able to retrieve the report and other shipping documentation provided by the trucker or the grower at delivery.

7.0 Elevator Receiving		
7.1 The elevator must have documented IP procedures for receiving.	**7.1.1** Staff responsible for receiving should be trained on and have accesses to the documented IP procedures. When purchasing grain from non-contracted growers, proof of the use of certified seed should be required from the grower.	**7.1.2** The elevator must have a documented procedure for identifying each load, including the variety and validating the eligibility of the grower to deliver. Growers that were not contracted by the elevator must sign an affidavit that attests to their adherence to all the same requirements that contracted growers have agreed to by contract.
7.2 The elevator pit, conveyors and legs must be cleaned and inspected prior to receiving IP soybeans. Cleaning procedures must be documented.		**7.2.2** The elevator must keep records as objective evidence that the pit, conveyors and legs have been cleaned and inspected prior to receiving IP soybeans. Records must include the date and the name of the employee who conducted the inspection.
7.3 Incoming loads must be identified and verified as an IP (CIPRS) delivery or a non-IP crop. SQWH and crush soybeans are **not** eligible for CIPRS certification.		**7.3.2** Scale tickets for incoming loads must indicate variety name and unloading/storage details.
7.4 Any non-IP loads that are received into the elevator must be tracked and traceable to storage and shipping.		**7.4.2** Elevator must have detailed records for storage and tracking of non-IP loads that were received into the elevator.
7.4 The elevator must take a sample from each load of IP soybeans received.	**7.4.1** The elevator should provide half of the delivery sample to the grower if requested.	**7.4.2** Samples must be labelled so that they are traceable to each delivery.

8.0 Elevator Storage		
8.1 The elevator must have documented IP procedures for binning, recording storage information and storage cleaning procedures.	**8.1.1** Staff responsible for storage should be trained on and have accesses to the documented IP procedures.	**8.1.2** The elevator must keep storage history records for each silo/bin to indicate what crop or variety was stored prior to being used to store IP soybeans.
8.2 Storage bins/silos must be cleaned and inspected prior to loading with IP soybeans. Cleaning procedures must be documented.	**8.2.1** Staff responsible for loading bins and silos should be trained on cleaning procedures.	**8.2.2** The elevator must keep records as objective evidence that silos/bins were cleaned and inspected prior to loading with IP soybeans. Records must include the date and the name of the employee who conducted the inspection.
8.3 Equipment used to load/unload bins and silos must be cleaned and inspected prior to being used for IP crop. Cleaning procedures must be documented.	**8.3.1** Staff responsible for unloading bins and silos should be trained on cleaning procedures.	**8.3.2** The elevator must keep records as objective evidence that all equipment used to load/unload bins and silos were cleaned and inspected prior to use on IP soybeans. Records must include the date and the name of the employee who conducted the inspection
8.4 Elevator must identify all bins/silos that are used to store IP soybean varieties, SQWH and crush soybeans. All elevator staff should be aware of and have access to bin/silo designation.		**8.4.2** The elevator must have detailed bin and silo maps and/or schematics and/or data indicating which crop and variety is stored in each bin.

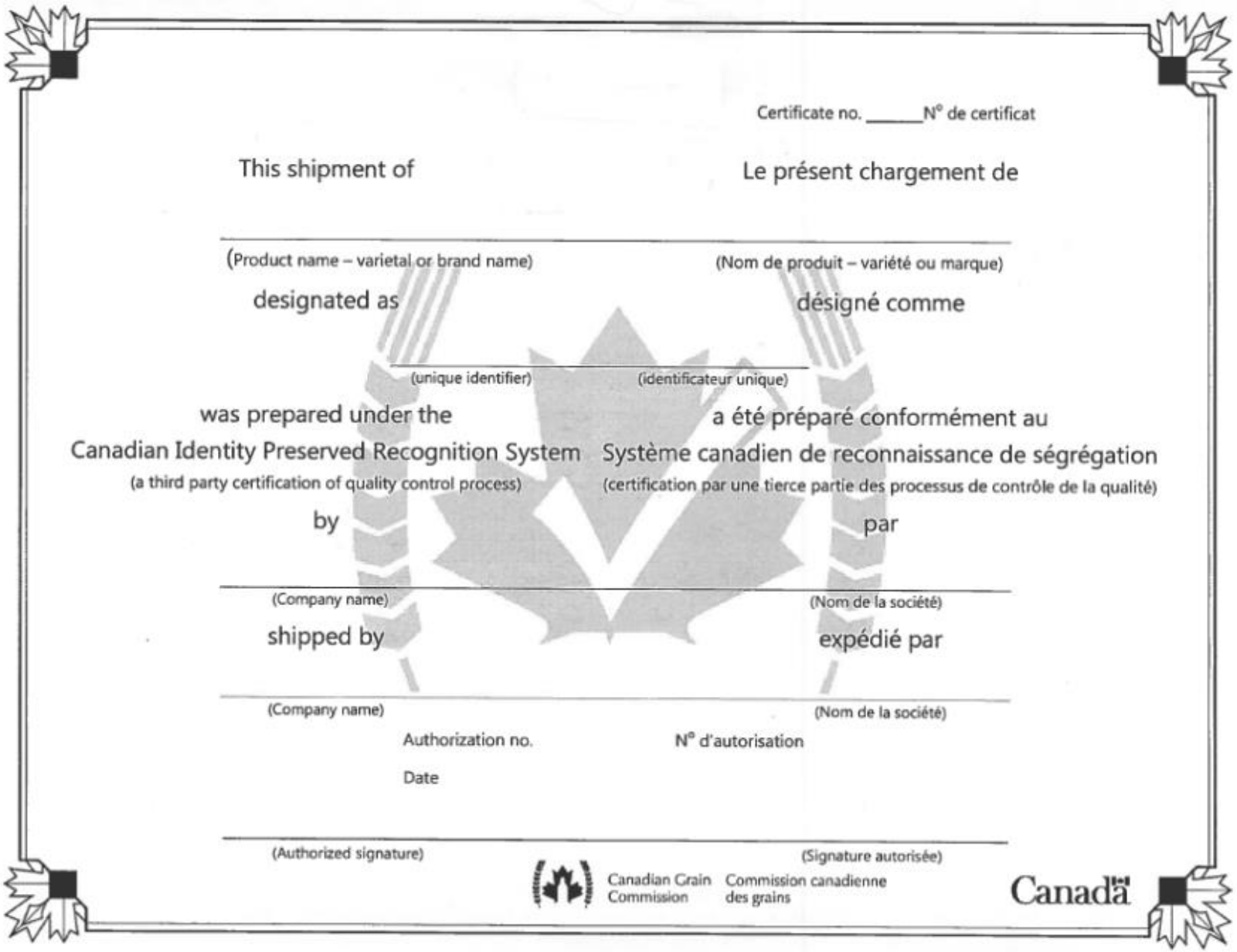
9.0 Processing		
9.1 All processing equipment must be cleaned and inspected prior to processing IP crop. Cleaning and inspection procedures must be documented.	**9.1.1** Staff responsible for processing should be trained on and have access to the documented processing and cleaning procedures.	**9.1.2** The elevator must keep records as objective evidence that processing equipment was cleaned and inspected prior to processing IP soybean crop. Records must include the date and the name of the employee who conducted the inspection.
9.2 The elevator must have a documented process for recording all movement of IP soybeans from raw bins through processing to processed bins.	**9.2.1** Staff responsible for processing should be trained on and have access to the documented record-keeping procedures.	**9.2.2** The elevator must keep records sufficient to allow all IP soybeans to be tracked and traced from delivery by growers to processed storage bins, including transfers within the facility and site to site transfers.

