PART 4 – Policies, Procedures, and Requirements for the Inspection of Fisheries Products on a Lot by Lot Basis

Chapter 1 – Authority

Authority for the USDC Seafood Inspection Program (SIP) to provide product inspection services can be found within the Agricultural Marketing Act of 1946, the Fish and Wildlife Act of 1956, and the regulations promulgated under these authorities (i.e., 50 CFR Part 260.)

Chapter 2 – Introduction

Lot inspection and sampling services are performed by the USDC Seafood Inspection Program on a voluntary, fee-for-service basis. Product inspection services can be provided to determine adherence to:

a. Minimum Acceptable Quality (MAQ)
b. U.S. Grade A, B, or C Attributes
c. Buyer Specifications (i.e., Net weight, size, count and/or other product attributes as defined by the buyer)

These services conform to global activities to harmonize inspection protocols. These services are designed to enhance the safety, wholesomeness, economic integrity, and quality of seafood available to consumers. If there are no Buyer Specifications from the applicant, the minimum inspection effort applied to every lot inspection will be adherence to the Minimum Acceptable Quality Standard of Quality and Condition, Flavor and Odor.

Chapter 3 – Scope

The purpose of product inspections is to facilitate the distribution of fish and fishery products that are safe, wholesome, properly labeled, and of desired uniform quality. Any individual, processor, retail operation, warehouse operation, or import/export dealer, foreign or domestic, may use the services of this program.

Chapter 4 – Definitions

1. **Acceptance Number:** The maximum number of non-conforming units allowed in the sample if the lot is to be accepted.
2. **Accuracy Check:** The daily or routine verification of a measuring device against a known standard.
3. **Applicant:** Any interested party who requests inspection service under the regulations in this part.
4. **Belly Burn:** An enzymatic action on the flesh of fish causing a burned or discolored appearance.
5. **Block:** A rectangular or other uniformly-shaped mass of cohering whole fish, fillets, minced fish flesh, or shrimp, or combinations of these products, frozen together into a solid mass and not readily separable into individual pieces.
6. **Calibration:** The process of checking, correcting, adjusting, or standardizing a measuring instrument, usually by comparing it with a verified standard.

7. **Case:** The number of containers (cased or uncased) which, by the particular industry, are ordinarily packed in a shipping container.
8. **Certificate of Sampling:** A statement issued pursuant to the regulations in this part, identifying officially drawn samples, which may include a description of condition of containers and the condition under which the processed product is stored. (**NOAA Form 89-805**)
9. **Chalky:** The abnormal condition wherein a fish product is partly or wholly characterized by a dry, chalky, granular appearance and fiberless structure.
10. **Clump:** A cluster of two or more shrimp or pieces of shrimp frozen together, and which cannot be readily separated.
11. **Condition:** The degree of soundness of the product which may affect its merchantability and includes, but is not limited to, those factors which are subject to change as a result of age or improper preparation, processing, packaging, storage, handling.
12. **Damaged Shrimp:** Any individual shrimp that is crushed or mutilated so as to materially affect its appearance or usability.
13. **Decomposition:** The deterioration of fish, shellfish and their products, including texture breakdown, and causing a persistent and distinct objectionable odor or flavor.
14. **Defect:** A departure of a quality characteristic from its intended level or state that occurs with a severity sufficient to cause an associated product not to satisfy intended normal, or foreseeable, usage requirements.
15. **Dehydration:** The loss of moisture from frozen products through evaporation. This may occur if the products are not properly glazed, packaged or stored. Deep dehydration adversely affects the appearance and surface texture of the product and is commonly known as “freezer burn”.
16. **Deterioration:** Any detectable change from the normal good quality of freshly caught seafood. It is evaluated by noting in the thawed product deviations from the normal odor and appearance of freshly caught product.
17. **Drained Weight:** The weight of the product of a sampled unit after the sample unit has been completely thawed and drained, per AOAC methods.
18. **Establishment:** Any premises, buildings, structures, facilities, and equipment (including vehicles) used in the processing, handling, transporting, and storage of fish and fishery products.
19. **Evisceration:** The cleaning of the belly cavities of fish. All spawn, viscera, and belly strings should be removed.
20. **Extraneous Material:** Any non-edible material such as sticks, seaweed, shrimp thorax, shell pieces, viscera, sand, grit, or other objects that may be accidentally present in the packaging.
21. **Flat:** A can with both ends concave, and remaining in this condition even when the can is brought down sharply on its end on a solid, flat surface.
22. **Flipper:** A can that normally appears flat, but when brought down sharply on its end on a solid flat surface, one end flips out. When pressure is applied to this end, it flips in again and can appear flat.
23. **Girdle:** The inedible bony and cartilaginous structures at the base of the pectoral and pelvic fins that have been inadvertently left on fish steaks.
24. **Glaze:** A layer (coating) of ice applied to a product’s surface to serve as a barrier to air to retard dehydration of the product. It must be removed to determine accurately a packaged product’s net weight.
25. **Glazed Weight:** The weight of the entire package contents (including loose ice, but excluding the weight of packaging material) of a sample unit that has been covered (coated) with a protective layer of ice.

