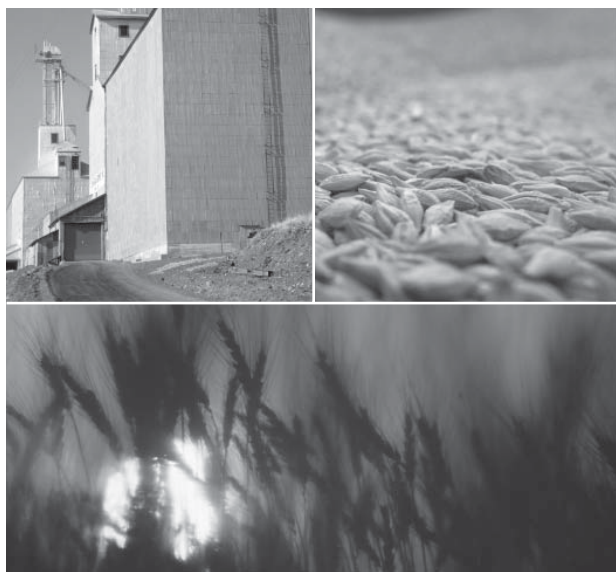


# AIB International Consolidated Standards for **GRAIN HANDLING FACILITIES**



**AIB International  
Consolidated Standards for  
Grain Handling Facilities**



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# **The AIB Standards**

The AIB International Consolidated Standards for Grain Handling Facilities were published as a tool to permit grain handlers to evaluate the grain/commodity safety risks within their operations and to determine levels of compliance with the criteria in the Standards. These Standards contain the criteria and rating method used to assign a numerical score (rating) to the facility. These criteria are derived from the following good management principles: The U.S. Federal Food, Drug and Cosmetic Act (1938); Good Manufacturing Practices, CFR Title 21, Part 110 (1986); U.S Grain Standards Act; Agriculture, CFR Title 7 (B)(VIII)(G), Part 800, the U.S. Federal Insecticide, Fungicide, and Rodenticide Act; the Occupational Safety and Health Standards, Grain Handling Facilities CFR Title 29, Part 1910.272.

This document and scoring procedure should be used by the facility management team to perform a self-assessment of the facility's compliance to the AIB Standards. The rating protocol should be used to assign a numerical score to the facility inspection and evaluate the overall effectiveness of the grain/commodity safety programs.

## **Section 1**

### **Adequacy of Grain Safety Program**

This section outlines management's responsibility for formally documented programs necessary to establish and maintain an effective grain/commodity safety program. These programs are detailed in sections 2 through 5 of this document. Successfully implementing these programs will reduce the potential for grain/commodity contamination in the facility. The effectiveness of the grain/commodity safety program is evaluated by the self-inspection and corrective action process, which documents the maintenance and continuous improvement of the required programs for grain/commodity safety.

## **Section 2**

### **Pest Control**

This section describes elements of a formalized, written grain/commodity adulteration prevention program required to conform with these consolidated standards. It defines several types of programs, lists required records, and gives specific procedures to follow to prevent grain/commodity adulteration by pests, pest evidence, or pesticides.

## **Section 3**

### **Operational Methods and Personnel Practices**

This section lists programs and techniques to protect the grain/commodity from adulteration during handling, storage and manufacturing. It addresses receiving and storing raw materials; transferring and handling; operational appearance; and operational, delivery, and personnel practices.

## **Section 4**

### **Maintenance for Grain Safety**

This section requires the facility to have an established and implemented preventive maintenance program; documented maintenance work order system; and sanitary/hygienic design criteria for the building, equipment, and utensils to prevent contamination of the grain/commodity from these sources.

## **Section 5**

### **Cleaning Practices**

This section contains requirements for scheduled cleaning of the facility and grounds, equipment, utensils, and maintenance cleaning associated with electrical and mechanical systems.

## **Confidentiality**

All information obtained by AIB International during the establishment/facility inspection will be treated as confidential between AIB International and the client. The inspection report will be provided to the client under an AIB assigned code number. Except as required by law, AIB International will not release any information or report of the inspection to a third party without written authorization from the client.

## **Using the Standards for Self-inspection: The Inspection Program**

The grain handling facility management **shall** develop a program to ensure the entire facility is inspected a minimum of once a month during operations and if applicable, at the beginning and end of each seasonal grain handling period. A formal documented report **shall** be made of the inspection observations. It is recommended that the inspections be conducted using a team consisting of key facility personnel, including management and supervisors.

## **Types of Self-Inspection**

There are three types of self-inspections. The first type is the pre and post-seasonal inspection to be conducted by facility management. The building and equipment should be inspected to ensure that grain/commodity safety hazards are identified and eliminated prior to start up. These inspections should focus on building and equipment conditions requiring corrective action to ensure the safe handling of grain throughout the operation. The second type of inspection should be conducted daily by designated personnel who should inspect the facility for hazards in their areas of responsibility. The third type of the inspection should be a monthly inspection. The periodic inspection should be conducted by the facility management personnel.

The inspection time should be short and focused for maximum benefit. It is better to have an inspection that is two hours long that is highly focused on one area rather than a lengthy inspection that interferes with team members' other duties or causes team members to lose focus or interest. As previously noted, the team should include supervisors in their areas of responsibility. The inspection should also be used to train employees in good procedures for grain/commodity product safety. It must be documented and list noted discrepancies. For each discrepancy, provide the course of corrective action required, person(s) responsible, estimated date of correction, and actual completion date.