10.0 Loading		
10.1 All containers/vessels/trucks must be cleaned and inspected prior to loading IP soybeans. Cleaning and inspection procedures, including those to be followed for rejection of a conveyance because it is not suitable for food use, must be documented.	**10.1.1** Staff responsible for loading/shipping should be trained on and have access to the cleaning and inspection procedures for containers/vessels/trucks.	**10.1.2** The elevator must keep records as objective evidence that containers/ vessels/trucks have been cleaned and inspected prior to being loaded with IP soybeans. Records must include the date and the name of the employee who conducted the inspection.
10.2 The elevator must have documented process for recording all movement of IP soybeans from the processed bins to the shipping conveyance.	**10.2.1** Staff responsible for loading/shipping should be trained on and have access to the documented record-keeping procedures.	**10.2.2** The elevator must keep records of the source processed bins for every IP soybean and non-IP soybean shipment. Records must include container, truck or railcar identification number, identification of the grain (IP variety, SQWH or crush) and the quantity loaded.

* Recommended Good Practices are not part of the official Soy Canada IP Procedures. They are additional suggestions for the IP program, but are not enforced.

ANNEX 2

LOAD CERTIFICATE



Certificate no. _____N° de certificat

This shipment of

Le présent chargement de

(Product name – varietal or brand name)

(Nom de produit – variété ou marque)

designated as

désigné comme

(unique identifier)

(identificateur unique)

was prepared under the Canadian Identity Preserved Recognition System

(a third party certification of quality control process)

a été préparé conformément au Système canadien de reconnaissance de ségrégation

(certification par une tierce partie des processus de contrôle de la qualité)

by

par

(Company name)

(Nom de la société)

shipped by

expédié par

(Company name)

(Nom de la société)

Authorization no.

N° d'autorisation

Date

(Authorized signature)

(Signature autorisée)

Canadian Grain Commission

Commission canadienne des grains

Canada

ANNEX 3

GRAIN SAFETY PREREQUISITE PROGRAM REQUIREMENTS

Annex 3
GRAIN SAFETY PREREQUISITE PROGRAM REQUIREMENTS

Introduction

This annex outlines the 16 prerequisite program requirements (PPR-001 to PPR-016) for CIPRS+HACCP and CGC HACCP. For each PPR you must:

- meet the required outcome;
- develop and implement written good operating procedures designed to meet the outcome;
- define staff roles and responsibilities, and describe how, and at what frequency, monitoring will be performed;
- determine what records will be kept as evidence that procedures are being followed and the required outcome is met; and
- describe what corrective actions will be taken when monitoring reveals that your procedures have not been followed.

Each PPR page is organized as follows:

Required Outcome – is the mandatory outcome that must be achieved. The outcomes are required to create a safe and suitable environment for the handling and primary processing of grain. They are designed to ensure that the potential hazards associated with the facility structure and condition, equipment and personnel are controlled.

How you can achieve this outcome – lists suggested good operating practices designed to meet the outcome. These practices can be used as guidelines for grain handling companies in developing prerequisite programs to control potential grain safety hazards in their facilities. Companies are not required to implement these suggested good operating practices exactly as written, but must document and implement practices that achieve the required outcomes.

How you can monitor and verify this prerequisite program – outlines suggested monitoring procedures companies can implement, and indicates the record keeping requirements.

In order to have a complete food safety system, companies must develop, implement and maintain a HACCP plan as outlined in section 6 of this standard, in addition to a prerequisite program compliant with the 16 requirements set out in this Annex.

Successful implementation of an integrated IP and food safety system, as indicated by an audit, will result in CIPRS+HACCP certification. Successful implementation of an integrated food safety and quality management system, as indicated by an audit, will result in CGC HACCP certification.

PPR-001: PREMISE DESIGN

Required Outcome

All new buildings, existing buildings, and modifications to existing buildings shall be designed and constructed in a manner that minimizes unintentional co-mingling or contamination incoming grain, finished product, rework, work in progress or non-grain input. Staff washrooms shall be provided with an adequate number of toilets and handwashing facilities. Buildings shall be located away from or protected against potential sources of external contaminants that may compromise the safety and quality of the grain. Buildings shall be structurally complete and suitable for the operations taking place within.

How you can achieve this outcome:

Write and implement a Premise Design prerequisite program that includes the following:

1. An assessment of existing buildings against grain safety and quality considerations conducted by the company as part of the development of the company's HACCP system.

2. New buildings or modifications to existing buildings are planned and evaluated against those same safety and quality considerations. These considerations include:
   - the facility is located away from potential sources of external contamination that may compromise the safety and suitability of the grain;
   - facility exterior is structurally complete, is suitable for the operations taking place within, and prevents access by pests;
   - washrooms, change rooms, and lunch and break area(s) are provided, are equipped with adequate lighting, an adequate number of flush toilets, hand-washing facilities, and are designed to prevent or minimize contamination;
   - internal rooms, structures and fittings are suitable for the operations taking place within;
   - lighting fixtures in areas of exposed grain and packaging materials are equipped with shatterproof bulbs or breakage seals or are approved under the Canadian Electrical Code;
   - lighting is appropriate to accommodate all activities that will take place, including processing, cleaning, and maintenance;
   - lighting in inspection and grading area is of a design and type that does not lead to a misleading assessment of grain;
   - drainage and/or waste disposal systems are equipped with back-flow prevention and no cross-connections exist with drainage or waste systems and potable water lines;
   - building materials used do not present a hazard;
   - receiving, processing and shipping areas are physically separate;
   - waste accumulation is prevented;
   - doors are constructed to minimize the entry of pests; and
   - facilities for the storage of production waste (i.e. dockage and screenings) are suitable to prevent pest infestation and prevent contamination of the product,

3. The assessment of existing buildings, new buildings or modifications to existing buildings must involve personnel who are designated with the responsibility for evaluating all construction against grain safety and quality considerations. The HACCP

team must review the completed assessments to ensure all grain safety and quality considerations have been addressed. Keep a record of the assessment.

How you can monitor and verify this prerequisite program:

Assign trained and qualified personnel the responsibility to conduct an evaluation of compliance with the plans and blueprints during construction or renovation. This can be done by reviewing the invoices and specification of construction inputs, and by carrying out an inspection of the site prior to the next phase of construction being undertaken. After completion, and prior to use of the new facility, arrange a final on-site inspection. Keep records of the findings from these monitoring activities.

Applicable Regulations

Canada Grain Act, s. 56(1)

Canada Grain Regulations, s. 16(e)

References

Canadian Electrical Code, Part 1, s18-216 and s 18-266

CFIA Website: Guidance for Food Establishments Concerning Construction Materials and Packaging Materials and Non-Food Chemicals

NSF White Book™ - Nonfood Compounds Listing Directory

PPR-002: PREMISE MAINTENANCE

Required Outcome

The condition of the exterior of buildings and surrounding areas shall be regularly inspected on a predetermined basis and maintained to prevent or minimize the entry or harborage of pests and contaminants. The condition of the interior of buildings shall be regularly inspected on a predetermined basis and maintained to protect the safety and quality of grain. A waste management procedure shall be in place to protect the safety and quality of grain.

How you can achieve this outcome

Write and implement a Premise Maintenance prerequisite program that includes the following:

EXTERIOR

1. The facility property and land adjacent to the facility is maintained free of debris, refuse, vegetation, and other potential sources of contamination.

2. Roadways to the facility and the shipping areas are graded and compacted to allow for adequate drainage and to minimize pooling water.

3. Equipment and materials stored outside the facility are stored in designated storage areas or on pallets and away from the walls to prevent vermin harboring and allow for ease of cleaning.

4. Waste removed from personnel and processing areas is stored in a sealed container (e.g. dumpster) and a removal schedule is in place to minimize potential for contamination and harborage of pests.

5. Where pipes extend through walls of the facility, they are sealed to prevent pest entry. Any holes or unprotected openings are sealed.

6. Windows in the plant are equipped with close fitting screens and/or materials that inhibit pest entry.

7. Windows are protected or constructed of unbreakable materials in areas where they may pose a food safety hazard.

8. Walls, roofs and foundations are maintained to prevent accumulation of water or entry of pests.

INTERIOR

1. Drainage and sewage systems are equipped with the appropriate traps and vents to prevent sewage back-up.

2. Waste containers in production areas are clearly identified. A removal schedule is in place to prevent waste accumulation. All flush, cleanout and sweep materials are identified and regularly disposed of to avoid contamination of grain.