26. **Gross Weight:** The weight of the entire packaged sample unit, including its packaging material.
27. **Hard Swell:** A can bulged at both ends, and so tightly that no indentation can be made with thumb pressure.
28. **Headed:** The condition of fish after the head, gills and pectoral fins have been removed. No gills, gill bones, gill covers, collar bones, or pectoral fins should remain after the fish have been headed.
29. **Honeycombing:** The visible appearance of numerous discrete holes or openings of varying size on the surface of flesh, which results in an overall sponge-like or honeycombed appearance.
30. **Individually Quick Frozen (IQF):** The freezing of each piece of product separately and apart from other pieces of product, i.e., not frozen together in a block or clump. Products frozen in this manner are generally glazed before packaging to delay the onset of dehydration.
31. **Inspection Certificate:** A statement issued pursuant to the regulations in this part, setting forth, in addition to appropriate descriptive information relative to a processed product, and the container thereof, the quality and condition, or any part thereof, of the product and may include a description of the conditions under which the product is stored. (NOAA Form 89-802)
32. **Inspection Service:** (1) The sampling pursuant to the regulations in this part; (2) The determination pursuant to the regulations in this part of: (i) Essential characteristics such as style, type, size, or identity of any processed product which differentiates between major groups of the same kind; (ii) The class, quality, and condition of any processed product, including the condition of the container thereof by the examination of appropriate samples; (3) The issuance of any certificate of sampling, inspection certificates, or certificates of loading of a processed product, or any report relative to any of the foregoing; or (4) Performance by an inspector of any related services such as to observe the preparation of the product from its raw state through each step in the entire process; or observe conditions under which the product is being harvested, prepared, handled, stored, processed, packed, preserved, transported, or held; or observe sanitation as a prerequisite to the inspection of the processed product, either on a contract basis or periodic basis; or checkload the inspected processed product in connection with the marketing of the product, or any other type of service of a consultative or advisory nature related herewith.
33. **Inspector:** Any employee of the National Marine Fisheries Service (NMFS), or any other person licensed by NMFS, authorized to investigate, audit, sample, inspect, and certify in accordance with the regulations in this part to any interested party the class, quality and condition of processed products covered in this part and to perform related duties in connection with the inspection service.
34. **Jellied:** The abnormal condition wherein a fish product is partly or wholly characterized by a gelatinous, glossy, translucent appearance.
35. **Licensed Sampler:** Any person who is authorized by NMFS to draw samples of processed products for inspection, to inspect for identification and condition of containers in a lot, and may, when authorized by NMFS, perform related services under the regulations in this part.
36. **Lot:** Any number of containers of the same size and type, which contain a processed product of the same type, style, grade and identification mark, located in the same or adjacent warehouses, and which are available for inspection at any one time, provided that 1) containers in separate piles which differ from each other as to grade or other factors may be deemed to be separate lots; 2) containers in a pile bearing an identification mark different from other containers of such processed product in that pile, if determined to be of lower grade or deficient in other factors, may be deemed to be a separate lot; and 3) if the applicant requests more than one inspection certificate covering different portions of such processed product, the quantity of the product covered by each certificate shall be deemed to be a separate lot.
37. **Lot Inspection (Contract):** Lot inspection(s), where the user contracts with the USDC SIP for a specified number of contract hours of lot inspection over a specified period of time.

38. **Lot Inspection (Non-contract):** The inspection performed on a specific lot of processed product, not during processing, and the conditions under which the product was produced are not attested to.
39. **Milky:** The abnormal condition wherein a fish product is partly or wholly characterized by a milky-white, excessively mushy, pasty, or fluidized appearance.
40. **Net Contents or Net Weight:** The weight of product in a sample unit which remains after all deductions for tare weight and/or glaze have been made.
41. **Nonconformance:** Any specifically defined variation from a particular requirement. (Formerly defined as "deviation.")
42. **Nonconformity**: A sample unit affected by a departure of a quality characteristic from its intended level or state that occurs with severity sufficient to cause an associated product not to meet a specification requirement. (Formerly defined as a "deviant.")
43. **Official Establishment:** Any establishment which has been approved by the USDC SIP, and utilizes inspection service on a contract basis.
44. **Officially Drawn Sample:** Any sample that has been selected from a particular lot by a USDC SIP inspector, licensed sampler, or by any other person authorized by NMFS pursuant to the regulations in this part.
45. **Processed Product:** Any fishery product or other food product covered under the regulations in this part, which has been altered or preserved by any recognized commercial process, including, but not limited to, filleting, canning, freezing, dehydrating, drying, the addition of chemical substances, or by fermentation.
46. **Pugh Marks:** Holes made in the flesh by a fish fork or pugh.
47. **Quality:** The inherent properties of a product which determine the relative degree of conformance to established standards or specifications of such product, and include the effects of preparation and processing, and may or may not include the effects of packing media or added ingredients.
48. **Rejection Number:** The number associated with a multiple sampling plan that indicates the minimum number of non-conformities in a sample that will cause a lot to fail a specific requirement.
49. **Sample:** A subset of the lot that has approximately the same distribution of characteristics as the population (the total number of containers comprising the lot) from which it was drawn.
50. **Sample Size:** The number of sample units that comprise the sample to be used for inspection prescribed by the sampling plan.
51. **Sample Unit:** A container and/or its entire contents, a portion of the contents of a container or other unit of commodity, or a composite mixture of a product to be used for inspection.
52. **Sampling:** The act of selecting samples of processed products for the purpose of inspection under the regulations in this part.
53. **Sampling Plan:** A specific plan that states the sample size or sizes to be used and the associated acceptance criteria.
54. **Sensory Evaluation:** The method by which evaluation of product attributes (i.e., color, appearance, odor, flavor and texture) is performed.
55. **Shipping Container/Shipper:** An individual container designed for shipping a number of packages or cans ordinarily packed in a container for shipping, or designed for packing unpackaged processed products for shipping.
56. **Sieve:** A utensil of wire mesh or closely perforated metal, used for draining or separating particles of different sizes.
57. **Soft Swell:** A can bulged at both ends, but not so tightly that the ends cannot be pushed in somewhat with thumb pressure.
58. **Springer:** A can with one end permanently bulged. When sufficient pressure is applied to this end, it will flip in, but the other end will flip out.

