

residue level determinations is performed at the Science and Technology Division's Eastern Laboratory, and is located at: USDA, AMS, Science and Technology Division, Eastern Laboratory, 645 Cox Road, Gastonia, NC 28054.

(b) Domestic-grown tobacco and tobacco products may be analyzed for acid herbicides, chlorinated hydrocarbons, fumigants, and organophosphates at the Science and Technology Division facility in this section.

(c) The Division performs for the Tobacco Division the quantitative and confirmatory chemical residue analyses on pesticide test samples of imported tobacco for the following specific pesticides:

(1) Organochlorine pesticides such as Dichloro-diphenyldichloroethylene (DDE), Dichloro Diphenyl Trichloroethane (DDT), 1,1-Dichloro-2,2-bis (p-chlorophenyl)ethane (TDE), Toxaphene, Endrin, Aldrin, Dieldrin, Heptachlor, Methoxychlor, Chlordane, Heptachlor Epoxide, Hexachlorobenzene (HCB), Cypermethrin, and Permethrin.

(2) Organophosphorus pesticides such as Formothion.

(3) Fumigants such as Ethylene Dibromide (EDB) and Dibromochloropropane (DBCP).

(4) Acid herbicides such as 2,4-D, 2,4,5-T, and Dicamba.

[58 FR 42424, Aug. 9, 1993, as amended at 61 FR 51350, Oct. 2, 1996, 61 FR 55840, Oct. 29, 1996]

#### § 92.4 Approved forms for reporting analytical results.

(a) Form TB-89, "Imported Tobacco Pesticide Residue Analysis" certificate, is enclosed with and identifies the sample submitted to the laboratory.

(b) Test results of the pesticide analyses for tobacco shall be recorded on "Certificate of Analysis For Official Samples," Form CSSD-3, and shall be expressed in total parts per million, per gram sample for each particular pesticide residue found in the lot of tobacco. Form CSSD-3 is attached to Form TB-89 that is returned to the Tobacco Division. The analytical data on Form CSSD-3 substantiates the information placed on Form TB-89.

#### § 92.5 Analytical methods.

Every chemist certified to analyze tobacco samples for pesticide residue contamination shall follow precisely the USDA developed analytical test methods and all successive official method updates, as approved by the Director, Science and Technology Division.

[58 FR 42424, Aug. 9, 1993, as amended at 61 FR 51350, Oct. 2, 1996]

#### § 92.6 Cost for pesticide analysis set by cooperative agreement.

The fee for the pesticide analysis of tobacco is set by the Tobacco Division, in conjunction with the Science and Technology Division, and appears at § 29.500 as part of Tobacco Division's fees for sampling and certification of imported flue-cured and burley tobacco. A Memorandum of Understanding (MOU) exists between the Tobacco Division and the Science and Technology Division for the testing of imported tobacco samples for pesticide residue contamination, and the corresponding agreement on the cost of analyses is specified in this document.

[58 FR 42424, Aug. 9, 1993, as amended at 61 FR 51350, Oct. 2, 1996]

## PART 93—PROCESSED FRUITS AND VEGETABLES

### Subpart A—Citrus Juices and Certain Citrus Products

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- 93.3 Analyses available and location of laboratory.
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- 93.10 General.
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- 93.14 Fees for aflatoxin testing.
- 93.15 Fees for analytical testing of oilseeds.

AUTHORITY: 7 U.S.C. 1622, 1624.

SOURCE: 61 FR 51351, Oct. 2, 1996, unless otherwise noted.

### Subpart A—Citrus Juices and Certain Citrus Products

#### §93.1 General.

Domestic and imported citrus products are tested to determine whether quality and grade standards are satisfied as set forth in the Florida Citrus Code.

#### §93.2 Definitions.

Words used in the regulations in this subpart in the singular form will import the plural, and vice versa, as the case may demand. As used throughout the regulations in this subpart, unless the context requires otherwise, the following terms will be construed to mean:

*Acid.* The grams of total acidity, calculated as anhydrous citric acid, per 100 grams of juice or citrus product. Total acidity is determined by titration with standard sodium hydroxide solution, using phenolphthalein as indicator.

*Brix or degrees Brix.* The percent by weight total soluble solids of the juice or citrus product when tested with a Brix hydrometer calibrated at 20° C (68° F) and to which any applicable temperature correction has been made. The Brix or degrees Brix may be determined by any other method which gives equivalent results.

*Brix value.* The refractometric sucrose value of the juice or citrus product determined in accordance with the "International Scale of Refractive Indices of Sucrose Solutions" and to which the applicable correction for acid is added. The Brix value is determined in accordance with the refractometric method outlined in the Official Methods of Analysis of AOAC INTERNATIONAL, Suite 500, 481 North Frederick Avenue, Gaithersburg, MD 20877-2417.

*Brix value/acid ratio.* The ratio of the Brix value of the juice or citrus product, in degrees Brix, to the grams of anhydrous citric acid per 100 grams of juice or citrus product.

*Brix/acid ratio.* The ratio of the degrees Brix of the juice to the grams of anhydrous citric acid per 100 grams of the juice.

