



United States Department of Agriculture

Marketing and
Regulatory
Programs

Agricultural
Marketing
Service

Specialty
Crops
Program

Specialty
Crops
Inspection
Division

AIM
Inspection
Series

Approval and Use of Automated Sorting Devices for Incoming Almonds

July 2024

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Approval and Use of Automated Sorting Devices for Incoming Almonds
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INTRODUCTION

This document is designed to give guidance to United States Department of Agriculture (USDA), Specialty Crops Inspection (SCI) Division and Federal-State Personnel, outlining the processes for approval of equipment used for automated sorting of almonds for [Marketing Order 981 \(7 Code of Federal Regulations \(CFR\) §981\)](#); to allow for the identification of foreign material, almond kernels, inedible kernels, and dissimilar varieties.

Compliance with the Agricultural Marketing Service (AMS) guidelines does not excuse failure to comply with the Food, Drug, and Cosmetic Act or any other applicable Federal or State laws or regulations. The SCI Division of AMS's Specialty Crops Programs (SCP), is responsible for grading/inspecting, audits and standardization programs of fresh and/or processed fruits and vegetables and related products. The legal authority for grading, auditing and standardization activities are the Agricultural Marketing Acts of 1936 and 1946, as amended.

Applicants may obtain inspections of any fresh and/or processed fruit and vegetable and related products for which they have a financial interest. The inspection service is voluntary and self-supporting, and is offered on a fee-for-service basis.

GUIDE FOR ELECTRONIC USAGE

The AIM system of instructional manuals is available electronically in Adobe Acrobat Portable Document Format (PDF) at the following intranet address:
<https://usdagcc.sharepoint.com/sites/ams/AMS-SCI/SitePages/Home.aspx>.

When accessed electronically, AIM materials have hyperlinks and hypertext (visible as underlined [blue text](#)) available to the PDF user. Clicking on a hyperlink takes the reader to a web site with information relating to the subject. Hypertext links the reader to a different page within the current manual, or a different manual, with information relating to the subject. For example, the hypertext in the Table of Contents allows a reader to go directly to the section of interest in the manual by clicking on the section title.

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- A series of options will become available,
- Click on the “Access Search Features” link and follow the instructions for the type of search you are interested in.

AUTHORITY

Marketing Order 981 specifies the following requirements for incoming almond inspections in [7 CFR §981.442](#):

§981.442 Quality control.

- (a) ***Incoming.*** Pursuant to § 981.42(a), the quantity of inedible kernels in each variety of almonds received by a handler, including almonds of his own production, shall be determined and disposed of in accordance with the provisions of this paragraph.
- (1) ***Sampling.*** Each handler shall cause a representative sample of almonds to be drawn from each lot of any variety received. The sample shall be drawn before inedible kernels are removed from the lot, or the lot is processed or stored by the handler. For receipts at premises with mechanical sampling equipment and under contracts providing for payment by the handler to the producer for sound meat content, samples shall be drawn by the handler in a manner acceptable to the Board and the inspection agency. The inspection agency shall make periodic checks of the mechanical sampling procedures. For all other receipts, including but not limited to field examination and purchase receipts, accumulations purchased for cash at the handler's door or from an accumulator, or almonds of the handler's own production, sampling shall be conducted or monitored by the inspection agency in a manner acceptable to the Board. All samples shall be bagged and identified in a manner acceptable to the Board and the inspection agency.
- (2) ***Variety.*** For the purpose of classifying receipts by variety to determine a handler's disposition obligation, “variety” shall mean that variety of almonds which constitutes at least 90 percent of the lot: *Provided*, That lots containing a combination of Butte and Padre varieties only, shall be classified as “Butte-Padre”, regardless of the percentage of each variety in the lot. If no variety constitutes at least 90 percent of the almonds in a lot, the lot shall be classified as “mixed”: *Provided further*, That if the variety or varieties of almonds in a lot are not identified, the lot shall be classified as “mixed”, regardless of the percentage of each variety in a lot.
- (3) ***Analysis of sample.*** Each sample shall be analyzed by or under the surveillance of the inspection agency to determine the kernel content and the proportion of inedible kernels in the sample. The inspection agency shall prepare a report for each handler showing, by variety, the total adjusted kernel weight received by handler, the inedible kernel weight and any other information as the Board may prescribe. The report shall cover the handler's daily receipt or the handler's total receipts during a period not exceeding one week and shall be submitted by the inspection agency to the Board and the handler....