3. Lighting fixtures in areas of exposed grain and packaging materials are equipped with shatterproof bulbs or breakage seals or are approved under the Canadian Electric Code.

4. Lighting in inspection and grading areas is of a design and type that does not lead to a misleading assessment of grain. The following are CGC-recommended specifications: 6 tube type 24”x 48” fixture; heat resistant, non-yellowing, white enamel reflectors; styrene prismatic diffusers. Lighting should emit between 2000-3000 Lux, colour temp of 5000K with a colour rendering index (CRI) of 90 or higher. Lights should be positioned no more than one meter above the grading bench.

5. Cracks in walls, ceilings, floors that may harbor pests are sealed.

6. Personnel facilities are properly maintained. Washrooms are equipped with hand-washing or sanitation facilities. Hand-washing notices are posted.

7. Ceilings, doors, and walls are maintained in good repair to ensure there is no flaking paint or rust corrosion.

How you can monitor and verify this prerequisite program:

Conduct a visual inspection of both the exterior and interior of the buildings on a predetermined basis to ensure that all premise maintenance procedures are being followed. Record the results of the inspection.

Verify that monitoring has occurred at a frequency appropriate to the risk. Verification may be conducted during internal audits for lower risk activities. Your written Premise Maintenance prerequisite program should be reviewed annually to ensure it continues to be current and appropriate.

Applicable Regulations

Canada Grain Act, s. 56(1)

Canada Grain Regulations, s. 16(e)

References

Canadian Electrical Code, Part 1, s. 18-216 and s. 18-266

Canadian Food Inspection Agency Website: Incoming ingredients, materials and non-food chemicals

CFIA Website: Guidance for Food Establishments Concerning Construction Materials and Packaging Materials and Non-Food Chemicals

NSF White Book™ - Nonfood Compounds Listing Directory

PPR-003: PREMISE HOUSEKEEPING

Required Outcome

Premise housekeeping shall be conducted to maintain cleanliness to a pre-determined standard that is set to minimize or eliminate pests, prevent dust explosions, and protect the safety and quality of grain. The methods and frequency of premise housekeeping shall be based on the risk posed to the safety and quality of grain. Designated staff shall conduct regular premise inspections on a predetermined basis to ensure housekeeping activities are conducted to ensure grain safety. Cleaning materials shall be appropriate for their intended use and stored in a manner that presents no risk of contamination with the grain.

How you can achieve the outcome

Write and implement a Premise Housekeeping prerequisite program that ensures that a schedule is established and maintained for housekeeping activities, including:

1. Grain spilled during unloading, processing and loading is cleaned up regularly.

2. Exposed oil or grease in areas where there is potential for product contamination is cleaned up immediately.

3. Spider webs and dust on walls, beams, pipes and ceilings and over open grain, are cleaned on a predetermined basis.

4. Unused machinery and parts are stored off the ground to discourage rodents.

5. Washrooms and lunchroom are cleaned on a predetermined basis.

6. All flush, cleanout and sweep materials are identified and disposed of appropriately to avoid contamination of grain.

7. Spilled liquids are mopped up immediately.

8. Waste containers are to be emptied and cleaned regularly in a manner that does not contaminate the product.

9. Drains, drain traps and drain covers are cleaned on a predetermined basis.

10. The boot and pit are cleaned and monitored regularly.

11. The receiving area is swept regularly to avoid build-up of debris and the pit grate is cleaned after each crop type to avoid cross contamination.

12. After any period of extended inactivity and prior to the start of operations, designated personnel conduct a pre-operational assessment of the suitability of the premises including all storage areas, employee facilities, and the receiving and shipping areas. A record of this assessment must be kept. A checklist should be developed for this purpose and could serve as the record.

How you can monitor and verify this prerequisite program:

Conduct a visual inspection on a predetermined basis to ensure that all premise housekeeping procedures are being followed. Record the results of the inspection.

Verify that monitoring has occurred at a frequency appropriate to the risk. Verification may be conducted during internal audits for lower risk activities. Your written Premise Housekeeping prerequisite program should be reviewed annually to ensure it continues to be current and appropriate.

PPR-004: PEST CONTROL

Required Outcome

A pest control program shall be developed and implemented to prevent entry and harbourage of pests, and to detect and minimize pests, in order to protect the quality and safety of grain.

How you can achieve the outcome

A pest is any animal that either directly or indirectly causes a deterioration of the quality and safety of grain and grain products. Pests may include rodents, insects, birds and wildlife.

Write and implement a Pest Control prerequisite program that includes the following:

1. Perform regular premise housekeeping and maintenance activities to prevent infestations from occurring. Perform regular monitoring activities to ensure the grain handling facility is not conducive to the entry and harborage of pests. Inspect grain at receiving for the presence of pests and/or pest-damaged grain.

2. The pest control program is contracted out to a pest control company or performed by designated facility staff who:
   - are authorized and properly trained to undertake pest monitoring and control procedures;
   - are authorized and properly trained to handle, apply and dispose of chemicals;
   - are licensed to use pest control products according to label instructions;
   - use only products licensed by PMRA under the Pest Control Products Act & Regulations;
   - record all pesticide applications and provide copies of the report to the company; and
   - provide a detailed pest control program plan that includes the duties to be performed, chemicals used, handling procedures, type and location of pest devices, frequency of activities, and documentation requirements.

3. If pest control is contracted out, a current copy of the contracted company's pest control certification is kept on file, as well as the technician's licence, the contract and the insurance policy.

4. The pest control company or the designated company personnel inspects the facility to determine if the pest control is functioning as required. After each inspection, the pest control company or designated company personnel prepares a report and reviews it with the Food Safety Manager, Quality Manager or other designated staff to provide information on the status and effectiveness of the pest control program.

5. Results from pest control reports are analyzed for trends in activity. When trend analysis indicates ongoing or unusual pest control issues, an investigation is conducted and documented, and remedial corrective actions are taken based on the root cause of the issue.

6. Pesticides not registered for use near food or in food handling areas are not to be used within the grain processing area.

7. Stored grain is regularly monitored to detect for early signs of insect infestations. Installing pit-fall traps and sieving grain samples can be used to detect insects in stored grain.

8. Empty bins are subject to cleaning and maintenance and are monitored for webbing and other evidence of insect infestation.

9. If grain stored in a facility is found to be infested, the company must report the infestation to the Canadian Grain Commission as required by the Canada Grain Act and Regulations.

How you can monitor and verify this prerequisite program:

Conduct an on-site visual assessment of the company's pest control program on a predetermined basis. Review the associated pest application and inspection reports to ensure that pest control is effective. Record the monitoring results.

Verify that monitoring has occurred at a frequency appropriate to the risk. Verification may be conducted during internal audits for lower risk activities. Your written Pest Control prerequisite program should be reviewed annually to ensure it continues to be current and appropriate.

Applicable Regulations

Canada Grain Act, s. 76(1) s. 81(4)(a)

Canada Grain Regulations, s. 64

Pest Control Products Regulations, List of Pest Control Product Formulants and Contaminants of Health or Environmental Concern (SI/2005-114)

References

Canadian Grain Commission Website: Monitoring stored grain for insect pest infestations

Health Canada Website: PMRA-approved pest control products

PPR-005: PERSONNEL PRACTICES

Required Outcome

Employees, visitors or contractors shall follow personnel practices established to minimize the risk of contaminating grain products. Protective clothing shall be provided when required to protect the quality and safety of the grain, or the safety of employees, visitors or contractors. The company shall have a policy in place to ensure that supervisors and employees are aware of the risks associated with illnesses transferable to food, and documented procedures are in place to ensure that the risks are appropriately managed. Employees, visitors and contractors shall be asked to advise management when ill, and no one known to be suffering from a disease transmitted through food shall be allowed in the grain processing area.