Section 5 - Policy for use of Official Insignia in Advertising [Reserved]

Chapter 11 – Minimum Inspection Effort for Lot Inspection

The minimum inspection effort applied for lot inspection of fishery products will be Quality and Condition, unless an inspection document requires further investigation of the fishery product, such as a buyer specification, foreign country requirements or an applicant's request. However, should obvious label violations be noted during the lot inspection, they will be reported on the lot inspection certificate along with the results of the quality and condition. Quality and Condition are defined in 50 CFR 260 as follows:

Quality refers to the wholesomeness of the product, or the minimum basis of acceptability for human food purposes. "Quality" means the inherent properties of any processed product which determine the relative degree of excellence of such product, and includes the effects of preparation and processing, and may or may not include the effects of packing media, or added ingredients."

Condition refers to the packaging and the product. "'Condition' means the degree of soundness of the product which may affect its merchantability and includes, but is not limited to those factors which are subject to change as a result of age, improper preparation and processing, improper packaging, improper storage, or improper handling."

On completion of the inspection, the Lot Inspection Certificate will attest to the factors of Quality and Condition found. If weights and counts were not requested as part of the lot inspection, a statement to the effect will be placed on the certificate, "Vendor weights and counts used, but not verified.

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Chapter 12 – Methodology

a. **Sample Selection**

Once the lot has been identified, the sample size is determined using the sampling plans found in **Chapter 19**.

The entire lot must be staged to be readily accessible for sampling. Samples shall be randomly drawn from throughout the entire lot. Representative cases should be selected from random pallets available and from different levels in each pallet, and from among outside and inside positions on the pallets. Individual samples shall be selected from varying locations within the individual cases, with only one sample drawn from any one case whenever possible. If the lot consists of more than one production date code, the inspector should sample as many different codes as possible. To avoid leaving multiple partially filled cases, back-fill each case with product from the first case(s) sampled. When sampling is completed, there should be no more than one partially filled case remaining. Cases from which a sample has been removed are either marked "sampled" or double-stamped, and then resealed with packing tape. 100% of outside of cases (top and four sides) shall be stamped as "Officially Sampled".

AOAC 967.13 and 970.60
Drained Weight of Frozen Shrimp and Crabmeat (Immersion-Thaw Method)

This method is used to determine the net weight of shrimp or other seafood frozen together in a block. The individual pieces are not readily separable in the frozen state. This method is also used for IQF shrimp of such small size that the glaze cannot be removed practically without thawing or partially thawing at least some of the shrimp. It is also used for IQF products which contain clumps or clusters in excess of 15% by weight of the glazed weight. Results of this method are reported as drained weight.

Note: Exception to methods 967.13 and 970.60: Nylon mesh bags are used in lieu of a wire mesh basket.

AOAC Official Method 967.13
Drained Weight of Frozen Shrimp and Crabmeat

A. Apparatus
   a. *Container*—Wire mesh basket large enough to hold contents of one package and with openings small enough to retain all pieces. Expanded metal test-tube basket or equivalent, fully lined with standard 16 mesh per linear inch insect screen is satisfactory.
   b. *Balance*—Sensitive to 0.25g or 0.01 oz.
   c. *Sieves*—U.S. No. 8, 8 in. (20cm) and 12 in. (30cm) diameter.

B. Determination

Place contents of individual package in wire mesh basket and immerse in $\geq$ 15L (4 gal.) container of fresh H_2O at 26± 3°C (80± 5°F) so that top of basket extends above H_2O level. Introduce H_2O of same temperature at bottom of container at flow rate of 4-11 L (1-3 gal.)/min. As soon as product thaws, as determined by loss of rigidity, transfer all material to 12 in. (30cm) (for package 450g [1 lb]) or 8 in. (20cm) (for package $\leq$ 1 lb) No. 8 sieve, distributing evenly. Without shifting material on sieve, incline sieve to ca 30° from horizontal to facilitate drainage. Two min from time placed on sieve, transfer product to previously weighed pan, and weigh. Weight so found minus weight of pan is drained weight of product.

AOAC Official Method 970.60
Drained Weight of Frozen Crabmeat

A. Apparatus
   a. *Balance*—Sensitive to 1 g or 0.01 lb.
   b. *Thermometer*—Accurate in 0-30°C (30-80°F) range.
   c. *Plastic bowls*—Marked at 48 oz (1440mL), 64 oz (1920 mL), or 1 gal. (3840 mL) level for 6 oz, 8 oz, or 1 lb packages, respectively.

B. Determination

Weigh bare block free of all wrappings and record weight. Place block in bowl containing amount of fresh potable water at 27°C (80°F) equal to 8 × declared weight. Leave block in H_2O until all ice is melted. Turn block over several times during thawing. The point at which thawing is complete can be determined by probing block apart.