## **Conducting the Self-Inspection**

The inspection personnel should conduct the elevator and grain handling facility self-inspection at least once a month. If the facility is small, then the entire facility should be completed during the inspection. If the facility is large, it may be necessary to divide it into two, three, or four inspection zones. One area should be inspected each week, meaning the entire facility will be inspected by the end of a single two- three-, or four-week cycle. If the grain handling facility is divided into sections, the facility areas should be defined and inspected together in a logical manner. Examples are: bulk receiving systems, bulk storage systems; raw materials warehouse; load-out systems; support areas (maintenance, locker and toilet rooms, etc.); outside grounds and roof; or other divisions as dictated by area of management responsibility. This will help to associate grain/commodity safety hazards found during the inspection with the inspected area and responsible personnel.

## **Inspection Preparation**

Management and others participating in the inspections should prepare in advance for the inspection by thoroughly reviewing the requirements in these standards and by examining previous inspection reports. This activity should not be interrupted. Participants should focus exclusively on the inspection throughout its duration. If the grain handling facility is large, then the inspection should focus on selected areas, and these areas should be thoroughly inspected. It is important that the team be thorough in the inspection, using the criteria in the AIB Standards.

Inspection participants should be properly attired per company requirements with all the proper inspection equipment including flashlight, spatula, tools to disassemble equipment, tape recorder or paper to take notes, and safety equipment. They should follow all applicable plant policies.

## **Inspection Notes**

One person should be assigned to take inspection notes. This person is designated throughout the rest of this document as the scribe. The inspection should be systematic, beginning in one area such as receiving, then moving through the facility area or in a logical sequence. The notes should be written so that they relate directly to the area being inspected. This will allow management to use them to focus on those grain handling areas or practices that pose the greatest grain/commodity product safety risks.

It is important that the scribe write down all observations made during the inspection. The participants should discuss the observations so all members understand the hazard observed, correction needed, and what changes can be made to the management system to prevent recurrence of the problem or hazard. Each written observation should be coded with the appropriate AIB category as follows:



1. (AP) Adequacy of Grain Safety Program
2. (PC) Pest Control
3. (OP) Operational Methods and Personnel Practices
4. (MS) Maintenance for Grain Safety
5. (CP) Cleaning Practices
6. (COM) Comment - Not a deficiency, but generally a statement of fact, not requiring any action

The scribe should also code each observation with the word designation “Improvement Needed,” “Serious” or “Unsatisfactory,” if the inspection observation fits the definition in the AIB Standards.

## **Definitions**

- Unsatisfactory:* Imminent food safety hazard, program failure, or departure from the Good Manufacturing Practices (GMPs).
- Serious:* Important potential grain safety or adulteration risk or risk of program failure.
- Improvement Needed:* A potential hazard, partial program omission or grain safety finding that is inconsistent with the Good Manufacturing Practices (GMPs). If this hazard, omission or finding is not corrected, it could lead to a program failure.
- Shall:* A requirement according to the AIB Standards.
- Should:* A recommendation according to the AIB Standards.
- Product Zone:* The area directly above exposed grain/commodity products and/or equipment surfaces that contact the grain/commodity.

*Product Area:* The area within close proximity of a product zone.

## **The AIB Food Safety Rating System: Using the Scoring Procedures**

Upon completion of the inspection, the scribe should number all inspection observations and transcribe them (report item numbers) to the AIB Rating Analysis Recap Form (Appendix I). Item numbers should be entered on the Recap Form in the proper category. Any items with a designation of “Improvement Needed,” “Serious” or “Unsatisfactory” should be noted in the classification box under the corresponding designation.

The number of the deficiency item(s) in each category should be placed in the Report Deficiencies by Item # column. This is necessary so the scribe can assign correct scores for each category (do not include any comment items). The scribe and team should reread the inspection observations in the report to assure that the correct category and classification have been assigned. These steps will enable the scribe and the inspection team to analyze the inspection notes according to the criteria in the AIB standards and to translate them into numerical scores.

The scribe should then assign each category a point value within the range given for the category rating classes noted in the section below. This point value should relate to the worst food safety item in each category. For example, the inspection notes may indicate that a hazard should be classed as an “Unsatisfactory” item, a “Serious” item, an “Improvement Needed/Potential Hazard,” or a “Minor Improvement” item.

The total number of items and the level of severity of the **worst** item(s) will determine whether the category score is at the upper or lower end of the scoring range in each category.

Category scores should be in five point increments. If a category item is coded as “Improvement Needed,” “Serious” or “Unsatisfactory,” the points assigned to that category must fall within that range.

**Scores for the category “Adequacy of Grain Safety Program” must be consistent in assessment criteria, results, and point value with the observations and analyses recorded for the other four categories.** This is important, since it will enable an objective analysis of the programs or practices that allowed or caused the deficiencies observed during the inspection. The total facility inspection score is the sum of all the category scores.

### **Category Rating Classification**

The following range descriptors will be used to assign category scores:

Minor improvements needed, no potential for contamination.....	180 - 200
Some improvement needed, potential hazards noted.....	160 - 175
Serious deficiencies (See definition) ....	140 - 155
Unsatisfactory deficiencies (See definition)<	140

If an unsatisfactory item has been identified, if a management program is unsatisfactory by definition, or if one of the categories has a score below 140 points, the total score classification will be “Unsatisfactory” regardless of the point total.

## Facility Rating Classification

The facility shall receive a total score classification based on the numerical ranges below:

Superior.....	900- 1000
Excellent .....	800 - 895
Satisfactory .....	700 - 795
Unsatisfactory .....	< 700

## Inspection Report and Remediation Plan

After the score has been assigned and the report discussed, a plan for abatement of the food safety risks should be implemented. This plan should focus not only on correcting the deficient item(s), but also on improving the management system to prevent recurrence of the deficiency or deficiencies.