How you can achieve the outcome

Write and implement a Personnel Practices prerequisite program, based on the risk posed to the product and/or customer requirements within designated areas of your facility, to ensure grain safety and quality. The program includes the following policies:

1. No food, beverages, medications, glass containers or any other prohibited items are allowed in the grain processing and storage areas.

2. No one is allowed to eat, chew gum, use tobacco products or spit in or around the grain processing area.

3. All jewelry must be removed or covered to ensure it will not fall into the product prior to entering areas where grain or grain handling surfaces are exposed.

4. Employees, visitors and contractors who are in contact with the product will cover all cuts and wounds with a secure bandage.

5. Employees must wash their hands after using the toilet facilities. Handwashing signs are posted. Hand sanitizing apparatus is available (where applicable).

6. All injuries occurring in the facility must be reported to the management immediately and an investigation conducted to ensure that no contamination of the grain has resulted. If contamination has occurred, corrective action is taken to dispose of the contaminated grain.

7. Employees maintain an adequate degree of personal cleanliness and wear clean clothing, headwear and footwear.

8. All visitors and contractors must sign in at the reception area before entering the grain processing areas and abide by the above practices.

9. Packaging materials are only used once and for the purpose intended.

10. Any glass breakage will be cleaned up immediately. If there is suspicion of contamination to the product, glass breakage procedures will be followed to ensure segregation and disposal of the contaminated product.

How you can monitor and verify this prerequisite program:

Conduct a visual inspection of the facility and employees on a predetermined basis to ensure that the required personnel practices are being followed. Record the results of the inspection.

Verify that monitoring has occurred at a frequency appropriate to the risk. Verification may be conducted during internal audits for lower risk activities. Your written Personnel Practices prerequisite program should be reviewed annually to ensure it continues to be current and appropriate.

PPR-006: CHEMICAL USE AND STORAGE

Required Outcome

Employees shall mix, handle, store and use chemicals in a manner that prevents the contamination of grain. Chemicals include pesticides, lubricants and other products used for premise and equipment maintenance and cleaning activities.

How you can achieve this outcome

Write and implement a Chemical Use and Storage prerequisite program that includes the following policies:

1. All employees or contractors who handle chemicals are appropriately trained and, if applying registered chemicals, are certified by the appropriate provincial licensing board.

2. Only products approved by PMRA under the Pest Control Products Act & Regulations are used to control infestations.

3. All other registered chemicals used have been issued a Letter of No Objection (LONO) from Health Canada, or a Letter of Guarantee (LOG) from the supplier. Products that were previously listed on the *Reference Listing of Accepted Construction Materials, Packaging Materials and Non-food Chemical Products,* or products that have a Letter of Acceptance (LOA) previously provided by the CFIA may also continue to be used.

4. All chemicals are measured, mixed, handled and used in accordance with manufacturers' instructions.

5. Chemicals are taken, mixed and dispensed from correctly labeled containers.

6. Label and stored non-food grade chemicals (e.g. fumigants, lubricants) in an area where they are kept secure, dry, well ventilated, and which is separate from grain processing and storage areas to prevent potential contamination.

7. Chemicals used in grain processing areas are stored and handled in a manner that prevents contamination.

8. Maintenance activities involving chemicals are conducted in a manner that does not contaminate the product.

How you can monitor and verify this prerequisite program:

Conduct a visual inspection of the facility on a predetermined basis to ensure that the required chemical use and storage practices are being followed. Review training records on a predetermined basis to ensure that personnel using chemicals have received appropriate training. Record the results of the inspection and training review.

Verify that monitoring has occurred at a frequency appropriate to the risk. Verification may be conducted during internal audits for lower risk activities. Your written Chemical Use and Storage prerequisite program should be reviewed annually to ensure it continues to be current and appropriate.

Applicable Regulations

Canada Grain Regulations, s. 61

Pest Control Products Regulations, List of Pest Control Product Formulants and Contaminants of Health or Environmental Concern (SI/2005-114)

References

CFIA Website: Guidance for Food Establishments Concerning Construction Materials and Packaging Materials and Non-Food Chemicals

NSF White Book™ - Nonfoods Compounds Listing Directory

Health Canada Website: PMRA-approved pest control products

PPR-007: PERSONNEL TRAINING

Required Outcome

Training on the company's Good Operating Practices, Standard Operating Procedures and HACCP shall be delivered and updated as required to ensure that personnel are competent in the activities, policies and procedures necessary to protect the safety and quality of grain. Training shall be delivered frequently enough to ensure personnel's understanding remains current.

How you can achieve the outcome

Write and implement a Personnel Training prerequisite program that includes the following:

1. All new employees receive orientation training which includes an overview of your Food Safety and Quality Management System, HACCP and Personnel Practices prerequisite program.

2. Identify and ensure that all personnel whose activities affect food safety and quality are trained and qualified. This is best done by developing and maintaining a matrix of training needs, in addition to the general orientation training, for every employee as required. This should be designed, maintained and followed to ensure personnel receive the appropriate training at the correct frequency. Training is delivered frequently enough to ensure personnel's understanding remains current.

3. Employee training needs should be reviewed on a predetermined basis, taking into account employee performance and trends that may suggest where additional or more frequent training may be required. Also considered is the need for trained personnel to conduct internal audits.

4. Maintain an Employee Training Record for each employee that includes the following information:
    - employee name;
    - position / title;
    - job description;
    - training received and date; and
    - section manager and employee signature.

    Prior to being assigned to a new position, the employee's qualifications and training record is reviewed against the qualification and training needs as described in the job description. The manager or designate signs off on the staff appointment form.

5. Job specific and/or on-the-job training follows the procedures and the prerequisite programs that apply to that specific job. Training should be recorded on the Employee Training Record.

6. HACCP Team members are provided with HACCP training, focusing on:
    - prerequisite programs;
    - hazard analysis;
    - CGC generic HACCP model;
    - production controls; and
    - HACCP principles.

How you can monitor and verify this prerequisite program:

Assign a manager or supervisor the responsibility of reviewing the employee training records and training matrix at predetermined intervals to ensure that employees are receiving training as scheduled. Record the results of this review on the training matrix.

Verify that monitoring has occurred at a frequency appropriate to the risk. Verification may be conducted during internal audits for lower risk activities. Your written Personnel Training prerequisite program should be reviewed annually to ensure it continues to be current and appropriate.

PPR-008: WATER AND AIR SUPPLY

Required Outcome

Water and air used in contact with grain or grain contact surfaces shall not present a risk to the safety of grain. In facilities where water is used for grain handling processes or sanitation, potable water shall be used and assessed on an annual basis for microbial safety, as determined by a laboratory that has a demonstrated ability to determine if the water supply meets the requirements of "Guidelines for Canadian Drinking Water Quality". Air and compressed gases used in grain handling processes or for sanitation shall be clean and not pose a risk of contamination.

How you can achieve the outcome

If water and/or air is used in your facility in a manner that may impact grain safety, write and implement a prerequisite program that addresses the following:

WATER SUPPLY

1. Establish a sampling procedure to ensure a representative sample can be taken. Your sampling procedure should include the appropriate frequency of water quality testing depending on whether your water is from a municipal supply or a well.

2. Send samples to a laboratory that has a demonstrated ability to determine if your water supply meets the requirements of "Guidelines for Canadian Drinking Water Quality". Keep copies of the test results.

3. If well water is used and water treatment is required, develop and maintain an effective water treatment program that sets out water treatment procedures, methods, chemicals to be used, and schedule.

4. Ensure that personnel are trained in your established water sampling and treatment procedures.

AIR SUPPLY

1. Air used in grain drying or aeration systems is sourced away from potential external contamination.

2. Compressed air that comes into direct contact with grain or grain contact surfaces is filtered.

3. Air compressor systems that are used for grain handling processes or for sanitation are monitored and maintained to ensure they do not pose a risk of contamination. Where possible, food grade lubricants are used for compressors used in grain handling processes or for sanitation.