KEY ELEMENTS USED TO MAKE DETERMINATION

The following are key elements USDA will evaluate to make their determination:

Accuracy

The accuracy of an analytical procedure is the closeness of test results obtained by that procedure to the normal detected value. This is accomplished by the comparison of sample results which include several components based on the commodity.

Detection Limits

The detection limit is a characteristic of limit tests of the defect level.

Precision

The precision of an analytical procedure is the degree of agreement among individual test results when the procedure is applied repeatedly to multiple samplings of a homogeneous sample. The precision of an analytical procedure is usually expressed as the standard deviation. Precision may be a measure of either the degree of reproducibility or of repeatability of the procedure under normal operating conditions or the comparison of duplicate results.

Robustness

The robustness of an analytical procedure is a measure of its capacity to remain unaffected by variations in conditions and the commodity.

Continued Verification

The consistency and lack of degradation of results and performance from repeated usage.

Software Security and Custody

Automated Sorting Device (ASD) software must be locked upon validation approval with no unauthorized changes made during the season. The device must be able to display the approved software version for routine verification. Software updates may be made on an annual basis outlined in the [Step 1: Proof of Concept/Software Updates](#) section.

DEFINITIONS

ACS	Almond Certification System
Allowed Tolerance	The allowed tolerance is no more than 0.4% of the sample by weight (example: 4 grams in a 1,000-gram sample). This tolerance applies to misclassified edible, inedible, foreign material, or dissimilar variety.
ASD	Automated Sorting Device
BIQMS	Branch Internal Quality Management System
CDFA	California Department of Food and Agriculture
Dissimilar Variety	Kernels that are not the same in shape and appearance. For example, short types should not be mixed with long types, or broad types should not be mixed with narrow types.
Edible Kernel	A kernel, piece, or particle of almond kernel that is not inedible.
Foreign Material	Non-almond content including shell, hull, twigs, rocks, etc.
FPM	Federal Program Managers
FSIS	Federal-State Inspection Service
Inedible Kernel	A kernel, piece, or particle of almond kernel with any defect scored as serious damage, or damage due to mold, gum, shrivel, or brown spot, as defined in the United States Standards for Grades of Shelled Almonds , or which has embedded dirt not easily removed by washing.
Inspection Service	The Federal-State Inspection Service (CDFA) or, when specifically designated, the Federal Inspection Service.
Mixed Variety	If no variety constitutes at least 90 percent of the almonds in a lot, the lot shall be classified as “mixed”: Provided further, that if the variety or varieties of almonds in a lot are not identified, the lot shall be classified as “mixed,” regardless of the percentage of each variety in a lot. With the exception that lots containing a combination of Butte and Padre varieties only, shall be classified as “Butte-Padre,” regardless of the percentage of each variety in the lot.

VALIDATION, APPROVAL AND CONTINUED REVIEWS (ONGOING VERIFICATION) OF AUTOMATED SORTING DEVICES

This manual is to be incorporated as an appendix in the “CDFA Marketing Order Almond Instructions” to provide guidance for the validation, approval, and review of automated sorting devices.

The cost of the validation process will be the responsibility of the applicant (i.e., manufacturers, individual handlers, Almond Board of California, etc.) and will be charged on a cost recovery basis by the respective agencies.

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Upon request, training on how to properly use and maintain the device will be provided by the applicant/manufacture for CDFA licensed inspectors/supervisors and Federal Program Managers.

Samples will be processed through the automated sorting device by either a CDFA-licensed inspector or manufacturer/industry staff under the surveillance of a CDFA-licensed inspectors/supervisor where comparative data will be collected for review.

Defect scoring will have to be consistent with manual inspection procedures. Current guidelines defined in the CDFA Marketing Order Almond Instructions allow for no more than 4 misplaced kernels per 1,000-gram sample when supervised inspection is being utilized. This would translate to a maximum error rate of 0.4% (a discrepancy of no more than 4 grams per 1,000-gram sample).