## Public Recognition

A Certificate of Achievement will be awarded following each inspection that results in a “Superior” or “Excellent” rating according to the criteria and rating system described in the *AIB Consolidated Standards for Grain Handling Facilities*.

A Certificate of Participation will be issued to facilities achieving a “Satisfactory” rating according to the AIB criteria and rating system.

# 1. Adequacy of Grain Safety Program

(1.00.00.00.00)

1. The responsibility and accountability at all levels of the grain handling environment is critical to a successful grain/commodity safety program. An organizational chart **shall** be maintained clearly assigning regulatory responsibility for the grain handling facility. The appropriate FDA registration **shall** be maintained. (1.01.00.00.00)
2. Standard operating procedures (SOP) **shall** be developed for all grain/commodity safety aspects to include procedures relating to grain receipt, storage, transportation, employee practices, site and grounds maintenance. (1.02.00.00.00)
3. Each grain handling operation **shall** establish a self-inspection program. A documented self-inspection **shall** be conducted of all the elevator areas and facilities at least monthly. The documentation **shall** include the written observations and corrective actions. Audits **shall** include a physical inspection of the entire site as well as a review of the documentation related to grain/commodity product safety. (1.03.00.00.00)
4. Each grain handling operation **shall** establish an appropriate budget and support for the acquisition of appropriate tools, equipment, and other chemicals. (1.04.00.00.00)
5. A Master Cleaning Schedule (MCS) for periodic cleaning assignments for grain receiving, grain handling, grain storage, employee hygiene areas, yard equipment and storage areas **shall** be undertaken as a formalized written plan. The schedule **shall** specify cleaning frequencies, responsibilities, post-cleaning evaluation, and be up to date. The cleaning tasks should be divided into three general areas and included on the appropriate schedule: (1.05.00.00.00)

Type Of Task	Appropriate Schedule
Periodic “deep cleaning” tasks, performed other than daily	Master Cleaning Schedule
Maintenance cleaning	Master Cleaning Schedule
Daily “housekeeping” tasks	Housekeeping Schedule

6. Cleaning procedures (Sanitation Standard Operating Procedures [SSOP]) **shall** be developed for personnel training and maintaining the hygiene/sanitation level of the grain handling facility. These written cleaning procedures **shall** be developed and utilized for all cleaning tasks listed on the Master Cleaning Schedule. (1.06.00.00.00)
7. An inspection program **shall** be developed for incoming materials including, but not limited to, bulk trailers, bulk rail cars and other carriers. Incoming carriers **shall** be routinely inspected consistent with receiving procedures to ensure product integrity. The presence of security seals, when used, **shall** be verified and documented. The results of the inspections **shall** be documented. (1.07.00.00.00)
8. Records of results of examinations and/or copies of Grade Designation that verify compliance with federal regulations, or guidelines for raw agricultural commodities **shall** be maintained on file. The raw materials susceptible to mycotoxins should be covered by a separate written procedure, with appropriate documentation maintained on file. (1.08.00.00.00)
9. Each grain handling operation **shall** conduct a risk assessment. Based on the results of the risk assessment analysis, the facility should establish a Hazard Analysis Critical Control Point (HACCP) program. If applicable, the HACCP plan should consist of the following points: (1.09.00.00.00)

1. Describe grains handled and identify hazards inherent to the product (1.09.01.00.00)
2. Determine the Critical Control Points (CCP), and identify procedures for controlling the hazards (1.09.02.00.00)
3. Identify the critical hazard limit associated with each CCP (1.09.03.00.00)
4. Specify monitoring frequency and designated person(s) responsible for testing (1.09.04.00.00)
5. Establish deviation procedures (1.09.05.00.00)
6. Establish verification procedures (1.09.06.00.00)
7. Maintain documentation of procedures (1.09.07.00.00)
10. The grain handling operation **shall** create specific written procedures for grain/commodity safety training consistent with the Good Manufacturing Practices (GMPs) of all personnel, including new employees, and maintain a record of training program content and completion. Refresher training should be provided to all employees at least annually. A policy should be written to ensure that buyers, contractors and other visitors comply with the GMPs while visiting the site. (1.10.00.00.00)
11. A formalized written program for evaluation of client complaints, particularly those related to adulteration, should be established. (1.11.00.00.00)
12. The grain handling operation should establish a trace back system that provides the ability to identify the source of the grain received. Documentation **shall** include date of receipt, method of transport, shipping point, and carrier information. This system should be tested for effectiveness at least annually and documentation of each test **shall** be maintained. (1.12.00.00.00)
13. Each grain handling operation should establish a procedure for handling regulatory inspectors, third party auditors, and other visitors. The procedure should specify the

persons delegated to accompany all inspectors, a policy regarding photographs, and a policy regarding records and samples. (1.13.00.00.00)

14. A written preventive maintenance program and work order system **shall** be developed and be in use to prioritize the elements of the identified structural or equipment maintenance problems that could cause potential for grain contamination. The program should address the use of temporary repairs. The company **shall** ensure that the stored grain is properly protected during maintenance operations. (1.14.00.00.00)
15. A written policy to prevent the inclusion of metal, wood, glass, and all other extraneous materials **shall** be maintained. (1.15.00.00.00)
16. A glass and brittle plastics policy **shall** be written and implemented. The policy should state that no glass or brittle plastics are to be used in the facility, except where absolutely necessary. The policy should state that no glass should be brought into the facility in the employees', visitors' or contractors' personal effects or equipment. Included in the policy should be a procedure for handling and removing any glass that is broken in the facility. A list or schematic of all the essential glass and brittle plastics should be compiled and the items on the list checked on a regular basis to ensure that any accidental breakage is noted. (1.16.00.00.00)