Pour entire thawed test portion into tared 8 in. (20cm) No. 8 sieve. Incline screen to aid drainage, drain exactly 2 min, and weigh. Subtract tare weight of sieve for thawed drained weight of test portion.

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General

On August 31, 1992, the Food and Drug Administration (FDA) through the Office of Seafood developed a policy memo entitled "Interim Labeling Policy Established for Scallops." The purpose of the policy was to "…provide consumers with a better indication about the amount of water in the scallop products they buy." At that time the FDA and the Seafood Inspection Program (SIP) along with many sectors of the industry including retailers and consumer groups were concerned that the practice of adding water and phosphate compounds to scallop adductor muscle meats was potentially deceptive, fraudulent and in violation of the Food, Drug and Cosmetic (FD & C) Act as it relates to adulterated food (*21 USCS, § 342(b)(4)*): "A food shall be deemed to be adulterated … if any substance has been added thereto or mixed or packed therewith so as to increase its bulk or weight, or reduce its quality or strength, or make it appear better or of greater value than it is."

The FDA "Interim Labeling Policy" established moisture percentages that would differentiate non-treated scallops or what has been referred to as natural scallops from scallops that were subjected to water and/or a phosphate treatment. Scallops less than 80.0% total moisture, if not subjected to processing conditions utilizing excessive water and/or phosphate treatment, could be labeled simply as scallops. As opposed to scallop products whose total moisture analysis demonstrated a percentage of 80.0 % to 84.0% would have to be labeled "X % Water Added Scallop Product" appearing in the principal display panel of the label. The statement, "Processed with Sodium Tripolyphosphate," or any other polyphosphates used, is also to appear in the identity statement if the product has been processed with the ingredient. In addition, the ingredient statement on the labels for these products must include water and sodium tripolyphosphate (or other phosphate, as appropriate). Products having moisture content over 84.0 % were considered adulterated under the FD & C Act.

It has been the SIP's policy since the inception of the FDA policy to test all lots of scallops for total moisture using the "Ohaus method" or the official AOAC method. The results of these analyses are noted on the certificate and the product would have to be labeled accordingly. On May 18, 2004, the FDA rescinded their Interim Labeling Policy of August 1992. In effect, the percentages that FDA used for defining labeling statements are no longer being enforced. However, scallop products that are subjected to processing conditions that will result in added moisture and/or to food additives (e.g., phosphates) must be properly labeled both in the identity statement (i.e., on the principal display panel) and in the ingredient statement.

Policy

Because the FDA has rescinded its policy regarding the action levels of moisture content in scallops, the SIP will no longer use that criteria. However, due to concerns over improper labeling, NOAA SIP will continue to require that all lots of scallops over 200 pounds destined for domestic use be tested for total moisture using the ***AOAC Official Method 950.46-Moisture in Meat*** (AOAC Method) or other valid methods and equipment that provide results statistically equivalent to those of the AOAC Method for total moisture. The results of the analysis will be noted on the certificate, score sheet or memorandum. If the inspector has definitive knowledge that the product has been treated in some way to add water to the product, the label must reflect that. Also if the product tests over 83.0 % for total moisture, the SIP will assume that the product has been treated and must be properly labeled. This assumption is based on studies and data collected by various governmental agencies, academia, and other organizations that have demonstrated total moisture content of scallops consistently less than 83%.

At this time there is no upper limit for moisture content.

The SIP will closely follow the development of the international Proposed Draft Standard for Quick Frozen Scallop Adductor Muscle Meat under the Codex Alimentarius Commission (the joint Food Standards Programme of the Food and Agriculture Organization of the United Nations and the World Health Organization). The issues of moisture content limits, phosphate usage, and proper labeling are central elements in this draft standard. The SIP will evaluate the data submitted regarding these issues during the development of this international standard, as well as any data that are obtained directly from foreign agencies or other sources with the intent of establishing appropriate moisture content and phosphate usage criteria for use by this Program.

{**Note**: "X%-water-added" is calculated by knowing the natural moisture content (A) and the moisture content after treatment (B). X = (B-A)/(1-B).}

i. Frozen Breaded/Battered Fish (reference grade std)
j. Simulated Seafood Products
k. Cephalopods
l. Roe
m. Live Products
    i. Crustacean Shellfish
    ii. Molluscan Shellfish
        1. Harvester Tag
        2. Dealer Tag
    iii. Miscellaneous Live Fish
n. Dry Ingredients
o. Reworked or Reconditioned Product
p. Inspection of Endangered Species

Chapter 14 – Lot Acceptance/Rejection

The lot is accepted if the number of non-conforming units is less than or equal to the acceptance number for that sample size. Note: There is no acceptance number for decomposition. If the number of non-conforming units exceeds the acceptance number for that sample size, the lot is rendered nonconforming, or Grade Not Certified. The applicant shall be notified immediately in the case a lot is deemed nonconforming. After the inspection, samples are returned, destroyed, or given to charity, based on the disposition instructions provided on the Request for Inspection Services form.