*Citrus.* All plants, edible parts and commodity products thereof, including

pulp and juice of any orange, lemon, lime, grapefruit, mandarin, tangerine, kumquat or other tree or shrub in the genera *Citrus*, *Fortunella*, or *Poncirus* of the plant family Rutaceae.

*Recoverable oil.* The percent of oil by volume, determined by the Bromate titration method as described in the current edition of the AOAC INTERNATIONAL.

#### §93.3 Analyses available and location of laboratory.

(a) Laboratory analyses of citrus juice and other citrus products are being performed at the following Science and Technology Division location: Science and Technology Division Citrus Laboratory, 98 Third Street, SW, Winter Haven, FL 33880.

(b) Laboratory analyses of citrus fruit and products in Florida are available in order to determine if such commodities satisfy the quality and grade standards set forth in the Florida Citrus Code (Florida Statutes Pursuant to Chapter 601). Such analyses include tests for acid as anhydrous citric acid, Brix, Brix-acid ratio, recoverable oil, and artificial coloring matter additive, as turmeric. The Florida Division of Fruit and Vegetable Inspection may also request analyses for arsenic metal, pulp wash (ultraviolet and fluorescence), standard plate count, yeast with mold count, and nutritive sweetening ingredients as sugars.

(c) Additional laboratory tests are available upon request at the Science and Technology Division Citrus Laboratory at Winter Haven, Florida. Such analyses include tests for vitamins, naringin, sodium benzoate, *Salmonella*, protein, salt, pesticide residues, sodium metal, ash, potassium metal, and coliforms for citrus products.

#### §93.4 Analytical methods.

(a) The majority of analytical methods for citrus products are found in the Official Methods of Analysis of AOAC INTERNATIONAL.

(b) Other analytical methods for citrus products may be used as approved by the Director, Science and Technology Division.

**§ 93.5 Fees for citrus product analyses set by cooperative agreement.**

The fees for the analyses of fresh citrus juices and other citrus products shall be set by mutual agreement between the applicant, the State of Florida, and the Director, Science and Technology Division. A Memorandum of Understanding (MOU) or cooperative agreement exists presently with the AMS Science and Technology Division and the State of Florida, regarding the set hourly rate and the costs to perform individual tests on Florida citrus products, for the State.

**Subpart B—Peanuts, Tree Nuts, Corn and Other Oilseeds**

**§ 93.10 General.**

Chemical analyses are performed to detect the presence of aflatoxin in lots of shelled peanuts and peanut products, as well as in other nuts and agricultural products. In addition, proximate chemical analyses for quality determination are performed on oilseeds.

**§ 93.11 Definitions.**

Words used in the regulations in this subpart in the singular form will import the plural, and vice versa, as the case may demand. As used throughout the regulations in this subpart, unless the context requires otherwise, the following terms will be construed to mean:

*Aflatoxin.* A toxic metabolite produced by the molds *Aspergillus flavus*, *Aspergillus parasiticus*, and *Aspergillus nomius*. The aflatoxin compounds fluoresce when viewed under UV light as follows: aflatoxin B<sub>1</sub> and derivatives with a blue fluorescence, aflatoxin B<sub>2</sub> with a blue-violet fluorescence, aflatoxin G<sub>1</sub> with a green fluorescence, aflatoxin G<sub>2</sub> with a green-blue fluorescence, aflatoxin M<sub>1</sub> with a blue-violet fluorescence, and aflatoxin M<sub>2</sub> with a violet fluorescence. These closely related molecular structures are referred to as aflatoxin B<sub>1</sub>, B<sub>2</sub>, G<sub>1</sub>, G<sub>2</sub>, M<sub>1</sub>, M<sub>2</sub>, GM<sub>1</sub>, B<sub>2a</sub>, G<sub>2a</sub>, R<sub>0</sub>, B<sub>3</sub>, 1-OCH<sub>3</sub>B<sub>2</sub>, and 1-CH<sub>3</sub>G<sub>2</sub>.

*Peanut Administrative Committee (PAC).* The committee established under the U.S. Department of Agriculture Marketing Agreement for Pea-

nuts, 7 CFR part 998, which administers the terms and provisions of this Agreement, including the aflatoxin control program for domestically produced raw peanuts, for peanut shellers.

*Peanut Marketing Agreement.* The agreement concerning the regulations and instructions set forth since July 12, 1965, by the Peanut Administrative Committee for the marketing of peanuts entered into by handlers of domestically produced peanuts under the authority of the Agricultural Marketing Agreement Act of 1937, as amended (7 U.S.C. 601 et seq.).

*Peanuts.* The seeds of the legume *Arachis hypogaea*, and includes both inshell and shelled nuts.

*Seed.* Any vegetable or other agricultural plant ovule having an embryo that is capable of germinating to produce a plant.