Two sample collection methods for Step 1 “Proof of Concept/Software Updates” and Step 2 “Validation Study” outlined later will be permitted. Only one method may be used, however the applicant is free to choose whichever method best suits their needs. Either a library sample can be selected and retained for later use in post/pre-season validation or samples actively being sorted and entered into the Almond Certification System (ACS) may be used for in season validation.

Prior to Step 1 of the validation process (outlined later), the applicant will collect enough comparative data and internally verify that the tolerances specified in Steps 1 and 2 of the approval processes are achievable.

A written request for in season validation must be received by CDFA prior to July 15th of that season. Request for library sample validation must be received by CDFA 90 days in advance. Library validation will not be conducted from August 1st to December 1st of each year. Software update requests for validation will be considered upon request.

Pre/Post Season Validation, In Season Validation, Data Collection, and Documentation

For Pre/Post Season Validation: Library samples will be collected by the applicant throughout the most recent harvest year for use at a later time. These library samples must meet the criteria listed below in approval Steps 1 and 2. If these samples were previously entered into ACS that information will not be used for comparison as the condition of the sample may have degraded in storage. Each library sample will need to be manually inspected in addition to being processed through the ASD and the data compared. It is the responsibility of any manufacturer seeking pre/post season validation to find industry partners to supply the required samples for the validation study.

For In Season Validation: Samples will be inspected manually, and the results will be entered into ACS. The same samples will be processed simultaneously through the ASD and the data will be compared.

All manual inspection results will be recorded using the Almond Marketing Order Fed-State Note-sheet and Inspection Report (Half Sheet). A printout of the results determined by the ASD

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device will be provided to the licensed inspector performing the validation. If a printout cannot be provided the results will be transcribed onto a Half Sheet. These documents will be retained, and the information will be entered into a spreadsheet database for evaluation. For in-season validation each sample will be reported and identified using the “weight tag” number reported on the Half Sheet. For pre/post season validation all samples will be numbered sequentially.

Approval Steps

Note: Upon successful completion of Step 2: Validation Study, that specific ASD equipment (under those specific parameters) is approved for industry use and subject to Step 3 verification activities.

Step 1: Proof of Concept/Software Updates

100 consecutive samples consisting of a minimum of 1,000-grams will be processed through the sorting device. These samples can be from any variety of almonds. Within these 100 samples, 15 samples must have at least 1% or more inedible kernels per each 1,000-grams (minimum) sample, 4 samples must be of mixed varieties. Each of these samples will be processed through the ASD two times so repeatability can be studied.

Each sample will also be examined by a licensed inspector using traditional manual inspection and the results compared.

None of the examined samples may deviate by more than 0.4%. If any sample exceeds the 0.4% tolerance a [non-conformity report](#) (Appendix I) will be provided to the applicant. An approved and implemented corrective action must take place prior to starting Step 1 over.

If the device accumulates more than 4 non-conformities prior to completing the requirements of Step 1, the proof-of-concept study will be halted for 90 days. This time is to be used by the manufacturer to make improvements to the device so that it is able to operate consistently within the requirements of this manual. Following these 90 days, a new request for study can be made and the processes outlined in Step 1 restarted.

This step will be managed, reviewed, and approved by USDA prior to moving to Step 2. The USDA will be provided 30 days minimum to review the results of this study.

Step 2: Validation Study

1,000 samples collected over the course of the season, representative of most common varieties handled, and of various defect levels will be processed through the machine. These samples will be broken down into variety groupings listed below of 250 samples per group and each sample being of a minimum of 1,000-grams.

Group 1: A minimum of 60 each: Nonpareil, Independence, Price, and 10 samples from varieties not contained in groups 1-4

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Group 2: A minimum of 60 each: Aldrich, Wood Colony, Sonora, and 10 samples from varieties not contained in groups 1-4

Group 3: A minimum of 60 each: Butte, Winters, Carmel, and 10 samples from varieties not contained in groups 1-4

Group 4: A minimum of 40 each: Monterey, Mission, Fritz, and Butte Padre/Padre

Within each grouping, 10 samples classified as mixed variety will be analyzed by the automated sorting device. Additional samples must be run until 38 of the samples processed in each grouping must have at least 1% or more inedible kernels per each 1,000-grams (minimum) sample.