Chapter 15 – Inspection Requests for Lionfish and Safe Handling Procedures

Background - Lionfish (*Pterois volitans*) are species of fish which originate from the Pacific Ocean. Lionfish are an invasive species in the Western Atlantic Ocean. Though not completely substantiated, it appears that lionfish were brought into Florida as an aquarium fish and were unintentionally introduced. Lionfish are present in the Western Atlantic all the way up to Long Island, NY.[1]

[1] NOAA Ocean Service Education, last updated July 2017.

Not only are lionfish permitted to be harvested, many States encourage the harvest and consumption of these non-native species in order to decrease their negative environmental impact on harvest and reef areas.

Lionfish possess venomous spines that must be handled carefully by divers, harvesters, seafood processors and retailers. Typically spines are removed using gloves to protect the food handler from the venom which can cause severe localized pain, swelling and, in some instances, blistering and infection if not treated properly. [2]

Question #1: Lionfish is not listed in the current Fish and Fishery Products, Hazards and Controls guidance (4th edition). Are there any potential species-related hazards associated with lionfish?

> **Response:** Yes; lionfish are affected by the potential species related food safety hazard of Ciguatera Fish poisoning (CFP). The FDA has issued guidance to primary processors regarding lionfish (here); depending upon the harvest area, they are species that can bioaccumulate CFP. Primary processors would be responsible for addressing CFP as a potential species-related hazard.

Question #2: Does the FDA provide any guidance relative to the non-edible parts of lionfish that contain venom?

> **Response:** Yes. Lionfish are venomous; venom is located in glands and can be transmitted to humans via injury from the pectoral, dorsal and anal spines. Processors are advised to review the venomous fish section of the FDA Bad Bug Book to look at other factors that may increase risk (e.g., processing in such a fashion where cross-contact occurs between venom sacs and meat.) FDA's Bad Bug Book indicates that *"[c]urrently FDA has no specific guidance for seafood processors as to the control of hazards from fish venom. As noted, the potential for harm from consuming this and any of the other known venom-producing fish species has not been adequately investigated."* [3]
>
> It is therefore NOAA IATC policy that processors must control the potential for venomous cross contact through a GMP and an adequate sanitation control program. As always, in addition to

[2] National Institutes of Health - US National Library - Denaturing the Lionfish May 23, 2016

[3] FDA Bad Bug Book, Venomous Fish, p. 245.,

potential species-related hazards, processors need to also consider potential process related hazards, per 21 CFR Part 123, the FDA Seafood HACCP Regulation. Processors who may have additional specific questions may want to direct them to the FDA.

Question #3: Can lionfish be inspected by the USDC/NOAA IATC?

Response: Yes. There is no prohibition relative to the harvest and distribution of lionfish; it may be harvested and sold by US seafood processors. Depending upon the contract type, USDC/NOAA IATC may provide grading and/or inspection services to processors of live or processed lionfish.

USDC/NOAA IATC is permitted to:

1. Perform product inspection of lionfish in any form (whole, filleted)
2. Perform product export certification of lionfish in any form (whole, filleted)
    a. Export certification to include the following statement: "Lionfish (*Pterois volitans)* sold with spines intact could present a handling hazard and must be further processed or handled to avoid cross-contact of the venom with the fish flesh."

USDC/NOAA SI Policy regarding - Personal Protection Equipment

When handling fish with venomous spines, it is important to prevent puncture wounds. According to the American Fisheries Society Fisheries Safety Handbook, individuals who handle fish can take precautions by wearing gloves.[4] Either nylon or kevlar gloves may be used. In some cases, biologists and other fish handlers such as NOAA SI field staff, may also wear a pair of latex gloves underneath the outer gloves. In addition, when evaluating fish with the spines intact, individuals should use hand held tools when selecting the fish for evaluation, to minimize the potential for "spining": puncture wounds caused by spines.

Recommendation for Gloves:

(1) HexArmor, Sharps Master II (link here) $41.99/pair, or similar gloves that are puncture resistant.

Recommendation for Hand Held Tools:

(1) Hooked picking tool to select fish
(2) Wire cutters to remove spines prior to evaluation.

[4] Fisheries Safety Handbook, American Fisheries Society, Bethesda, MD, 2008. Fish Handling Safety, p. 28.

[4] Fisheries Safety Handbook, American Fisheries Society, Bethesda, MD, 2008. Fish Handling Safety, p. 28.

Chapter 16 – Certificates

Certificates are issued according to the type of sampling and inspection performed, i.e., Lot Inspection Certificate, Export Health Certificate, Certificate of Origin, Certificate of Sampling, EU Certificate. All certificates must be filled out completely by the inspector performing the services or his/her designee, in ink, and include the inspector's name and ID number, and date of service.

Certificates will attest to the inspection results of the MAQ attributes, grade attributes, or Buyer Specifications. If weights and counts were not requested as part of the lot inspection, a statement to the effect will be placed on the certificate, "Vendor weights and counts used, but not verified". If, however, the inspector suspects short weights and/or counts, s/he is obligated to evaluate and report the results.

The Lot Inspection Certificate will be issued regardless of whether the product is accepted or deemed nonconforming, since it is an official record of the inspection findings. Lot Inspection Certificates shall be completed and distributed as described in the Instructions for Completing Lot Inspection Certificate, Part 7, Chapter 6, of this Handbook.

Chapter 17 – Appeal Procedures

An application for an appeal may be made by any interested party who has cause to disagree with the results of a product inspection or audit finding. Interested parties can request an appeal by completing a submission form at Sip Appeal Inquiry . Additional documentation supporting the appeal can be emailed to SIP.Appeals@noaa.gov.