How you can monitor and verify this prerequisite program:

Review the water test results at a predetermined frequency to ensure that water quality testing is occurring at the established frequency and that water treatment, if used, is effective. Review air compressor maintenance records to ensure that the equipment is operating as required and is not posing a risk. Inspect the vicinity of bin aeration air intakes to ensure that external contaminants aren't being introduced.

Verify that monitoring has occurred at a frequency appropriate to the risk. Verification may be conducted during internal audits for lower risk activities. Your written prerequisite program should be reviewed annually to ensure it continues to be current and appropriate.

References

Health Canada Website: Guidelines for Canadian Drinking Water Quality – Summary Table

Provincial Water Quality and Safety Regulations

PPR-009: EQUIPMENT DESIGN

Required Outcome

All new and existing equipment, including storage bins, shall be designed and installed to achieve its intended purpose and to protect the quality and safety of grain during handling, processing and storage.

How you can achieve the outcome

Write and implement an Equipment Design prerequisite program that includes the following:

1. All plant equipment and storage bins are easily cleaned and maintained. Plant and equipment surfaces are made of non-toxic materials and designed to withstand the environment of its intended use. Equipment is installed in a manner that facilitates cleaning, inspection and maintenance activities.

2. Magnets and other necessary detection devices are in place where necessary.

3. Storage bins are designed to permit cleaning and maintenance and to allow for the monitoring of humidity, temperature and air flow where required to reduce the potential of product degradation and mould growth.

4. Prior to the purchase of any major piece of equipment, review the specifications to ensure that it is made of non-toxic materials, can be easily cleaned and maintained, and is designed to withstand the environment of its intended use. The results of this review should be recorded. The purchase order for new equipment should be signed only after this review has been completed and the specifications are approved.

5. Equipment and test supplies used for testing the quality and safety of grain is fit for purpose as per the manufacturer's recommended guidelines and the company's established parameters for testing the quality and safety of grain.

How you can monitor and verify this prerequisite program:

After the installation of new equipment, and prior to its use, conduct a final on-site inspection of the new equipment to ensure it meets the approved specifications and record the inspection results. On-going monitoring of equipment is done through your Equipment Cleaning and Maintenance procedure (as required by PPR-011 Equipment Cleaning and Maintenance).

Your written Equipment Design prerequisite program should be verified at a frequency appropriate to the risk to ensure it continues to be current and appropriate. Verification may be conducted during internal audits for lower risk activities.

Applicable Regulations

Canada Grain Act, s. 56(1) s. 59

PPR-010: CALIBRATION

Required Outcome

Calibration activities shall be conducted at regular and predetermined frequencies to ensure that all inspection, measuring and test equipment that may affect the safety and quality of grain operates as intended.

How you can achieve the outcome

Write and implement a calibration prerequisite program that includes the following:

1. Ensure all inspection, measuring and test equipment and methods are capable of providing the accuracy and precision required for the measurement being performed. This can be done by compiling and maintaining a master list of all inspection, measuring and test equipment that indicates for each:

    i. A description of the equipment and its purpose
    ii. Unique equipment number
    iii. Title of the person responsible for calibrating that piece of equipment
    iv. Required frequency of calibration
    v. Calibration method
    vi. Required action to be taken when results are unsatisfactory

2. Equipment that is essential for ensuring the safety and quality of grain is calibrated on an annual basis. If an annual calibration is not possible, a risk assessment must be conducted to determine the likelihood and the severity of the hazard should the equipment lose its accuracy, and a frequency determined based on the results of this assessment. The frequency of calibration must be sufficient to ensure that the safety of the product is not compromised.

3. Assign the calibration activities for each piece of equipment to appropriately trained personnel or contractors and indicate the assignment on master list.

4. Keep calibration records for each piece of inspection, measuring and test equipment that includes the date and results of each calibration, as well as the corrective action taken when results were unsatisfactory.

5. Upon installation, verify the accuracy of each piece of inspection, measuring and test equipment before it is used. Also at this time, conduct a visual inspection to ensure that the equipment location allows for proper operation and is safeguarded from adjustments that could invalidate the calibration setting. Record the results of the accuracy test and inspection.

6. Where possible, conduct calibrations against certified measurement standards which have a known relationship to a nationally registered standard. In cases where no standard exists, document the basis for calibration.

7. Identify the calibration status of all inspection, measuring and test equipment on a clearly visible sticker. At a minimum, the sticker must indicate the next calibration date.

How you can monitor and verify this prerequisite program:

On a predetermined schedule, review the master list of inspection, measuring and testing equipment and your records of calibration activities to verify that they are occurring as planned. Inspect the calibration stickers on all inspection, measuring and testing equipment to verify that the information is correct. Record the results of these reviews and inspections.

Equipment is verified between calibration intervals at a predetermined frequency to ensure its continued accuracy. Verify that monitoring has occurred at a frequency appropriate to the risk. Verification may be conducted during internal audits for lower risk activities. Your written Calibration prerequisite program should be reviewed annually to ensure it continues to be current and appropriate.

Applicable Regulations

Canada Grain Act, s. 56(1)

References

Operator's Manual for each piece of equipment

PPR-011: EQUIPMENT CLEANING AND MAINTENANCE

Required Outcome

Equipment and storage bins shall be cleaned, maintained and inspected on a regular pre-determined basis to ensure that equipment critical to grain handling and processing operations, and that may affect the safety and quality of the grain, operates as intended and does not introduce contaminants.

How you can achieve the outcome

Write and implement an Equipment Cleaning and Maintenance prerequisite program that includes the following:

1. Compile and maintain a master list of all equipment critical to grain handling, processing and storage and that may affect the safety and quality of the grain. This list should include maintenance, cleaning and inspection schedules for each piece of equipment and all storage bins based on its importance and manufacturers' recommendations. This list must include any equipment that has been identified on a HACCP Plan as potentially introducing hazards to a process, e.g. pneumatic probes. For each piece of equipment include:

   i. A description of the equipment and its purpose
   ii. Unique equipment number
   iii. Maintenance and cleaning frequency
   iv. Maintenance or cleaning method (or reference another document that describes the maintenance method)
   v. Inspection frequency
   vi. Identification of chemicals and/or lubricants used

2. Ensure maintenance and cleaning activities for each piece of equipment and storage bin are assigned to appropriately trained personnel or contractors and are indicated on the master equipment list. Assigned personnel or contractors should conduct maintenance, cleaning and inspection activities at the frequency set out in the master equipment list and keep a record of these activities.

3. Where possible, only food-grade lubricants are used above the product line or any area where there could be an adverse effect on the product. Identify equipment requiring food-grade lubricants on the master list. Where food-grade lubricants cannot be used (e.g. due to low temperatures), a risk assessment must be conducted to assess the potential for contamination of product. If there is a risk and it is warranted, an appropriate control measure is put into place.

4. Processing and handling equipment that is not self-cleaning is cleaned following the completion of each run to ensure there is no accumulation of dust and/or product buildup to minimize contamination. When equipment is disassembled and reassembled for cleaning, it must be done according to manufacturer's instructions or a detailed cleaning procedure.

5. Conduct a pre-operational assessment of the suitability of the equipment after each run and after any extended period of inactivity.

6. Whenever maintenance is to be performed, a pre- and post-inventory of all tools is undertaken, to ensure that all tools are accounted for and to eliminate the potential for a tool to inadvertently fall into the product.

How you can monitor and verify this prerequisite program:

On a predetermined schedule, review the master list of equipment and your records of equipment maintenance, cleaning and inspection to verify that these activities are occurring as planned. Also inspect the calibration stickers on all inspection, measuring and testing equipment to verify that the information is correct. Record the results of these reviews and inspections.

Verify that monitoring has occurred at a frequency appropriate to the risk. Verification may be conducted during internal audits for lower risk activities. Your written Equipment Cleaning and Maintenance prerequisite program should be reviewed annually to ensure it continues to be current and appropriate.