Each grouping of 250 samples will be processed independently and may not deviate outside of the allowed limit of 0.4%. If any sample exceeds the 0.4% tolerance, a [non-conformity report](#) (Appendix I) will be provided to the applicant. An approved and implemented corrective action must take place prior to starting that grouping over. Once a grouping of samples has been processed without deviation from the allowed limit of 0.4% the next group of samples can be processed.

Each sample will also be examined by a CDFA-licensed inspector using traditional manual inspection and the results compared.

If the device accumulates more than 4 non-conformities prior to completing the requirements of a grouping outlined in Step 2, the validation study will be halted for 90 days. This threshold of non-conformities is permitted for each grouping. This time is to be used by the manufacturer to make improvements to the device so that it is able to operate consistently within the requirements of this manual. Following these 90 days, a new request for study can be made and the processes outlined in Step 1 restarted.

Once all four groups have been processed without exceeding the allowed tolerance of 0.4% the collected data will be sent to USDA for review.

This step will be overseen by CDFA Program Supervisors, District Supervisors, Federal Program Managers (FPM), and monitored periodically during Branch Internal Quality Management System (BIQMS) reviews. Data will be reviewed and approved by USDA before moving on to Step 3: Ongoing Verification. The USDA will be provided 60 days minimum to review the results of this study.

Step 3: Ongoing Verification

Verification: First and last sample of each day will be verified each day along with an additional amount based on the total number of samples run through the ASD outlined in the following chart. This is a minimum number of samples to be examined. For sites with multiple almond sorting devices, the total number of review samples will be distributed equally across the devices

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being used. At the discretion of the Federal-State Inspection Service (FSIS) additional samples may be examined.

Total Number of Samples Processed	Number of Review Samples Including First and Last
1 to 10	First and Last
11 to 20	3
21 to 30	4
31 to 40	5
41 to 50	6
51 to 60	7
61 to 70	8
71 to 80	9
81 to 90	10
91 to 100	11
101 to 500	8%
501+	6%

If any of the ASD device samples as compared to the inspector reviewed samples exceeds the tolerance of 0.4% (incorrectly scored kernels), a review will be conducted by a supervisory inspector in order to verify the initial results. If it is confirmed that inspector reviewed samples exceeded the tolerance of 0.4%, all samples automatically sorted since the last point of verification will be re-inspected by the CDFA-licensed inspector.

The operation will have to take action, as per established procedures (see [Final Approval and Terms of Use](#) section of this manual). A written non-conformity will be issued by CDFA, and no further automatic sorting will take place until the automatic sorting issue is resolved by the operation and accuracy of the equipment is verified by the CDFA-licensed inspector. This step will be performed by CDFA-licensed inspectors and overseen by CDFA Program Supervisors, District Supervisor and monitored periodically during BIQMS reviews.

When using the same type of device previously validated and approved for use by USDA (i.e., a device with same hardware and software), the applicants will be able to proceed to Step 3 (ongoing verification), assuming all other requirements outlined in this document have been met. Each machine will have to be uniquely identified. Any updates to hardware or software will require the machine to be verified following Proof of Concept/Software Updates requirements outlined in Step 1. Individual applicants/handlers must have sufficient staffing to support subsequent validations of new types of automated inspection equipment.

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Final Approval and Terms of Use

If approved, each Handler will have the option of using an Approved Automated Sorting Device for Incoming Almonds (under surveillance of the Federal-State Inspection Agency), or to continue with traditional manual inspection method performed by the Federal-State Inspection Agency.

An agreement must be signed by the Handler whereby they agree to the conditions outlined in the final version of the manual for the privilege of using an Automated Sorting Devices for Incoming Almonds.

Each approved machine will be labeled with an official USDA seal for identification purposes. The device must be able to display the current software version in use so that it may be verified by the inspection agency.

The Compliance and Criteria for Revocation of Permission of use of ASD will be outlined in the Handler [Instructions for the Use \(IFU\) of Almond Automated Sorting Devices](#) (Appendix II). Those aspects will include the physical security of the device, proper maintenance, unapproved software or manipulation of the sorting algorithms and unsatisfactory routine reviews of the inspection results.

