Proposed Rules

Federal Register
Vol. 65, No. 223
Friday, November 17, 2000

This section of the FEDERAL REGISTER contains notices to the public of the proposed issuance of rules and regulations. The purpose of these notices is to give interested persons an opportunity to participate in the rule making prior to the adoption of the final rules.

FEDERAL TRADE COMMISSION

16 CFR Part 303

Rules and Regulations Under the Textile Fiber Products Identification Act

AGENCY: Federal Trade Commission.

ACTION: Notice of proposed rulemaking.

SUMMARY: The Federal Trade Commission (''Commission'') solicits comments as to whether to amend Rule 7 of the Rules and Regulations Under the Textile Fiber Products Identification Act (''Textile Rules,'' 16 CFR 303.7) to designate a new generic fiber name and establish a new generic fiber definition for a fiber manufactured by Cargill Dow, LLC (''Cargill Dow''), of Minnetonka, Minnesota. Cargill Dow suggested the name ''synterra'' for the fiber, which it described as polylactic acid or polylactide, and referred to as ''PLA.''

DATES: Comments will be accepted through January 29, 2001.

ADDRESSES: Comments should be submitted to: Office of the Secretary, Federal Trade Commission, Room 159, 600 Pennsylvania Ave., NW., Washington, DC 20580. Comments should be identified as ''16 CFR Part 303—Textile Rule 8 Comment—P948404.''

FOR FURTHER INFORMATION CONTACT: James G. Mills, Attorney, Division of Enforcement, Federal Trade Commission, Washington, DC 20580; (202) 326–3035, FAX: (202) 326–2190, <<jmills@ftc.gov>>.

SUPPLEMENTARY INFORMATION:

I. Background

Rule 6 of the Textile Rules (16 CFR 303.6) requires manufacturers to use the generic names of the fibers contained in their textile fiber products in making required fiber content on labels. Rule 7 (16 CFR 303.7) sets forth the generic names and definitions that the Commission has established for synthetic fibers. Rule 8 (16 CFR 303.8) describes the procedures for establishing new generic names.

Cargill Dow applied to the Commission on August 28, 2000 for a new fiber name and definition.[1] It stated that PLA fibers are synthetic but are derived from natural renewable resources (agricultural crops such as corn). It maintained that PLA can combine certain advantages of natural fibers with those of certain synthetic fibers. Cargill Dow said that, although it does not itself currently produce products made from Natureworks™ PLA fiber (the PLA fiber it currently manufactures), it does contract with others for the production of the fiber and sells the fiber to end users. Cargill Dow contended that its proprietary Natureworks™ PLA fiber, and PLA that may be made using alternative processes, have unique properties that, along with PLA's unique fundamental chemistry, differentiate PLA fibers from all other recognized and listed synthetic or natural fibers.

Cargill Dow explained that PLA's fundamental polymer chemistry allows control of certain fiber properties and makes the fiber suitable for a wide variety of technical textile fiber applications, especially apparel and performance apparel applications. Of most significance to consumers, Cargill Dow maintained, is that PLA fibers exhibit: (1) Low moisture absorption and high wicking, offering benefits for sports and performance apparel and products; (2) low flammability and smoke generation; (3) high resistance to ultra violet (UV) light, a benefit for performance apparel as well as outdoor furniture and furnishings applications; (4) a low index of refraction, which provides excellent color characteristics; and, (5) lower specific gravity, making PLA lighter in weight than other fibers. In addition to coming from an annually renewable resource base, it stated, PLA fibers are readily melt-spun, offering manufacturing advantages that will result in greater consumer choice.

Contending that the unique chemistry of fibers made from PLA is inadequately described under existing generic names listed in 16 CFR Part 303.7, Cargill Dow petitioned the Commission to establish the generic name ''synterra.'' After an initial analysis, the Commission announced, on October 30, 2000, that it had issued Cargill Dow the designation ''CD 0001'' for temporary use in identifying PLA fiber pending a final determination as to the merits of the application for a new generic name and definition. A final determination will be based on whether the record in this proceeding indicates that Cargill Dow meets the Commission's criteria for issuing new fiber names and definitions, as described in Part II, below.

II. Invitation To Comment

The Commission is soliciting comment on Cargill Dow's application generally, and on whether the application meets the Commission's criteria for granting applications for new generic names.[2]

First Criterion: The fiber for which a generic name is requested must have a chemical composition radically different from other fibers, and that distinctive chemical composition must result in distinctive physical properties of significance to the general public.

Second Criterion: The fiber must be in active commercial use or such use must be immediately foreseen.