## 2. Pest Control (2.00.00.00.00)

1. A formalized integrated pest management program involving written procedures designed to reduce the risk of contamination from insects, rodents, birds and other animals **shall** be maintained by the grain handling operation. (2.01.00.00.00)
  1. Pesticide (insecticide, rodenticide, herbicide and avicide) applications made within the elevator areas or on the grounds of the operation **shall** be undertaken by a certified applicator or licensed contractor, where such licensing provisions are required by government regulations, and **shall** be made in accordance with the pesticide labeling requirements. In the absence of such regulatory requirements, applicators must demonstrate that they have received proper training in the correct and safe use of pesticides by attendance at a recognized seminar or have documented training and be under the supervision of a licensed applicator, where required by government codes. (2.01.01.00.00)
  2. Pesticides designated for “Restricted Use” **shall** only be used by trained, licensed pesticide applicators, where a license is required by government codes. (2.01.02.00.00)
  3. At grain handling facilities that conduct fumigations, a formal, written Fumigation Management Plan (FMP) describing the required steps to ensure safe, legal and effective fumigations **shall** be developed and maintained on file. (2.01.03.00.00)
  4. Grain handling operations serviced by a contracted licensed pest control company **shall** maintain the following: (2.01.04.00.00)
    1. A contract describing the specific services to be rendered, including materials to be used, methods, precautions and Material Safety Data Sheets

- (MSDS) or other chemical safety use information required by government regulations. This information **shall** be readily available. (2.01.04.01.00)
2. Sample labels for all pesticides used. Sample labels **shall** be maintained readily available for the time specified by regulatory codes. (2.01.04.02.00)
  3. Accurate and complete service records describing the current levels of pest activity and recommendations for additional efforts needed to correct conditions allowing a potential for pest activity. (2.01.04.03.00)
  4. Accurate documentation of all pesticide applications, including insecticides, rodenticides, and herbicides made in or around the operation. Documentation **shall** be maintained in accordance with government regulations and must include, at a minimum: (2.01.04.04.00)
    1. Materials applied, including EPA registration number, where available (2.01.04.04.01)
    2. Target organism (2.01.04.04.02)
    3. Amount applied (2.01.04.04.03)
    4. Specific area where pesticide was applied (2.01.04.04.04)
    5. Method of application (2.01.04.04.05)
    6. Rate of application or dosage (2.01.04.04.06)
    7. Date and time treated (2.01.04.04.07)
    8. Re-entry interval, if applicable (2.01.04.04.08)
    9. Wind velocity and direction, if applicable (2.01.04.04.09)
    10. Air temperature, if applicable (2.01.04.04.10)
    11. Applicator's signature (2.01.04.04.11)

5. Include a copy of the current liability insurance and certified applicator's license, where a license is required. (2.01.04.05.00)
5. The facility serviced by on-site personnel (certified, licensed or trained pesticide applicator or applicators) **shall**: (2.01.05.00.00)
  1. Maintain a file of sample labels and Material Safety Data Sheets (MSDS) for each pesticide used and **shall** maintain pesticide usage records as well as records on maintenance of the safety and protective equipment used. (2.01.05.01.00)
  2. Maintain and enforce written procedures for the application of all pesticides. (2.01.05.02.00)
  3. Maintain accurate records of application of pesticides as outlined in section 2.01.04.04.00 above. (2.01.05.03.00)
2. All grain handling operations **shall** establish an effective preventive program for the elimination of pest activity. Specific procedures include, but are not limited to: (2.02.00.00.00)
  1. Outside bait stations for the control of rats and mice. These bait stations **shall** meet tamper resistance standards and **shall** be properly positioned, anchored in place, locked, and properly labeled in compliance with regulatory requirements. The bait stations **shall** be installed at appropriate intervals around the exterior perimeter of the facility. The exterior bait station placement is suggested at 50-100 foot (15-30 meter) intervals. Where allowed by local ordinance, the stations should also be installed along the fence line in accordance with industry best practice. Properly maintained mechanical rodent control devices may also be used, where allowed by government regulations. Lids to the bait stations **shall** be locked with

devices supplied by or recommended by the manufacturer. The use of reusable plastic ties or other easily cut or tampered with materials **shall** not be used. Baits used **shall** be approved, registered, rodenticide or monitoring (non-toxic) feeding blocks. (2.02.01.00.00)

2. Internal measures **shall** comply with government regulations. Unless prohibited by regulatory requirements, internal control programs **shall** consist of the use of mechanical traps, extended trigger traps, or glue boards, but should not include feeding stations of any kind. It is recommended that the internal devices, used for routine monitoring purposes, be positioned at appropriate intervals along exterior perimeter walls. The suggested spacing between traps is 20-40 foot (6.5-13 meter) intervals. Where possible, rodent control devices should be installed at each side of exterior overhead and pedestrian doors or where there is a potential for rodent entry into the facility. In any area where there is a potential for rodent activity, such as raw material storage areas within a facility, rodent control devices should be installed along interior walls. The contractor or facility personnel **shall** inspect and clean the devices at least once a week. (2.02.02.00.00)
3. Schematics depicting the locations of all the rodent control devices, and other pest control devices, as applicable, **shall** be maintained and kept current. (2.02.03.00.00)
4. Birds **shall** be excluded from the facility through the use of netting, screening, mechanical traps, or frightening devices. Avicides, if legal and practical, may be used according to the label directions. Avicides **shall** not be used on the interior of the facility, near grain receiving pits, or other areas where grain is exposed and may become contaminated. (2.02.04.00.00)