All appeals (retests) must be performed by CDFSA-licensed inspectors.

Instructions for the Use of Almond Automated Sorting Devices

A responsible party at each participating company is required to sign an acknowledgement each approved ASD will adhere to the [Instructions for the Use \(IFU\) of Almond Automated Sorting Devices](#) (Appendix II) in order to participate in the ASD Program. The IFU outlines the responsibilities of the applicant and the inspection services.

COMPLIANCE, LEVELS OF NON-CONFORMITIES, AND CRITERIA FOR REVOCATION OF PRIVILEGE TO PARTICIPATE

Compliance with the requirements for the Automated Sorting Device manual is essential for continued participation. Non-compliance will result in the assessment of non-conformities when they are found during the course of verifying the applicant staff's activities or when the automated sorting device deviates from approved limits, this may jeopardize the privilege to participate in the ASD program.

All observations and non-conformities will be documented by FSIS, including corrective measures taken. All non-conformities must be corrected in a timely manner under FSIS supervision. Some non-conformities may be corrected immediately, others may require additional time to correct. Some non-conformities may result in the loss of the privilege to participate and the return to typical manual grading for the marketing order.

Minor deviations from program requirements observed by FSIS (observations) will be brought to the attention of applicant staff. Corrective actions may be necessary (by applicant). Observations are not “non-conformities;” however, they are potential deviations that may become non-conformities if not corrected. Continued deviations (observations) from the requirements identified as being systematic could also lead to non-conformities.

Levels of Non-Conformities

The following definitions will be used regarding levels of non-conformities.

Major Non-Conformity

A major non-conformity is a major deviation from program requirements, which, if allowed to continue, may result in the evaluated lot being certified incorrectly under Marketing Order 981.

Critical Non-Conformity

A critical non-conformity is a critical deviation from program requirements, which has resulted in the lot being certified incorrectly under Marketing Order 981.

Multiple Major Non-conformities not being corrected by the applicant or occurring on the same day (when impeding the inspection process) may be elevated to the level of Critical Non-conformity.

Assessing Non-Conformities

Non-conformities are assessed according to the severity of the deviation from program requirements. A single non-conformity will be assessed for each type of deviation found in a lot. However, more than one non-conformity may be assessed per lot for different types of deviations.

See [Appendix I – Non-Conformity Report](#).

Examples of Non-Conformities

The following provides an explanation for compliance in the various categories that non-conformities may be assessed. The chart on the following pages provides some examples of non-conformities in these categories and the assigned severity. This is not a complete listing. For those issues that may arise but are not listed, contact either the Federal Program Manager/Supervisor or State Program Manager.

Sample Preparation

Company staff must adhere to procedures detailing the preparation of samples for their approved device. If procedures such as sample splitting, crack out, removal of foreign material and loading

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into the approved sorting device are not done correctly it may result in an incorrect certification of the lot under Marketing Order 981.

Maintenance

Failure to follow the manufactures directions regarding proper maintenance of the approved sorting device may result in an incorrect certification of the lot under Marketing Order 981.

Supporting Documentation

All information pertaining to the sorting of the sample such as lot weight, foreign material, moisture and automated sorting device results must be reported fully and accurately to CDFA for entry into the ACS database. Failure to do so may result in the lot being incorrectly reported.

Inconsistency

Failure of the automated sorting device to adhere to 0.4% or less compliance of misplaced kernels will result in an incorrect certification of the lot under Marketing Order 981.

Security

Alteration of approved software versions or installation of hardware that did not exist when the device was approved for use may result in an incorrect certification of the lot under Marketing Order 981.