References

CFIA Website: Guidance for Food Establishments Concerning Construction Materials and Packaging Materials and Non-Food Chemicals

NSF White Book™ - Nonfoods Compounds Listing Directory

Operator's Manual for each piece of equipment

PPR-012: PURCHASING OF NON-GRAIN INPUTS

Required Outcome

All non-grain inputs and contracted services that are critical to receiving, storing, processing and shipping of grain shall be acquired from approved suppliers in order to meet customer quality specifications and grain safety requirements.

How you can achieve the outcome

Write and implement a Purchasing of Non-Grain Inputs prerequisite program that includes the following:

1. Evaluate and select suppliers of non-grain inputs or contracted services based on their ability to meet contract requirements, which may include the suppliers' quality system or other quality assurance requirements and/or supplier performance. Record the results of evaluations.

2. If a supplier does not already exist for a particular input, product can be purchased from a new supplier, but approval and justification for continued use of the new supplier is contingent upon successful completion of the supplier approval process within a year.

3. Evaluate suppliers at least annually. In the case of packaging material suppliers, the annual evaluation includes an assessment of any problems associated with the packaging that has compromised the safety or quality of shipped product, that have resulted in a customer complaint, or other non-conformances. Conduct a risk assessment of inputs to your processes and products to determine the intensity of the evaluation of each supplier.

4. Keep contact information for all key suppliers, including name, address, telephone number, contact person (and alternate). This information is also used if required for recall and traceability purposes.

5. Ensure that product specifications comply with any legislative requirements and are consistent with your prerequisite programs and HACCP plan.

How you can monitor and verify this prerequisite program:

On a predetermined schedule, review your purchase orders and supplier evaluation records to ensure that inputs are purchased only from approved suppliers.

Verify that monitoring has occurred at a frequency appropriate to the risk. Verification may be conducted during internal audits for lower risk activities. Your written Purchasing of Non-Grain Inputs prerequisite program should be reviewed annually to ensure it continues to be current and appropriate.

Applicable Regulations

Safe Food for Canadians Regulations, s. 186(a)

References

Health Canada Website: Lists of Acceptable Polymers for use in Food Packaging Applications

Canadian Food Inspection Agency Website: Guidance for Food Establishments Concerning Construction Materials and Packaging Materials and Non-Food Chemicals

PPR-013: RECEIVING, HANDLING, STORAGE AND SHIPPING

Required Outcome

Potential hazards and risk of physical, chemical and biological contamination shall be mitigated by ensuring that:

- prior to unload, all trucks, containers or railcars delivering grain or packaging material are inspected to ensure they are clean, in good condition and that there is no evidence of pests or potentially hazardous materials from previous loads;
- all incoming grain and packaging material is assessed by trained staff for grain safety hazards (e.g. treated seed, glass, foreign material, odours, suspected contamination, mould growth, etc.) and quality factors according to the CGC's Official Grain Grading Guide and/or customer specifications;
- incoming grain identified as being contaminated with treated seed is rejected at receiving;
- measures are taken to ensure that grain deemed defective after receiving is either disposed or reworked in a manner that ensures its safety;
- moisture content of grain is measured upon receipt; grain is stored within safe timeframes and monitored at an appropriate frequency; and records of these activities are maintained;
- all storage, movement, cleaning and processing of grain through the facility is recorded to ensure traceability and facilitate the segregation of unprocessed and processed product;
- grain and non-grain inputs, including storage aids, are stored in conditions that protect their safety and quality (e.g. diatomaceous earth);
- where possible, grain and non-grain inputs are handled and used on a first-in first-out basis;
- trucks, rail cars and containers used for the transport of grain are assessed before and during loading to ensure they do not present a risk to grain safety and quality;
- measures are taken to ensure that there is no contamination from chemicals or from defective grain; and
- non-grain inputs are inspected on receipt to ensure that they will not be a source of contamination.

How you can achieve the outcome

Write and implement a Receiving, Handling, Storage and Shipping prerequisite program that includes the following:

GRAIN RECEIVING AND HANDLING

1. At receiving, require the trucker hauling the grain to provide (or sign) an affidavit indicating previous load hauled and/or cleaning records to ensure that there are no potential contaminants or varieties out of customer specification present in the load.

2. Prior to unload, inspect the truck to ensure it is clean (e.g. free of excess dirt, salt, water), in good condition (e.g. no rust or corrosion), and that there is no leakage of automotive fluid. Also inspect the receiving pit prior to unload.

3. Obtain documentation for all grain and inputs received from the trucker or grower, and compare against specifications for that delivery.

4. Take a representative sample at delivery.

5. Inspect the delivery sample for potential contaminants (e.g. treated seed, glass) and test to determine if moisture content is within acceptable limits. Grade the sample for quality attributes and determine if additional testing and/or inspection is required to meet customer specifications (e.g. for IP grain).

6. A grain delivery that is suspected of being contaminated (e.g. contains treated seed, visible mould, glass, bones, metal, or wood chips; smells of pesticides, is beyond acceptable moisture content limits; or is infested with insects) must be either treated, cleaned, dried, redirected to another market, or rejected.

7. Keep records of each delivery including: date, sample number, receipt number, name of the grower and trucker, weight, type of grain, grade, moisture level and other quality parameters needed to meet customer specifications, as well as binning location of the delivery. Record deliveries that are rejected due to contamination or infestation.

8. Record all movements of grain from bin to bin for cleaning, drying or blending to ensure traceability and to ensure that any wet grain is not stored beyond safe timeframes.

DEFECTIVE GRAIN

After receiving, when grain is deemed to be a critical food safety hazard by testing and inspection activities ensure:

- it is binned, identified, labeled or stored separately and disposed of to prevent contamination,
- someone is assigned the authority to determine the appropriate disposition, which may include:
  - reworking;
  - redirecting to a different market;
  - disposal; and
  - a corrective action report is completed.

When grain is deemed defective after receiving due to the detection of glass, ensure that the following controls are in place:

- the contaminated lot is segregated from other lots immediately;
- the contaminated lot is clearly identified to ensure that it is not available for general use;
- a clearly defined procedure is in place in the event that a facility decides to rework product to remove glass; and
- the procedure should detail the quantitative criteria (i.e. amount of glass in screenings; number of passes through the cleaning equipment required; how the amount of product to be reworked will be determined) used to determine when a product is passable and when a product is still unfit for consumption.

GRAIN STORAGE

1. Bin grain according to documented binning procedures.

2. Store grain within safe timeframes and monitor at an appropriate frequency to minimize the risk of mould growth.

3. Ensure dockage and screenings removed during cleaning are stored separately in clearly identified bins.

4. Monitor stored grain on a predetermined basis to ensure the continued quality and safety of the grain. Record bin monitoring and any actions taken to maintain the quality and safety of stored product (e.g. aeration, drying, turning bins, etc.).

5. Store bagged product on pallets off the floor and away from walls to minimize potential contamination. Inspect pallets for cleanliness on receipt and keep them in good repair, or use slip sheets between pallets and bagged product.

RECOMMENDED SAFE STORAGE TIMEFRAMES FOR WET GRAIN

Finished product moisture (FPM) levels will minimize the risk of mould growth due to high moisture grain. FPM levels for storage up to one year are:

Wheat <14.6%
Soybeans <14.0%
Fababeans <16.1%
Beans <18.1%
Lentils <13.1%
Peas <16.1%
Mustard seed <9.6%
Oats <13.6%
Barley – covered <13.6%
Barley – hulless <14.1%
Canola <10.1%
Flax <10.1%

When moisture level of incoming grain exceeds FPM levels, safe storage timeframes are:

If moisture is > FPM and <=18% dry to below FPM within 40 days
If moisture is > 18% and <=20% dry to below FPM within 20 days
If moisture is > 20% and <= 22% dry to below FPM within 10 days
If moisture is >22% and <= 24% dry to below FPM within 5 days
If moisture is >24% dry to below FPM within 3 days

GRAIN SHIPPING

1. Ensure that shipping instructions include any inspection and testing required to verify the safety and the quality specifications of customers is done prior to shipping. If product is being moved to another facility for cleaning, drying and/or shipping, ensure appropriate shipping instructions are provided. A shipping sample should be inspected to verify that customer specifications are met. Based on the shipping sample inspection, shipping staff may decide to ship the lot of grain, send it back for cleaning, redirect it to another market or reject the lot. Record the results of the final inspection along with information on the amount of product shipped, source bin, car or container number, and customer name or identifier. Prepare a bill of lading, an invoice and any other required shipping documentation for each shipment.