5. Insect light traps (ILT), if used, **shall** be properly mounted and maintained. The ILTs should be installed in locations so that insects are not attracted from outside the building. The ILTs should be included on a regular cleaning and inspection program (weekly during peak insect seasons) and the results documented. Installation and use must follow federal and local regulations. The light tubes should be a safety-type light bulb or included on the glass inspection program and be changed on an annual basis and records of these changes maintained. (2.02.05.00.00)
6. Insect pheromone traps, if used, **shall** be properly maintained. These traps **shall** be maintained in areas where they do not present a potential contamination hazard. The traps should be included on a regular inspection program and the findings documented. (2.02.06.00.00)
3. All grain handling operations **shall** establish programs for the management of pesticides, application equipment, proper usage, and proper disposal of residuals and containers. (2.03.00.00.00)
  1. All pesticides, containers, and equipment **shall** be labeled to identify the contents. Insecticides or herbicides each require separate equipment for application. All equipment used for pesticide applications **shall** be properly maintained and calibrated. Equipment calibration records **shall** be maintained. (2.03.01.00.00)
  2. All pesticides **shall** be stored in a locked enclosure that is adequate in size and construction and well ventilated. The storage facility **shall** meet state and local requirements. An easily understandable labeling warning of the contents and limiting access **shall** be posted on exterior entrances. A program **shall** be in place for the control of spills. (2.03.02.00.00)

3. The use of any pesticide container for any purpose, other than the pesticide originally intended, **shall** not be permitted. (2.03.03.00.00)
4. Disposal of pesticides, pesticide containers, and pesticide residues **shall** be performed in a manner that meets all regulatory guidelines and must be consistent with the instructions included on the pesticide label. (2.03.04.00.00)

### 3. Operational Methods and Personnel Practices (3.00.00.00.00)

1. Receipt and Storage (3.01.00.00.00)
  1. Grain handling equipment and tools **shall** be handled and maintained in a manner to prevent the potential for contamination of the grain. This equipment and the transport vehicles **shall** be inspected prior to use to identify filth and contamination issues. Corrective actions **shall** be taken prior to putting the affected items in service. (3.01.01.00.00)
  2. Materials and equipment in storage should be kept off the floor. In addition, adequate space should be provided along the interior perimeters to allow for effective cleaning, inspecting and pest control services. (3.01.02.00.00)
  3. Rotation of all raw materials **shall** be undertaken on a “first-in, first-out” (FIFO) basis or other verifiable method to ensure proper stock rotation. (3.01.03.00.00)
  4. All toxic chemicals, including cleaning and maintenance compounds, and all nonproduct related materials, such as parts and equipment, **shall** be stored in designated locations away from the exposed grain product areas. (3.01.04.00.00)
  5. All breather bags, filter elements, filter socks and boots in storage should be protected from dust. These **shall** be designed and fabricated with grain/commodity contact approved materials, which are properly maintained to reduce possible contamination. These **shall** be kept clean. (3.01.05.00.00)
  6. All containers **shall** be labeled or otherwise identified to indicate the intended use, i.e., good grain vs. waste grain, floor sweepings, dockage, spray bottles, and other intermediate containers. (3.01.06.00.00)

7. The grain storage bin tops and bottoms **shall** be inspected for pest activity, moisture issues and grain quality on a pre-determined frequency. The frequency should be determined based on seasonal conditions, pest life cycles and historical data. The results of the inspections and corrective actions **shall** be documented. (3.01.07.00.00)
  8. Grain retention samples should be properly stored in sealed containers to minimize potential for pest infestation. The grain sampling and testing laboratories **shall** be properly maintained in a clean and organized manner. (3.01.08.00.00)
  9. The appropriate usage documentation **shall** be maintained for all approved dust suppressants or other materials added to the grain. Letters of approval for grain contact use **shall** be maintained. Water **shall** not be added to grain as a dust suppressant. (3.01.09.00.00)
  10. Grain receiving pits **shall** be provided with covers to prevent the entry of dust, windblown debris, pests, water and other contaminants from entering the pit when not in use. (3.01.10.00.00)
  11. Effective measures (effective purge, equipment design, etc.) **shall** be undertaken to prevent cross-contamination between different grains. Particular attention **shall** be given to the avoidance of cross-contamination between grains which constitute an allergen potential, i.e., wheat, soybeans. (3.01.11.00.00)
2. Transfer and Handling of Materials (3.02.00.00.00)
    1. Personnel should promptly eliminate spillage, leakage, and waste. (3.02.01.00.00)
    2. All scalpels and other grain cleaning equipment, if used, should be checked on a predetermined frequency for torn screens and other defects, if applicable. Records of these checks should be maintained by appropriate department personnel. (3.02.02.00.00)



3. Rubbish, trash, or inedible waste should be placed in appropriately identified containers and should be emptied when necessary. (3.02.03.00.00)
3. Operational Appearance (3.03.00.00.00)
  1. Grain handling equipment should be properly installed to provide access for cleaning and inspection. Supplies should be arranged in an orderly fashion. (3.03.01.00.00)
  2. Adequate work space and storage should be provided to enable the operations to be performed under safe, hygienic conditions. (3.03.02.00.00)
  3. Ongoing housekeeping operations by the grain handling employees and all support personnel should be conducted routinely throughout the operating hours to maintain the work and storage areas in a reasonably sanitary environment. Operational debris should be kept at a minimum. (3.03.03.00.00)
4. Operational Practices (3.04.00.00.00)
  1. Effective measures **shall** be taken to prevent the inclusion of metal, wood, glass and all other extraneous materials. This can be accomplished through self-inspections, preventative maintenance programs, and glass and brittle plastics management programs. This can also be accomplished through the use of scalpers, magnets, and metal detectors at appropriate locations. Metal detection equipment (magnets) **shall** be provided on each product line at the point of grain receipt, per regulatory requirements. Metal detection equipment (magnets) should be installed on each load-out system. (3.04.01.00.00)
  2. If used, the magnet systems should be tested through pull-strength tests on a pre-determined frequency. (3.04.02.00.00)
  3. Equipment, containers, and utensils used to convey,

process, hold or store grain and commodities **shall** be constructed, handled and maintained during processing or storage in a manner that prevents the contamination of grain and commodities. All containers for handling sound grain should be used only for designated purposes. (3.04.03.00.00)