Type of Non-Conformity	Major Non-Conformities (Examples)	Critical Non-Conformities (Examples)
Sample Preparation		
<p>Improper sample splitting and weighing. All samples must be prepared and have the appropriate amount required for the lot for Marketing Order analysis. This will be reported to Almond Board of California under Almond Sampling Verification Program for approval.</p>	<p>An inadequate amount of product was collected for a proper evaluation of the lot.</p>	
<p>Removal of foreign material/crack out (if applicable). If the automated sorting device is unable to evaluate foreign material present in the sample a company SOP must be followed.</p>	<p>Company/CDFA procedures are not being followed but does not impact MO results.</p>	<p>Company/CDFA procedures are not being followed. Foreign material left in sample that cannot be evaluated by the device resulting in inaccurate results.</p>
<p>Sample input. Samples must be input according to manufacturer’s specifications.</p>		<p>The sample in its entirety was not inputted into the device for evaluation. Sample was not inputted into the device per company specifications.</p>
Maintenance		
<p>Cleaning and maintenance of the device. The device must be routinely cleaned and maintained per manufactures specifications.</p>	<p>Cleaning and maintenance records indicate device is not being properly maintained.</p>	<p>Lack of cleaning and maintenance that causes inaccurate sample results. Repeated observations that cleaning and maintenance is not being performed.</p>
Supporting Documentation		
<p>Incorrect values. Values that do not represent the correct weight of the sample or defects for processes unable to be performed by the device.</p>		<p>Entering incorrect data into the device (i.e., sample weight, foreign material, moisture, etc.).</p>
<p>Missing or incomplete supporting documentation. Supporting documents that are necessary to substantiate parts of the inspection that the device is unable to perform, are absent.</p>	<p>Sample exists in its entirety and can be reexamined and documented correctly. Non sample related information such as delivery number, variety, net weight, and county are not completed.</p>	<p>Elements of the sample no longer exist and no longer can be verified (for example: missing moisture, foreign material, etc.).</p>


Type of Non-Conformity	Major Non-Conformities (Examples)	Critical Non-Conformities (Examples)
<p>Falsification of supporting documentation. Any value that was changed to reflect a value that was not observed or measured is a falsification. Intent to falsify on part of the applicant staff must be demonstrated. In the absence of clear intent this will be treated as an incorrect value entry.</p>		<p>Changing values after the sample was examined.</p> <p>Providing supporting documentation for a sample that was not examined.</p>
Inconsistency		
<p>Automated sorting device is failing to maintain misplaced kernel threshold of +/- 0.4%. Verification samples indicate it is unable to operate within acceptable limits to correctly certify lots.</p>	<p>A single sample per shift was in excess of the +/- 0.4% limit. Note: All samples automatically sorted since the last point of verification will be re-graded by the USDA licensed SPI inspector with no additional samples being in excess of 0.4% limit.</p>	<p>Multiple verification samples within the same shift were in excess of the +/- 0.4% limit.</p>
Security		
<p>Changes to software. The use of a version of the software other than what was approved.</p>		<p>An unapproved version of the software is being used.</p>
<p>Device identification sticker. Unique CDFA identification sticker showing approved usage is missing from the device.</p>	<p>Sticker was accidently removed or damaged.</p>	<p>Device was not approved for use.</p>

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APPENDIX I – NON-CONFORMITY REPORT

[Electronic version of the Non-Conformity Report](#)

		UNITED STATES DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE SPECIALTY CROPS INSPECTION DIVISION		Report #: _____ in 20 ____
NON-CONFORMITY REPORT				
COMPANY NAME:		DATE:		
WAREHOUSE REPRESENTATIVE:				
SUPERVISOR:		RATING: <input type="checkbox"/> MAJOR or <input type="checkbox"/> CRITICAL		
DESCRIPTION OF NON-CONFORMITY:				
NOTIFIED COMPANY STAFF AT TIME OF FINDING NON-CONFORMITY: <input type="checkbox"/> YES or <input type="checkbox"/> NO				
___ Non-Conformity is reoccurring. ___ Non-Conformity is the result of an ineffective corrective action. ___ Non-Conformity will result in immediate suspension from the program until effective corrective actions are implemented. ___ Non-Conformity will result in immediate removal from the program.				
COMPANY REPRESENTATIVE SIGNATURE (Signature affirms facts concerning non-conformity are correct):			DATE:	
CORRECTIVE ACTION PROPOSED AND TIME-FRAME FOR IMPLEMENTATION:				
SUPERVISOR SIGNATURE (For acceptance of proposed corrective action and timetable for implementation):			DATE:	

APPENDIX II – INSTRUCTIONS FOR THE USE (IFU) OF ALMOND AUTOMATED SORTING DEVICES

This document outlines requirements for the use of an approved Automated Sorting Device (ASD) to assist in the inspection of Almonds. This document applies to participants requesting to utilize an ASD to sort almonds presented for inspection under Federal Marketing Order 918 covering almonds grown in California. In addition, the use of Automated Sorting Devices for Incoming Almonds is only permitted for use by participants that meet the requirements below.