Please refer to NOAA Handbook Part 1 Chapter 14 for details of the Appeals process.

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Chapter 18 – Fees and Charges

The applicant is responsible for all fees and charges associated with the sampling and inspection of the product. In the event of an appeal inspection, if the applicant for both the initial and appeal inspections is the same and the results of the appeal inspection are in favor of the applicant, there will be no charge to the applicant for the appeal inspection. If, however, the results of the appeal are not in favor of the applicant, the applicant will be charged for the appeal inspection and all related travel expenses. The inspector will complete a Daily Record of Charges, which includes time spent sampling, inspecting, and completing certificates, as well as any travel expenses incurred.

Chapter 19 – Sampling Plans

The Single Sampling Plans found in Tables I-V below, and the Multiple Sampling Plan found in Table VI below, (formerly found in 50 CFR Part 260 §260.61) are the most commonly used plans and are to be used by SIP inspectors unless a customer requests otherwise. Other validated and internationally recognized sampling plans, such as **Military Standard 1916**, ANSI/ASQ Z1.4 "Sampling Procedures and Tables for Inspection by Attributes," or **Codex Sampling Plans for Prepackaged Foods**, may also be used. For most lot inspections, the single sampling plan format is used. When using the sampling plans below, select the appropriate Table, depending on the product type, and then identify the sample size depending on the lot size (number of containers). Use the footnotes provided with each Table to determine whether to examine the entire contents of each container or only a portion thereof.

Example: A lot of frozen shrimp (41/50 count) weighing a total of 9,500 pounds, consists of 950 cases. Each case contains 4 2.5-pound bags of shrimp.

1. Use **Table II** for **Frozen** or Similarly Processed Fishery Products, and Products Thereof Containing Units of Such Size and Character as to be **Readily Separable**.
2. The product falls into **Group 2** - Any type of container over 1 pound but not over 4 pounds net weight.
3. The lot size is **3,800 containers**, which falls in the second column of between 1,801 – 8,400 containers: 950cs × 4 bags/cs = 3,800 containers
4. The sample size is **6 sample units**, or 6 2.5-pound bags of shrimp. Examine the entire contents of each bag.

A. Samples shall be selected from each lot in the exact number of sample units indicated for the lot size in the applicable sampling plan, unless, at the discretion of the inspection service, the number of sample units selected is increased to the number of sample units indicated for any one of the larger sample sizes provided for in the appropriate plans.

B. Under the single sampling plans, with respect to any specified requirement:

(1) If the number of deviants (as defined in connection with the specific requirement) in the sample does not exceed the acceptance number prescribed for the sample size, the lot meets the requirement;

(2) If the number of deviants (as defined in connection with the specific requirement) in the sample exceeds the acceptance number prescribed for the sample size, the lot fails the requirement.

C. Under the multiple sampling plans, inspection commences with the smallest sample size indicated under the appropriate plan, and with respect to any specified requirement:

(1) If the number of deviants (as defined in connection with the specific requirement) in the sample being considered does not exceed the acceptance number prescribed for that sample size, the lot meets the requirement;

(2) If the number of deviants (as defined in connection with the specific requirement) in the sample being considered equals or exceeds the rejection number prescribed for that sample size, the lot fails the requirement; or

(3) If the number of deviants (as defined in connection with the specific requirement) in the sample being considered falls between the acceptance and rejection numbers of the plan, additional sample units are added to the sample so that the sample thus cumulated equals the next larger cumulative sample size in the plan. It may then be determined that the lot meets or fails the specific requirement by considering the cumulative sample and applying the procedures outlined in paragraphs C. (1) and (2) of this section or by considering successively larger samples cumulated in the same manner until the lot meets or fails the specific requirement.

D. If in the conduct of any type of in-plant inspection the sample is examined before the lot size is known, and the number of sample units exceeds the prescribed sample size for such lot but does not equal any of the prescribed larger sample sizes, the lot may be deemed to meet or fail a specific requirement in accordance with the following procedure:

(1) If the number of deviants (as defined in connection with the specific requirement) in the non-prescribed sample does not exceed the acceptance number of the next smaller sample size, the lot meets the requirements;

(2) If the number of deviants (as defined in connection with the specific requirement) in the non-prescribed sample equals the acceptance number prescribed for the next larger sample size, additional sample units shall be selected to increase the sample to the next larger prescribed sample size;

(3) If the number of deviants (as defined in connection with the specific requirement) in the non-prescribed sample exceeds the acceptance number prescribed for the next larger sample size, the lot fails the requirement.

E. In the event that the lot compliance determination provisions of a standard or specification are based on the number of specified deviations instead of deviants, the procedures set forth in this section may be applied by substituting the word “deviation” for the word “deviant” wherever it appears.

F. Sampling plans referred to in this section are those contained in Tables I, II, III, IV, V, and VI which follow, or any other plans which are applicable. For processed products not included in these tables, the minimum sample size shall be the exact number of sample units prescribed in the table, container group, and lot size that, as determined by the inspector, most closely resembles the product, type, container size and amount of product to be samples.