4. All restrooms and, if used, all field sanitation units (FSUs) **shall** be properly maintained. Restrooms and FSUs **shall** be properly supplied with toilet paper, cleaned, and maintained in a sanitary condition. (3.04.04.00.00)
  5. Hand washing facilities (basin, container, or outlet) **shall** be provided in all restrooms and in a location adjacent to the FSUs, if used. Potable water, soap, disposable paper towels, and a trash receptacle **shall** be provided. “Wash hands” signs **shall** be posted in languages understood by the employees. (3.04.05.00.00)
5. Delivery Practices (3.05.00.00.00)
1. Written procedures **shall** be developed concerning the inspection of outbound carriers for overall condition and cleanliness. Any vehicle utilized for the transportation of fertilizers and other non-grain related items **shall** be rejected until appropriately cleaned. Documentation of these inspections **shall** be maintained. (3.05.01.00.00)
  2. All points of access (top hatches, bottom hatches) to bulk shipping containers **shall** be sealed, when applicable, with a verifiable numbered seal and the seal number provided on the bills of lading. (3.05.02.00.00)
  3. Distribution records **shall** be maintained to identify initial distribution as per governmental regulations, and the grain products **shall** be handled and transported in such a way that prevents their actual or potential adulteration. (3.05.03.00.00)

6. Personnel Practices (3.06.00.00.00)
  1. Responsibility for assuring compliance by all personnel to facility policy **shall** be clearly assigned to competent supervisory personnel. (3.06.01.00.00)
  2. Employees **shall** be encouraged to practice good personal hygiene habits at all times. (3.06.02.00.00)
  3. Hand washing **shall** be performed at a frequency that is appropriate. Hands should be washed before beginning work, after using toilet facilities, eating, drinking, smoking or otherwise soiling hands. (3.06.03.00.00)
  4. Employees **shall** adhere to the following principles when handling grain materials: (3.06.04.00.00)
    1. Wear clean outer garments or uniforms. Suitable footwear **shall** be worn within the facility environment. Changing facilities should be provided for all personnel, whether employees, visitors or contractors, prior to entry to the grain handling areas, where appropriate. (3.06.04.01.00)
    2. Before entering rail cars for cleaning or repair activities, suitable clothing, head, and foot covering should be worn to prevent contamination of the internal product contact surfaces with hair or other foreign material. This should be included as part of the documented GMP policies for the site. (3.06.04.02.00)
    3. Gloves, if worn, should be subject to adequate control to avoid product contamination. (3.06.04.03.00)
    4. Outdoor clothing, cold weather clothing, and other personal items **shall** be stored separately in designated areas. (3.06.04.04.00)
    5. Remove insecure costume or hand jewelry, including watches, earrings, rings with settings, false fingernails, fingernail polish, and dangling jewelry. Only plain wedding bands are acceptable, unless prohibited by facility policy and/or

safety requirements. Any exception to this should be spelled out in the company policy and the reasoning behind it explained. (3.06.04.05.00)

5. Eating food, drinking beverages, chewing gum, and using tobacco products **shall** be restricted to designated areas only. (3.06.05.00.00)
6. Employee lunches and/or personal effects should be stored in designated locations and not be stored or placed in exposed grain handling areas. Examples would include sweaters, jackets, shoes, smoking materials, etc. All personal property should be stored in an area defined by company management. (3.06.06.00.00)
7. Personal items such as tools, pens or pencils should be carried in pockets or pouches below the waist when employees are in grain handling areas. There should be no pockets above the waist on the outside of protective clothing. (3.06.07.00.00)
8. No person with obvious boils, sores, infected wounds, or any other infectious or communicable disease **shall** be permitted to contact grain. If required by local regulations, all employee health cards **shall** be kept current and properly posted. The company **shall** have a procedure for the notification by employees, including temporary employees, of any relevant infectious disease or conditions with which they may be suffering, or have been in contact. (3.06.08.00.00)
9. Noncompany personnel **shall** be required to conform to company safety/hygiene policies and the Good Manufacturing Practices (GMPs). These would include, but not be limited to: visitors, regulatory authorities, outside contractors, tour groups, and employees' family and friends. (3.06.09.00.00)

#### 4. Maintenance for Grain Safety (4.00.00.00.00)

1. The site **shall** be located and maintained so as to prevent contamination and enable the safe handling of grains. Consideration **shall** be given to local activities that may have potentially adverse impact, and measures **shall** be taken to prevent product contamination. The site boundaries should be clearly defined. Measures necessary to protect the site from any potential contaminants should be in place and periodically reviewed to ensure they continue to be effective. (4.01.00.00.00)
2. Building Structure (4.02.00.00.00)
  1. The grounds surrounding the grain handling operation **shall** be maintained in a manner that prevents grain contamination. (4.02.01.00.00)
    1. Equipment **shall** be properly stored. Litter and waste and weeds or tall grass **shall** be removed from the immediate vicinity of the grain handling operation. (4.02.01.01.00)
    2. Outside wet and/or dry waste compactors and dumpsters **shall** be installed and maintained to minimize leakage or such leakage contained to be easily removed and the area cleaned. (4.02.01.02.00)
    3. Provision of adequate drainage from grounds, roof or other areas. (4.02.01.03.00)
    4. Maintenance of roads, yards, and parking areas to minimize dust, standing water or other potential contaminants. (4.02.01.04.00)
    5. Measures **shall** be in place to maintain site security. (4.02.01.05.00)
  2. Floors, walls and ceilings of grain handling operation structures **shall** be of such construction as to be adequately cleanable and kept in good repair. Ceiling leaks in areas where grain contact is possible **shall** be promptly repaired. (4.02.02.00.00)