2. Prior to loading, ensure that the truck, railcar or container will not introduce a contaminant to the shipped product by:

- inspecting the outside area or damage and/or structural defects that may allow entry of water, infestation or contamination;
- inspecting the interior to confirm it is in good condition, clean, dry and free of any foreign material buildup, debris, moisture and infestation;
- verifying it is free of chemical, animal or other odours that may indicate the presence of a contaminant; and
- recording the results of this inspection.

3. In the case of shipments by truck and trailer, obtain a signed affidavit from the trucker on previous load hauled prior to loading.

4. Keep contact information for all buyers, including name, address, telephone number, contact person (and alternate). This information is also used if required for recall and traceability purposes.

RECEIVING OF NON-GRAIN INPUTS

1. Inspect trucks delivering packaging material to ensure they are odour free, structurally sound, and that there is no evidence of pests or potentially hazardous materials from previous loads.

2. Inspect packaging materials, polishing agents and chemicals on receipt to confirm supplier information and that the products meet specifications as set out in the purchase order.

3. Ensure packaging materials and polishing agents are received separately from chemicals. Inspect packaging material, bulkheads, and/or cardboard liners at receiving to ensure they are odour-free and have no evidence of pests or other contaminants.

4. Ensure chemicals, maintenance and cleaning supplies are received in a location separate from grain receiving pits to prevent potential contamination of grain products.

STORAGE OF NON-GRAIN INPUTS

1. Rotate packaging on a first-in first-out basis to minimize degradation of grain bags.

2. Store packaging material on pallets off the floor and away from walls to minimize potential contamination.

FEED AND FEED INGREDIENTS

1. Processed feed grain and feed grain ingredients are kept separate from unprocessed grain and food-grade grain and grain products.
2. Feed grain and feed grain ingredients are received, handled, stored and shipped in a manner which minimizes the risk for cross-contamination and deterioration
3. Screenings collected for use as a feed ingredient is examined for hazards on a regular pre-determined basis. Screenings that contain physical, chemical or biological hazards in excess of regulatory or customer safety requirements is segregated to prevent unintentional use until its appropriate disposition can be determined.

How you can monitor and verify this prerequisite program:

On a predetermined schedule, monitor the receiving, handling, storage and shipping practices to ensure that these procedures are being followed and to review the training records to ensure that personnel performing these functions have received appropriate training. Record the monitoring results.

Verify that monitoring has occurred at a frequency appropriate to the risk. Verification may be conducted during internal audits for lower risk activities. Your written Receiving, Handling, Storage and Shipping prerequisite program should be reviewed annually to ensure it continues to be current and appropriate.

Applicable Regulations

Canada Grain Act, s. 57(d), s. 58, s. 59, s. 76(1), s. 86, s. 104

Canada Grain Regulations, s. 69

References

Canadian Grain Commission Official Grain Grading Guide

PPR-014: RECALL AND TRACEABILITY

Required Outcome

Traceability, recall and product withdrawal capabilities shall be established to ensure that any contaminated grain or packaging that poses a food safety hazard can be effectively recalled. The traceability system must be able to identify the movement of grain forward to the immediate customer and back to the producer or immediate supplier of the grain. Receiving, binning, cleaning, storage and shipping records shall be maintained using unique identifiers, key supplier, producer and customer information and, where applicable, grain inputs.

How you can achieve the outcome

An effective recall and traceability program will ensure that product can be located, reconciled, and if required, removed from the market in the following situations:

- **Recall**: removal of product from further sale or use, or the correction of its label, at any point in the supply chain as a risk mitigation action i.e. food safety issue
- **Product withdrawal**: removal from further sale or use of a marketed product that does not contravene legislation administered or enforced by the CFIA or CGC i.e. quality issue
- **Stock recovery**: removal or correction of a violative product that has not been marketed or that has not left the direct control of the recalling firm

Write and implement a Recall and Traceability prerequisite program that includes the following:

IDENTIFICATION AND TRACEABILITY

1. Maintain records of grain receiving, handling (drying, cleaning, processing), storing and shipping in a manner that ensures traceability of grain from producer delivery to shipping conveyance.

2. Maintain records of receiving, storage and use of packaging materials to ensure traceability from supplier through to shipping.

RECALL COORDINATION

1. Identify a recall team, and ensure that the following information on team members and substitutes is maintained:
   - name;
   - title;
   - recall responsibilities;
   - address; and
   - phone numbers.

   Ensure that after-hours contact information for team members and substitutes is also maintained.

2. Ensure all team members are trained in the recall procedure and that this is recorded on the team members' training records.

3. Have the recall team maintain the following information, and confirm that contact information is correct at regular intervals:
   - key supplier and buyer information; and
   - CGC contact name, address and phone numbers.

RECALL PROCEDURE

A recall procedure is implemented and tested to support recalls, market withdrawals, product withdrawals and stock recovery, as defined in the CFIA guidance document *Food incident response process*.

When a non-conforming product that poses a potential food safety hazard has already been shipped, follow the following recall procedures:

1. Review the shipping, receiving, and cleaning records to trace the contaminated grain from the lot or bin it was shipped from forward to all customers that received shipment from that lot or bin while it contained the contaminated grain.

2. Contact the customer(s) who received the contaminated grain and co-ordinate the product recall. All recalled product must be binned separately and disposed of according to the company's control of non-conforming product procedures.

3. If you are not licensed by the CFIA under the Safe Food for Canadians Regulations, contact the CGC to report grain that is contaminated as defined in the *Canada Grain Act*[1]. Samples deemed to be contaminated by the Grain Research Laboratory in consultation with the Chief Grain Inspector for Canada are graded *Sample Condemned* and must be disposed. To notify the CGC about a recall of contaminated grain, please contact the HACCP Technical Advisor at (204) 983-3635.

4. If you are licensed by the CFIA under the Safe Food for Canadians Regulations, inform the CFIA of the recall. This procedure can be found on the CFIA's Website: *Recall procedure: A guide for food businesses*.

5. Conduct a root cause analysis including, if necessary, inspection or testing of producer delivery samples, to evaluate the source and/or cause of the non-conformance. The investigation should include the possibility of intentional contamination of the product. If the source of the problem is determined to be a producer delivery, the information is recorded and taken into consideration in the training and evaluation of that producer.

6. The recall team must prepare a recall report summarizing of all actions taken, people involved, and records reviewed once the recall is complete.

MOCK RECALL

A mock recall must be conducted at least annually on grain and non-grain inputs (e.g. packaging) using the recall procedure to assess its effectiveness. Identify a shipment of

[1] "Contaminated" means, in respect of grain, containing any substance in sufficient quantity that the grain is unfit for consumption by persons and animals or is adulterated within the meaning of the regulations made pursuant to paragraph 30(1)(a) of the *Food and Drugs Act*

grain and one lot of the non-grain input. Then verify that it can be traced forward to all customer shipments from that lot, and back to all producer or supplier deliveries that made up that shipment. Customer and supplier contact information must also be verified for accuracy. The results of the mock recall must be recorded.

If the mock recall reveals a lack of adequate records to ensure full traceability, corrective action is initiated.

How you can monitor and verify this prerequisite program:

Verify that mock recalls occur annually. Review the written Recall and Traceability program annually to ensure it continues to be current and appropriate.