G. Single Sampling Plans and Acceptance Levels

Table I—Canned or Similarly Processed Fishery Products, and Products Thereof Containing Units of Such Size and Character as to be Readily Separable

Container size group	Lot size (number of containers)								
group 1									
Any type of container of less volume than that of a No. 300 size can (300 × 407)	3,600 or less	3,601–14,400	14,401–48,000	48,001–96,000 96,001–156,000	156,001–228,000	228,001–300,000	300,001–420,000	Over 420,000	
group 2									

Container size group	Lot size (number of containers)								
Any type of container of a volume equal to or exceeding that of a No. 300 size can, but not exceeding that of a No. 3 cylinder size can (404 × 700)	2,400 or less	2,401–12,000	12,001–24,000	24,001–48,000 48,001–72,000	72,001–108,000	108,001–168,000	168,001–240,000	Over 240,000	
group 3									
Any type of container of a volume exceeding that of a No. 3 cylinder size can, but not exceeding that of a No. 12 size can (603 × 812)	1,200 or less	1,201–7,200	7,201–15,000	15,001–24,000	24,001–36,000	36,001–60,000	60,001–84,000	84,001–120,000	Over 120,000
group 4									
Any type of container of a volume exceeding that of a No. 12 size can, but not exceeding that of a 5-gallon container	200 or less	201–800	801–1,600	1,601–2,400	2,401–3,600	3,601–8,000	8,001–16,000	16,001–28,000 Over 28,000	
group 5									
Any type of container of a volume exceeding that of a 5-gallon container	25 or less	26–80	81–200	201–400	401–800	801–1,200	1,201–2,000	2,001–3,200	Over 3,200
Single sampling plans[1]									
Sample size (number of sample units)[2]	3	6	13	21	29	38	48	60	72
Acceptance number	0	1	2	3	4	5	6	7	

[1] For extension of the single sample sizes beyond 72 sample units, refer to table V of this section; for multiple sampling plans comparable to the various single sampling plans refer to table VI of this section.

[2] The sample units for the various container size groups are as follows: Groups 1, 2, and 3—1 container and its entire contents. Groups 4 and 5—approximately 2 pounds of product. When determined by the inspector that a 2-pound sample unit is inadequate, a larger sample unit may be substituted.

Table II—Frozen or Similarly Processed Fishery Products, and Products Thereof Containing Units of Such Size and Character as to be Readily Separable

Container size group	Lot size (number of containers)								
group 1									
Any type of container of 1 pound or less net weight	2,400 or less	2,401–12,000	12,001–24,000	24,001–48,000	48,001–72,000	72,001–108,000	108,001–168,000	168,001–240,000	Over 240,000
group 2									
Any type of container over 1 pound but not over 4 pounds net weight	1,800 or less	1,801–8,400	8,401–18,000	18,001–36,000	36,001–60,000	60,001–96,000	96,001–132,000	132,001–168,000	Over 168,000
group 3									
Any type of container over 4 pounds but not over 10 pounds net weight	900 or less	901–3,600	3,601–10,800	10,801–18,000	18,001–36,000	36,001–60,000	60,001–84,000	84,001–120,000	Over 120,000
group 4									
Any type of container over 10 pounds but not over 100 pounds net weight	200 or less	201–800	801–1,600	1,601–2,400	2,401–3,600	3,601–8,000	8,001–16,000	16,001–28,000	Over 28,000
group 5									
Any type of container over 100 pounds net weight	25 or less	26–80	81–200	201–400	401–800	801–1,200	1,201–2,000	2,001–3,200	Over 3,200
Single sampling plans[1]									
Sample size (number of sample units)[2]	3	6	13	21	29	38	48	60	72
Acceptance number	0	1	2	3	4	5	6	7	8

[1] For extension of the single sample sizes beyond 72 sample units, refer to table V of this section; for multiple sampling plans comparable to the various single sampling plans refer to table VI of this section.

[2] The sample units for the various container size groups are as follows: Groups 1, 2, and 3—1 container and its entire contents. Groups 4 and 5—approximately 3 pounds of product. When determined by the inspector that a 3-pound sample unit is inadequate, a larger sample unit or 1 or more containers and their entire contents may be substituted for 1 or more sample units of 3 pounds.

Table III—Canned, Frozen, or Otherwise Processed Fishery and Related Products, and Products Thereof of a Comminuted, Fluid, or Homogeneous State

Container size group[1]	Lot size (number of containers)								
group 1									
Any type of container of 12 ounces or less	5,400 or less	5,401–21,600	21,601–62,400	62,401–112,000	112,001–174,000	174,001–240,000	240,001–360,000	360,001–480,000	Over 480,000
group 2									
Any type of container over 12 ounces but not over 60 ounces	3,600 or less	3,601–14,400	14,401–48,000	48,001–96,000	96,001–156,000	156,001–228,000	228,001–300,000	300,001–420,000	Over 420,000
group 3									
Any type of container over 60 ounces but not over 160 ounces	1,800 or less	1,801–8,400	8,401–18,000	18,001–60,000	36,001–60,000	60,001–96,000	96,001–132,000	132,001–168,000	Over 168,000
group 4									
Any type of container over 160 ounces but not over 10 gallons or 100 pounds whichever is applicable	200 or less	201–800	801–1,600	1,601–3,200	3,201–8,000	8,001–16,000	16,001–24,000	24,001–32,000	Over 32,000
group 5									
Any type of container over 10 gallons or 100 pounds whichever is applicable	25 or less	26–80	81–200	201–400	401–800	801–1,200	1,201–2,000	2,001–3,200	Over 3,200
Single sampling plans[2]									
Sample size (number of sample units)[3]	3	6	13	21	29	38	48	60	72
Acceptance number	0	1	2	3	4	5	6	7	8

[1] Ounces pertain to either fluid ounces of volume or avoirdupois ounces of net weight, whichever is applicable for the product involved.