3. All structural beams, supports, and other structural systems that are painted **shall** be maintained in an appropriate manner to preclude or eliminate any chipping, flaking, or peeling paint. (4.02.03.00.00)
  4. Bulk systems and unloading areas **shall** be installed and maintained to prevent the adulteration of the grain products. (4.02.04.00.00)
  5. Adequate lighting **shall** be provided in all storage areas and light bulbs, fixtures, mirrors, skylights, or other glass suspended over exposed grain product areas **shall** be of the safety-type or otherwise protected to prevent breakage. Other glass and brittle plastics in the operation **shall** be properly maintained and included on a formal glass/brittle plastics inspection program. (4.02.05.00.00)
  6. The physical building **shall** be maintained to provide necessary barriers for effective protection against birds, animals, vermin, and insects. The maintenance department should be responsible for the elimination of cracks and crevices, as well as other insect or rodent harborages. The doors, windows and other openings to the exterior **shall** be properly maintained to ensure a tight seal when closed. (4.02.06.00.00)
  7. Screening devices **shall** be provided on ventilation ducts installed on exterior grain bins and silos. Proper screening devices **shall** also be installed on windows, doors and other openings to the facility, which are opened for ventilation. (4.02.07.00.00)
  8. Hatches and other openings to exterior grain bins and silos **shall** be properly maintained and closed when not in use to prevent the entry of precipitation, flying pests and other airborne debris. Hatches and other openings to the interior grain bins and silos should be kept covered when not in use. (4.02.08.00.00)
3. Equipment (4.03.00.00.00)

1. All equipment associated with grain handling, but not limited to augers, scalpers, conveyors, trucks, trailers, switch engines, conveyors, forklifts, etc., **shall** have a preventive maintenance program for the systematic elimination of lubrication leaks, metal-to-metal wear conditions, and excessive grease applications. (4.03.01.00.00)
2. Flaking paint on equipment or excessive rust other than normal mild oxidation on black steel **shall** be eliminated. (4.03.02.00.00)
3. All equipment and utensils **shall** be so designed and of such material and workmanship as to be adequately cleanable and **shall** be properly maintained. (4.03.03.00.00)
4. The use of tape, wire, cloth, caulking and other temporary repairs should be minimized. A formal program should be implemented to identify temporary repairs and to ensure the provision of proper long term repairs. Tape and other temporary repairs should be dated with the application date and proper long term permanent repairs provided as soon as possible. (4.03.04.00.00)
5. Gear drives and other points of lubrication located over the exposed grain products **shall** be provided with proper catch pans or deflector plates to minimize the potential for contamination in case of leakage. (4.03.05.00.00)
6. Moisture accumulations in basement areas should be minimized. Appropriate ventilation should be provided to minimize condensation. The appropriate repairs should be provided to prevent wall and floor leakage. Sump pumps and pits **shall** be included on regular maintenance and cleaning schedules. (4.03.06.00.00)
7. A program to systematically remove obsolete and

unused equipment and building structures should be developed and implemented. (4.03.07.00.00)

4. Water Supply (4.04.00.00.00)

1. The water source **shall** be maintained to meet drinking water requirements. (4.04.01.00.00)
2. Programs should be established for the periodic inspection and testing of the grain handling operation water to evaluate for actual or potential microbial contamination. (4.04.02.00.00)
3. The grain handling operation **shall** have a potable water supply from an approved source. For underground well water supplies, sampling of the water **shall** be undertaken on a frequency consistent with local health department codes and state law. Proper documentation **shall** be readily available. (4.04.03.00.00)
4. All water installations and equipment **shall** be constructed, installed, and maintained to prevent back siphonage. (4.04.04.00.00)



## 5. Cleaning Practices (5.00.00.00.00)

1. The facility management **shall** have a written, documented cleaning schedule for the grain handling operation, grounds, equipment, storage facilities, employee areas, maintenance shops, etc. (5.01.00.00.00)
2. “Deep cleaning” **shall** be assigned to the appropriate department(s) and **shall** be accomplished by and consistent with a Master Cleaning Schedule (MCS) or its equivalent. (5.02.00.00.00)
3. The use of air hoses for cleaning should be minimized and should be permitted only for inaccessible areas of the equipment and in conjunction with deep cleaning operations. (5.03.00.00.00)
4. All cleaning procedures **shall** be carried out in compliance with applicable safety laws and regulations and according to formally established equipment cleaning procedures. When undertaken safely and in compliance with local and national laws and regulations, all equipment guards, panels, boots and socks **shall** be removed for inspection and cleaning of the interior of all equipment according to the Master Cleaning Schedule. All equipment guards, panels, boots and socks **shall** be replaced after inspection and cleaning of the interior of equipment. (5.04.00.00.00)
5. Equipment and structural “overheads” such as lights, pipes, beams, vent grids, etc., **shall** be scheduled for deep cleaning according to the Master Cleaning Schedule (MCS) to prevent the development of insects or mold or accumulation of foreign matter and dust. (5.05.00.00.00)
6. Daily “Housekeeping or Cosmetic Cleaning” **shall** be assigned to the appropriate departments or individuals and **shall** be undertaken to ensure work and support areas are maintained during normal working hours. All cleaning should be performed to prevent contamination. (5.06.00.00.00)
7. Floor sweepings, dust collection materials and other