Applicable Regulations

Canada Grain Act, s. 118(d)

Canada Grain Regulations, s. 61(3)

Safe Food for Canadians Regulations, s. 90(1)

Canadian Food Inspection Agency Act, s. 19(1)

Food and Drugs Act, s. 30(1)(a)

References

Canadian Food Inspection Agency Website: Recall procedure: A guide for food businesses

Canadian Food Inspection Agency Website: Food incident response process

PPR-015: FOOD DEFENCE AND FOOD FRAUD MITIGATION

Required Outcome

A risk assessment procedure shall be developed, documented and performed on the facility and its operations to determine food defence and food fraud vulnerabilities due to intentional adulteration within the food safety system and/or the facility. The risk assessment procedure shall address physical security of the facility, access to high risk areas by employees and visitors, the security of daily operations, and products and processes that could be targeted for substitution, mislabeling or counterfeiting for economic gain. Based on the results of the risk assessment, a mitigation plan shall be written and enacted to prevent sabotage, substitution, counterfeiting or mislabeling of grain and grain products. The mitigation plan shall be reviewed on an annual basis.

How you can achieve the outcome

FOOD DEFENCE

1. If your facility is a member in good standing of the Canadian Border Services Agency's (CBSA) Partners in Protection (PIP) program, or any customs-trade partnership program where a mutual recognition arrangement exists, it will be considered compliant to the CGC FSIP STAN 1.1.0 requirements for food defence. If not, continue with the following steps.

2. Perform an initial risk assessment on the security of your facility and its operations. The risk assessment process should include:
   - the identification of the steps of the process flow, and all parties contributing to the process flow of the HACCP plan. This should include suppliers, receiving, storage, handling, processing and shipment of grain and grain products;
   - an assessment of each step of the process flow for potential food defence threats; and
   - an assessment of the organization's vulnerability to each threat identified.

   A food defence risk assessment tool that meets the above listed criteria may be used to perform the risk assessment. Unmitigated risks should be addressed through corrective actions and the results of the risk assessment shall be used to develop the Food Defence Plan. Document the procedure for conducting risk assessments.

3. Write and implement a Food Defence Plan that includes the following:

   Employee and visitor security measures:
   - references are attained for new employees to ensure their suitability for employment;
   - work assignment schedules are developed and maintained;
   - if necessary, an employee identification system (e.g. identification tags, colour-coded uniforms) is implemented;
   - access to sensitive areas (utilities and water, sensitive documents) is restricted to authorized personnel only;
   - all visitors are required to report to the appropriate company representative prior to entering the facility;
   - personal items not required for job performance are prohibited in the grain handling area;

- all staff are trained on how to prevent, detect and respond to food defence threats including reporting any unusual behaviours to supervisors; and
- supervisors and management are alert for atypical illness or health conditions among employees.

Physical security of the facility:

- secure all accessible entryways to facilities when not in use and not being monitored;
- secure all bulk unloading equipment when not in use and not being monitored;
- inspect all equipment prior to use;
- install adequate interior and exterior lighting;
- perform regular security monitoring of the premises;
- keep staff and public parking areas separate from grain receiving and delivery areas;
- restrict access to the laboratory and monitoring the location and usage of re-agents, if applicable; and
- limit access to chemical storage areas to authorized personnel only.

The security of the day-to-day operations of the facility, including the security of receiving, handling, storage and shipping of grain and grain products:

- supervise the delivery of grain and non-grain inputs;
- inspect grain and non-grain inputs for evidence of contamination prior to accepting the delivery and reject suspect deliveries;
- acquire non-grain inputs from previously approved suppliers;
- segregate unfit or contaminated goods in a manner that minimizes the potential to compromise other goods;
- keep inventories of incoming goods, and store these goods in a secure location;
- randomly perform security inspections on warehouses, storage containers and vessels; and
- assess the security of off-site or public warehousing locations.

FOOD FRAUD

1. Perform a vulnerability assessment on all incoming materials and grain handling processes, taking into account susceptibility to substitution, mislabeling or counterfeiting. The vulnerability assessment shall take into consideration:
   - the identification of all inputs to the grain handling process and the suppliers of those inputs, including both grain producers and suppliers of non-grain inputs;
   - an assessment of the inputs and the associated supply chain for potential opportunities, risks or vulnerability for food fraud;
   - an identification and assessment of process steps that pose potential opportunities, risks or vulnerabilities for food fraud; and
   - an assessment of the organization’s level of risk or vulnerability to each threat identified. Identify existing control measures that may be used to mitigate your vulnerability

2. Develop and implement a food fraud mitigation plan. The plan will be based on the results of the vulnerability assessment and shall address ways to mitigate identified vulnerabilities and any opportunities to improve existing controls. The Plan will take into account, but is not limited to, the following risks:
   - origin of grain (Canada, USA, Other countries);
   - special attributes that increase the value of raw materials or finished product (e.g. non-GMO, organic);

- increasing the volume of high value commodities; and
- historical evidence of fraudulent activity with similar products.

How you can monitor and verify this prerequisite program:

A food defence and food fraud self-assessment must be conducted annually on the facility's operations and infrastructure to assess security strengths and areas that require improvement. Your food defence and food fraud plan must be reviewed annually by your Food Safety Team to ensure that it continues to be current and appropriate. Record the results of both the assessment and the annual review.

References

Canadian Border Services Agency Website: Partners in Protection

Canadian Food Inspection Agency Website: Food Fraud

PPR-016: ALLERGEN CONTROL

Required Outcome

An allergen control program shall be implemented to eliminate or reduce the amount of allergenic grains to an acceptable level. Acceptable levels shall be determined by customer specifications and their intended use of the product (i.e. further cleaning/allergen control or no further allergen control), and the regulatory requirements of the importing country. When no further allergen control will be conducted by the customer, a risk assessment shall be conducted to determine the allergen control measures required. Controls shall be implemented as appropriate at receiving, handling, storage and shipping to prevent, reduce or eliminate the presence of allergenic grains and minimize the risk associated with cross contamination.

How you can achieve the outcome

Write and implement an Allergen Control program that includes the following:

1. Conduct a risk assessment to determine which grain-based allergens pose a risk and where in the process cross-contamination can occur. Document the risk assessment and record the results. Use the results of the risk assessment to determine the required allergen controls for your facility.

2. Establish maximum allowances for allergenic grains (e.g. wheat, soybeans, mustard) at receiving based on how effectively they can be removed by your cleaning equipment. Inspect grain at receipt to ensure that allowances for allergenic grains are not exceeded. If incoming grain contains an excessive amount of allergenic grains the lot must be rejected or redirected to another market.

3. Grain should be received and handled using designated receiving pits, storage bins and grain handling equipment. If this is not possible, establish documented procedures for cleaning and flushing receiving pits, bins and grain handling equipment thoroughly in between commodities. Maintain records of these activities.

4. Grain spills are cleaned up prior to handling grain for customers with allergen specifications to minimize risk of potential cross contamination

5. Grain that is being sold to customers with allergen specifications is inspected and/or tested prior to shipping. If product does not meet customer specifications, it is reworked or redirected to another market.

6. Personnel are trained in your established allergen control procedures.

7. Cleaning methods used to remove or reduce allergenic grains to an acceptable level are validated to ensure that they are effective. This may be done through sampling and inspection and/or testing of end product to ensure that levels of allergenic grains are removed or reduced to an acceptable level. If validation activities indicate that your cleaning processes are not effective in reducing allergenic grains to acceptable levels take corrective actions and conduct a root cause analysis to determine the source of contamination. Document validation activities and record the results of validation.

How you can monitor and verify this prerequisite program:

On a predetermined schedule, monitor the receiving, handling, storage and shipping of grain lots with allergen specifications to ensure that allergen control procedures are being followed. Review the training records to ensure that personnel performing these functions have received appropriate training. Record the monitoring results.

Verify that monitoring has occurred at a frequency appropriate to the risk. Verification may be conducted during internal audits for lower risk activities. Your written Allergen Control prerequisite program should be reviewed annually to ensure it continues to be current and appropriate.