[2] For extension of the single sample sizes beyond 72 sample units, refer to table V of this section; for multiple sampling plans comparable to the various single sampling plans refer to table VI of this section.

[3] The sample units for the various container size groups are as follows: Groups 1, 2, and 3 - 1 container and its entire contents. A smaller sample unit may be substituted in group 3 at the inspector's discretion. Groups 4, 5, and 6 - approximately 16 ounces of product. When determined by the inspector that a 16-ounce sample unit is inadequate, a larger sample unit may be substituted.

Table IV—Dehydrated Fishery and Related Products

Container size group	Lot size (number of containers)								
group 1									
Any type of container of 1 pound or less net weight	1,800 or less	1,801–8,400	8,401–18,000	18,001–36,000	36,001–60,000	60,001–96,000	96,001–132,000	132,001–168,000	Over 168,000
group 2									
Any type of container over 1 pound but not over 6 pounds net weight	900 or less	901–3,600	3,601–10,800	10,801–18,000	18,001–36,000	36,001–60,000	60,001–84,000	84,001–120,000	Over 120,000
group 3									
Any type of container over 6 pounds but not over 20 pounds net weight	200 or less	201–800	801–1,600	1,601–3,200	3,201–8,000	8,001–16,000	16,001–24,000	24,001–32,000	Over 32,000
group 4									
Any type of container over 20 pounds but not over 100 pounds net weight	48 or less	49–400	401–1,200	1,201–2,000	2,001–2,800	2,801–6,000	6,001–9,600	9,601–15,000	Over 15,000
group 5									
Any type of container over 100 pounds net weight	16 or less	17–80	81–200	201–400	401–800	801–1,200	1,201–2,000	2,001–3,200	Over 3,200
Single sampling plans[1]									
Sample size (number of sample units)[2]	3	6	13	21	29	38	48	60	72
Acceptance number	0	1	2	3	4	5	6	7	8

[1] For extension of the single sample sizes beyond 72 sample units, refer to table V of this section; for multiple sampling plans comparable to the various single sampling plans refer to table VI of this section.

[2] The sample units for the various container size groups are as follows: Group 1 - 1 container and its entire contents. Groups 2, 3, 4, and 5 - 1 container and its entire contents or a smaller sample unit when determined by the inspector to be adequate.

Table V—Single Sampling Plans for Use in Increasing Sample Size Beyond 72 Sample Units

Sample size, *n*	84	96	108	120	132	144	156	168	180	192	204	216	230	244	258	272	286	300	314	328	342	356	370	384	400
Acceptance numbers, *c*	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33

H. Multiple Sampling Plans[1]

Table VI—Multiple Sampling Plans Comparable to the Indicated Single Sampling Plans

Indicated single sampling plan:																									
Single sample size, *n*	6			13			21			29			38			48			60			72		
Acceptance numbers, *c*	1			2			3			4			5			6			7			8		
Cumulative sample sizes, n_c, and acceptance numbers, *c*,	n_c	*c*	*r*	n_c	*c*	*r*	n_c	*c*	*r*	n_c	*c*	*r*	n_c	*c*	*r*	n_c	*c*	*r*	n_c	*c*	*r*	n_c	*c*	*r*
and rejection numbers, *r,* for multiple sampling.	4	0	2	8	0	3	10	0	3	12	0	4	14	0	4	16	0	4	18	0	5	22	0	5
	6	0	2	10	0	3	14	1	4	16	0	4	20	0	5	24	1	5	28	1	6	32	1	7
	8	1	2	12	1	3	18	1	4	20	1	5	26	1	6	32	2	6	38	2	7	42	2	8
				14	2	3	22	2	5	24	2	5	32	2	6	40	3	8	48	3	8	52	3	9
							26	4	5	28	3	6	38	3	7	48	4	8	58	4	8	62	5	10
										32	3	6	44	6	7	56	7	8	68	8	9	72	6	10
										36	5	6										82	9	10

[1] These multiple sampling plans may be used in lieu of the single sampling plans listed at the heading of each column.

I. Subsample Size (Revised Sub-Sampling Policy for Container Size Group 3 (Table II) Single Sampling Plan)

The above single sampling plans were created to balance the need for accurate results with the desire to minimize the costs associated with destructive sampling. These single sampling plans permit sub-sampling for Table II - Container Size Groups 4 (over 10 lbs but not over 100 lbs) and 5 (over 100 lbs), but currently do not allow sub-sampling for Table II - Container Size Groups 3 (over 4 lbs but not over 10 lbs).

During a review of the above single sampling plans, it was determined that the USDC could decrease destructive sampling associated with Table II - Container Group Size 3 by allowing for sub-sampling without affecting the performance of the single sampling plan. Effective September 22, 2011, it is now allowed to use 3 pound sub-sampling units from container sizes in Group 3 (over 4 lbs but not over 10 lbs) when using the above single sampling plan Table II to perform product inspection, grading or other evaluations. All products subject to Container Size Group 3 may be sub-sampled per the instructions for Container Groups 4 and 5, which allows for a three-pound sub sample.