

requirements before being shipped for domestic human consumption.

As with aflatoxin testing, provisions for minimum quality and size testing under the order would require that lot samples consisting of a minimum number of incremental samples be drawn. A minimum number of

incremental samples would be required to protect the statistical validity of the testing process and to ensure that the test sample is representative of the quality of the entire lot of pistachios from which it was drawn.

As shown in the table below, the number of incremental samples per lot

sample would be the same under the aflatoxin testing as under the minimum quality and size testing requirements. This would allow the handler to pull one set of samples for both tests, as previously explained. The sample would be drawn by, or under the supervision of, an inspector.

INSHELL AND KERNEL PISTACHIO LOT SAMPLING INCREMENTS FOR MINIMUM QUALITY CERTIFICATION

Lot weight (lbs.)	Number of incremental samples for the lot sample	Total weight of lot sample (grams)	Weight of inshell and kernel test sample (grams)
220 or less	10	500	500
221–440	15	500	500
441–1100	20	600	500
1101–2200	30	900	500
2201–4400	40	1200	500
4401–11,000	60	1800	500
11,001–22,000	80	2400	1000
22,001–150,000	100	3000	1000

According to witness testimony, a lot of inshell pistachios weighing 220 pounds or less would require a lot sample weighing a total of 500 grams. This lot sample would consist of 10 incremental samples collected throughout the lot. Alternatively, a lot weighing 22,001 pounds to 150,000 pounds would require a lot sample equal to 3,000 grams and would consist of 100 incremental samples.

A test sample would then be taken from the lot sample. For lots up to 11,000 pounds, the test sample would equal 500 grams. For any lot in excess of 11,000 pounds, the test sample would be 1,000 grams.

The test sample sizes for minimum quality requirements differ from those for aflatoxin testing. Under the aflatoxin testing system, the lot sample drawn would be divided into three equal test samples, with each sample being used progressively depending on the aflatoxin content of each test sample. Under the sampling and testing procedures for the proposed minimum quality requirements, the test sample would be used in its entirety. Inspectors would assess the quality of the test sample for external and internal defects.

Table 4 in proposed § 983.39(e)(1) has been revised from that included in the Notice of Hearing. An additional column entitled "Weight of kernel test sample (grams)" has been eliminated, and the column previously entitled "Weight of inshell test sample (grams)" has been re-titled to "Weight of inshell and kernel test sample (grams)." These changes are based on witness testimony that the test sample sizes for inshell and kernel testing should be the same.

Proposed Minimum Quality Testing Procedures

Witnesses stated that the test samples should be analyzed in accordance with USDA inspection procedures. This would ensure that the pistachios do not contain in excess of the maximum permissible defects and that they meet the minimum size level.

Under the USDA inspection procedures, the inspector would analyze the test sample for external, internal, and other defects. The nuts would be shelled for further analysis of internal kernel defects if the pistachios exhibited dark stain, adhering hull, or other external defects, or if, in the inspector's opinion, they had possible internal defects.

Witnesses explained the importance of this requirement as studies have shown that nuts with external defects have a higher probability of kernel defects. These studies, discussed earlier in this document, linked certain quality defects with the incidence of aflatoxin. Nuts with unblemished shells would be subject to internal kernel analysis at the discretion of the inspector. After testing, inspectors would certify that the lot had met the minimum quality levels.

The record states that handlers would be required to keep testing and certification records, along with records of final shipping disposition, for three years after the crop year in which the pistachios were shipped. These records would be subject to audit by the committee at any time. These requirements would be important in allowing the committee and the USDA to ensure that pistachio handlers comply with the proposed provisions of the order. As stated in the discussion of

proposed aflatoxin testing procedures, each lot tested for minimum quality and size certification would also be required to be uniquely identified to ensure traceability.

Substandard Pistachios

Proposed § 983.40 addresses procedures recommended by the witnesses for reworking or disposing of substandard pistachios. Substandard pistachios are pistachios that fail to test below the maximum aflatoxin tolerance level or do not meet minimum quality (including size) requirements.

According to record testimony, handlers would have different options available for managing substandard pistachios. The first of these would allow a handler to rework a lot of pistachios until that lot met the aflatoxin and quality requirements proposed under the order. If, after being reworked, the pistachios met the aflatoxin and minimum quality levels, those pistachios could be shipped for domestic human consumption.

If a handler chose not to rework a lot of substandard pistachios, then the handler would be required to either dispose of those nuts or use them for non-human consumption. These pistachios could also be exported if they met the requirements of the receiving country.

Proposed § 983.45 would prevent substandard pistachios from entering the stream of domestic human consumption. Under the provisions of this section, reporting and disposition procedures for substandard pistachios would be implemented by USDA (upon recommendation of the committee) through informal rulemaking.