- dockage created by cleaning activities **shall** not be reintroduced back into the grain stream. (5.07.00.00.00)
8. When necessary, the equipment and tools **shall** be cleaned and sanitized to prevent microbial and/or foreign material contamination. (5.08.00.00.00)
  9. All grain material handling equipment used in the transfer and storage of grains **shall** be routinely cleaned. (5.09.00.00.00)
  10. A program must be in place for cleaning and storage of equipment to be used or lowered into the rail cars or bulk transports. Designated clean equipment **shall** be provided to ensure that only clean ladders or other devices come in contact with the interior product contact surfaces. Appropriate means of storage of ladders or other devices used inside the rail car for cleaning and repair **shall** be implemented as a part of this program. (5.10.00.00.00)
  11. Separate and distinct cleaning tools should be utilized for cleaning grain-contact surfaces and non-grain contact surfaces. At no time **shall** cleaning items used to clean the toilet areas or FSUs be utilized for any other cleaning purpose. Proper identification and segregation of each classification of cleaning utensils **shall** be maintained. (5.11.00.00.00)
  12. If used, only detergents and sanitizers approved for food contact **shall** be used for cleaning of the grain contact surfaces. Non-toxic, general-purpose soaps need not be a registered product, but should be used in a manner that prevents grain/commodity contamination. (5.12.00.00.00)
  13. All cleaning compounds, sanitizers, and detergents **shall** be properly labeled and stored in locked compartments removed from the grain handling and storage areas. (5.13.00.00.00)
  14. The overheads **shall** be cleaned on a regular frequency to

prevent dust accumulations. Dust accumulations should be kept to a minimum to meet EPA, OSHA, Federal and State Regulations. (5.14.00.00.00)

15. Grain spills on the exterior of the facility **shall** be promptly removed. (5.15.00.00.00)
16. Obsolete or idle grain handling equipment, i.e., spouts, bucket elevators, storage bins, etc., **shall** be cleaned and included on a regular inspection and cleaning program. The obsolete and/or idle equipment should be thoroughly cleaned and left open to facilitate access or sealed to prevent additional grain and dust from entering. (5.16.00.00.00)
17. Maintenance mess and debris created during repairs and alterations **shall** be promptly removed. Emphasis **shall** be given to removing all nuts, bolts, washers, wire pieces, welding rods, welding slag, tape, cutting and drilling filings and other items that could contaminate the grain. (5.17.00.00.00)

## Conditions for Unsatisfactory Rating

Per AIB Standards, an Unsatisfactory rating will be assigned when an item or items during the audit represents a violation of the following types:

1. If an imminent grain/commodity safety hazard exists.
2. If grain safety programs are nonexistent or deficient in such a way that they do not comply with the GMPs.
3. If grain is adulterated such that:
  - a. It bears or contains an added poisonous or deleterious substance.
  - b. It consists in whole or in part of any filth, putrid, or decomposed substances, or if it is otherwise unfit for use as a food grain or commodity.
  - c. It has been handled or held under unsanitary conditions, whereby, it may have been contaminated with filth, or whereby, it may have been rendered injurious to health.
4. If a violation of the Good Manufacturing Practices (GMPs) is noted that is an imminent food grain or commodity safety risk.
5. If a violation of local, state and federal pesticide regulations is noted, that would represent a significant departure from the regulations or would cause an imminent grain/commodity safety risk.

Examples of a few conditions most commonly found which will require an unsatisfactory rating assignment have been listed below. **The following only represent examples of conditions for unsatisfactory rating assignments and are by no means inclusive. Similar items not specifically stated will be dealt with by the auditor in view of existing conditions and are always subject to review by AIB International headquarters personnel.**

1. Microbes
  - a. The presence of extensive amounts of mold either on or within proximity to the main product zones, jeopardizing product integrity.
2. Foreign matter
  - a. Pesticides used inconsistently with labeled directions.
3. Insects
  - a. Widespread infestation in overheads above product zones.
  - b. Infestations of equipment where product adulteration is likely.
  - c. Insect infestation resulting from poor grain/commodity handling practices or cleaning issues that could cause product contamination.
4. Rodents
  - a. Decomposed rodent in a trap indicating a program failure.
  - b. Dead rodent observed inside the grain/commodity handling facilities on wall perimeters, or in equipment or areas that would not be indicative of a normal contaminant of harvest.
5. Birds
  - a. Resident avian or evidence of bird nesting or contamination in the elevator storage areas.



## RATING ANALYSIS RECAP

Report #: \_\_\_\_\_

Review Person: \_\_\_\_\_

Location: \_\_\_\_\_

Date: \_\_\_\_\_

### Most Significant Items in Each Category:

- A.
- B.
- C.
- D.
- E.

Category	Report Deficiencies by Item #	(160-175)**	(140-155) Serious Items	(<140) Unsatisfactory	Reviewer's Score
AP					
PC					
OP					
MS					
CP					
<b>**Potential Hazard/Improvement Needed Items</b>					<b>TOTAL SCORE</b>

AP - Adequacy of Food Safety Program

PC - Pest Control

OP - Operational Methods and Personnel Practices

MS - Maintenance for Food Safety

CP - Cleaning Practices









# Pesticide Usage Log

Year

List all restricted use pesticides purchased according to trade name and EPA registration number on the back

Name of certified applicator		Address			Certification ID No.			
Name of Pesticide Used/EPA Registration No.	Target Organism	Application Data				Date(s) and Time(s) Treated	Applicator's Signature	
		Quantity Used	Where Pesticide was Applied	Method	Rate of Application or Dosage			

*List separately below all pesticides used*



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