[61 FR 51351, Oct. 2, 1996, as amended at 63 FR 16375, Apr. 2, 1998]

**§ 93.12 Analyses available and locations of laboratories.**

(a) *Aflatoxin testing services.* The aflatoxin analyses for peanuts, other nuts, corn, and other oilseed products are performed at the following 8 locations for Science and Technology Division (S&TD) Aflatoxin Laboratories:

- (1) USDA, AMS, S&TD, 1557 Reeves Street, Mail: P.O. Box 1368, Dothan, AL 36302.
- (2) USDA, AMS, S&TD, 1211 Schley Avenue, Albany, GA 31707.
- (3) USDA, AMS, S&TD, 610 North Main Street, Blakely, GA 31723.
- (4) USDA, AMS, S&TD, 107 South Fourth Street, Madill, OK 73446.
- (5) USDA, AMS, S&TD, 308 Culloden Street, Mail: P.O. Box 1130, Suffolk, VA 23434.
- (6) USDA, AMS, S&TD, c/o Golden Peanut Company, 200 West Washington Street, Mail: P.O. Box 488, Ashburn, GA 31714.
- (7) USDA, AMS, S&TD, c/o Golden Peanut Company, 301 West Pearl Street, Mail: P.O. Box 279, Aulander, NC 27805.
- (8) USDA, AMS, S&TD, c/o Stevens Industries, Cargill, Inc., 715 North Main Street, Mail: P.O. Box 272, Dawson, GA 31742.

(b) *Peanuts, peanut products, and oilseed testing services.*

(1) The Science and Technology Division Aflatoxin Laboratories at Albany and Blakely, Georgia will perform other analyses for peanuts, peanut products, and a variety of oilseeds. The analyses for oilseeds include testing for free fatty acids, ammonia, nitrogen or protein, moisture and volatile matter, foreign matter, and oil (fat) content.

(2) All of the analyses described in paragraph (b)(1) of this section performed on a single seed sample are billed at the rate of one hour per sample. Any single seed analysis performed on a single sample is billed at the rate of one-half hour per sample. The standard hourly rate shall be as specified in 7 CFR 91.37(b).

(c) *Vegetable oil testing services.* The analyses for vegetable oils are performed at the Science and Technology Division Midwestern Laboratory, 3570 North Avondale Ave., Chicago, IL 60618. The analyses for vegetable oils will include the flash point test, smoke point test, acid value, peroxide value, phosphorus in oil, and specific gravity. The fee charged for any single laboratory analysis for vegetable oils shall be obtained from the schedules of charges in 7 CFR 91.37(a).

[61 FR 51351, Oct. 2, 1996, as amended at 63 FR 16375, Apr. 2, 1998]

**§93.13 Analytical methods.**

Official analyses for peanuts, nuts, corn, oilseeds, and related vegetable oils are found in the following manuals:

(a) Analyst's Instruction for Aflatoxin (August 1994), S&TD Instruction No. 1, USDA, Agricultural Marketing Service, Science and Technology Division, South Agriculture Building, 14th & Independence Avenue, SW, P.O. Box 96456, Washington, DC 20090-6456.

(b) Official Methods and Recommended Practices of the American Oil Chemists' Society (AOCS), American Oil Chemists' Society, 1608 Broadmoor Drive, P.O. Box 3489, Champaign, IL 61826-3489.

(c) Official Methods of Analysis of AOAC INTERNATIONAL, Suite 500, 481 North Frederick Avenue, Gaithersburg, MD 20877-2417.

(d) Standard Analytical Methods of the Member Companies of Corn Indus-

tries Research Foundation, Corn Refiners Association (CRA), Suite 1120, 1100 Connecticut Avenue, NW, Washington, DC 20036.

**§93.14 Fees for aflatoxin testing.**

(a) The fee charged for any single laboratory analysis for aflatoxins shall be obtained from the schedules of charges in 7 CFR 91.37(a).

(b) The charge for the aflatoxin testing of raw peanuts under the Peanut Marketing Agreement for subsamples 1-AB, 2-AB, 3-AB, and 1-CD is a set cost per pair of analyses and shall be set by cooperative agreement between the Peanut Administrative Committee and AMS Science and Technology Division.

(c) The charge for any requested laboratory analysis for aflatoxins not listed shall be based on the standard hourly rate specified in 7 CFR 91.37(b).

**§93.15 Fees for analytical testing of oilseeds.**

(a) The fee charged for any single laboratory analysis for oilseeds shall be obtained from the schedules of charges in 7 CFR 91.37(a).

(b) The charge for any requested laboratory analysis for oilseeds not listed shall be based on the standard hourly rate specified in 7 CFR 91.37(b).

**PART 94—POULTRY AND EGG PRODUCTS**

**Subpart A—Mandatory Analyses of Egg Products**

- Sec.
- 94.1 General.
- 94.2 Definitions.
- 94.3 Analyses performed and locations of laboratories.
- 94.4 Analytical methods.
- 94.5 Charges for laboratory service.

**Subpart B—Voluntary Analyses of Egg Products**

- 94.100 General.
- 94.101 Definitions.
- 94.102 Analyses available.
- 94.103 Analytical methods.
- 94.104 Fees and charges.

**Subpart C—Salmonella Laboratory Recognition Program**

- 94.200 [Reserved]