Background

USDA Specialty Crops Inspection (SCI) has developed guidelines to allow for the use of machinery to sort almonds presented for inspection under Federal Marketing Order 981 covering almonds grown in California. Use of an ASD is voluntary, and users must comply with these instructions as well as guidelines stated within the Approval and Use of Automated Sorting Devices for Incoming Almonds Manual.

Procedures

1. Participants must submit a formal request to use an ASD. Requests should be on company letterhead and submitted to the Federal State Inspection Branch Chief or designee. Requests should also include:
 - a. Location of Facility
 - b. Number of Devices
 - c. Device including manufacturer, serial number, and software system and version.
 - d. Designated Management Official responsible for the oversight and use of any ASD(s) in operation.
2. Once approved for use, the participant must:
 - a. Comply with all applicable regulations governing the services to be conducted under: the Agricultural Marketing Agreement Act of 1937 (AMAA), as amended; the Agricultural Marketing Act of 1946, as amended; Federal Marketing Order 981 (Almonds Grown in California) and any State Agricultural or Administrative Codes which are applicable to the products intended for inspection.
 - b. Comply with the policies, procedures and specifications set out in these instructions and the Approval and Use of Automated Sorting Devices for Incoming Almonds Manual.
 - c. Always maintain physical security of the ASD to ensure no unauthorized access. Each approved machine will be labeled with an official USDA sticker for identification purposes.
 - d. Always maintain security of the ASD software to prevent manipulation and unauthorized access. The device must be able to display the current software version in use so that it may be verified by the inspection agency at any time.

- e. Provide for routine cleaning and proper maintenance of the ASD.
 - f. Provide inspection personnel with timely product for the purposes of inspection.
 - g. Pay all inspection fees according to the appropriate fee schedule.
 - h. Develop and maintain standard operating procedures (SOPs) outlining all aspects of the Marketing Order (MO) inspection process not completed by the ASD (i.e. weighing, splitting, and separating foreign material).
 - i. Provide adequate staff to support the inspection program, including individuals specifically trained for assisting in the inspection process (for example shelling, splitting, and weighing of the sample, separation and weighing of the foreign material, measurement of moisture etc...). This is to include adequate staff necessary to facilitate sorting if the ASD is removed from use in the case of nonconformities.
 - j. Provide adequate and appropriate space for inspections.
 - k. Keep the inspection site clean during the inspection process.
 - l. Address non-conformities and take corrective actions to avoid the potential suspension of approval to use an ASD.
3. With USDA's written approval of the request, use of an ASD is approved as long as the participant remains in compliance with these instructions and guidelines stated in the Approval and Use of Automated Sorting Devices for Incoming Almonds Manual.
 4. If a participant is found not in compliance with the Approval and Use of Automated Sorting Devices for Incoming Almonds Manual or these instructions, USDA will notify the participant of the non-conformance and the participant should take corrective action in a timely manner.
 - a. If the participant does not take appropriate corrective action to comply with use instructions in a timely manner, USDA will revoke the right to use the ASD until the non-conformance(s) is rectified.
 - b. Participants may appeal non-conformities. Requests must be made in writing within 24 hours of non-conformities being assessed and filed with the local inspection office. Nonconformity reports issued as a result of an ASD failing to operate within the Allowed Tolerance of 0.4% will not be subject to the appeal process outlined above.
 5. Flagrant non-compliance or fraud will result in immediate termination of the ASD Program and may result in debarment from any USDA certification activities.
 6. Use of an ASD will continue at approved facilities until services are suspended, withdrawn, or terminated by:
 - a. Mutual consent.
 - b. 30 day written notice by either party.

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- c. In the case of non-conformities discovered by the Inspection Service during an inspection and/or verification, termination is effective as outlined in these instructions.
- d. Closing of the business or change in controlling ownership of the facility.