Third Criterion: The granting of the generic name must be of importance to the consuming public at large, rather than to a small group of knowledgeable professionals such as purchasing officers for large Government agencies.

The Commission notes that the repeat units of PLA are linked by ester groups, which means that PLA fiber is a polyester. The Commission agrees with the petitioner, however, that PLA fiber does not fit into the current definition for polyester in Rule 7. The Commission is considering three approaches to resolve this situation, and requests comment from the public on the relative merits of each:

[1] This petition and additional information that Cargill Dow submitted are on the rulemaking record of this proceeding. This material, as well as any comments that are filed in this proceeding, will be available for public inspection in accordance with the Freedom of Information Act, 5 U.S.C. 552, and the Commission's Rules of Practice, 16 CFR 4.11, at the Consumer Response Center, Public Reference Section, Room 130, Federal Trade Commission, 600 Pennsylvania Avenue, NW., Washington, DC. Any comments that are filed will be found under the Rules and Regulations Under the Textile Fiber Products Identification Act, 16 CFR Part 303, Matter No. P948404, ''Cargill Dow Generic Fiber Petition Rulemaking.'' The comments also may be viewed in electronic form on the Commission's website at <www.ftc.gov>.

[2] The Commission first announced these criteria on Dec. 11, 1973, at 38 FR 34112, and later clarified and reaffirmed on Dec. 6, 1995, 60 FR 62353, on May 23, 1997, 62 FR 28343, and on Jan. 6, 1998, 63 FR 447 and 63 FR 449.

1. Amend the Rule to broaden the current definition for polyester in section 7(c) of the Rule to include PLA fiber;

2. Amend the current definition for polyester in section 7(c) of the Rule by creating a separate subcategory and definition for PLA fiber within the polyester category; or,

3. Amend the Rule to create a new, separate category in Rule 7 for PLA fiber.

Before deciding whether to amend Rule 7, the Commission will consider any comments submitted to the Secretary of the Commission within the above-mentioned comment period.

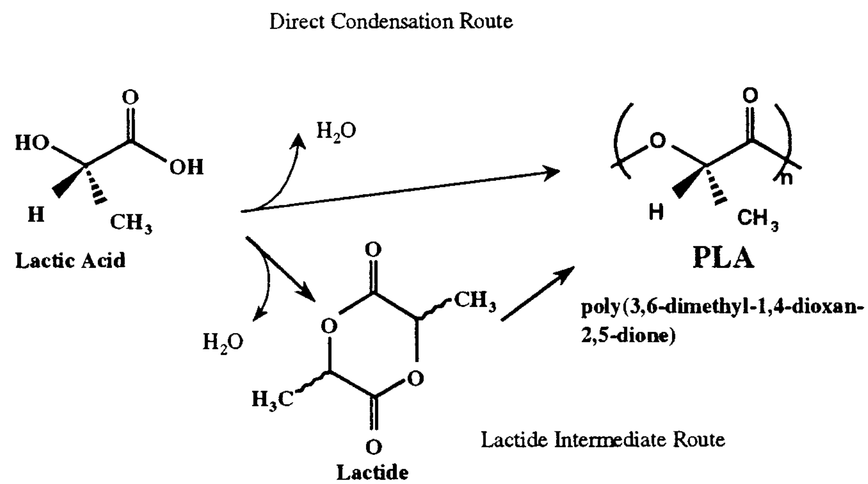
III. Cargill Dow's Petition

A. Chemical Composition and Physical and Chemical Properties of PLA Fiber

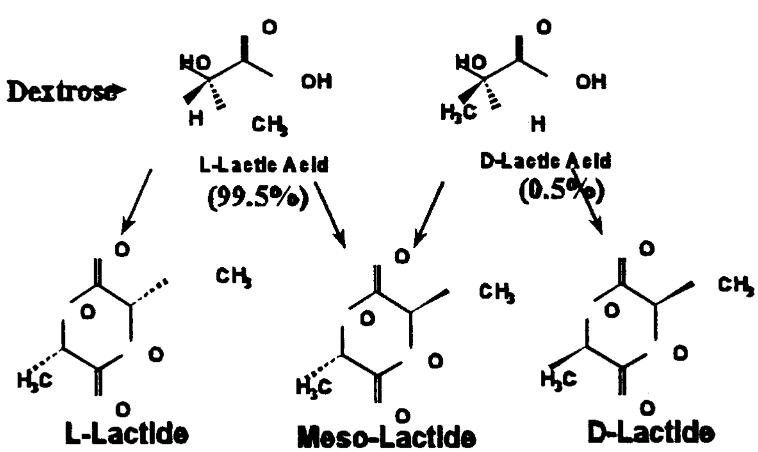
In its petition, Cargill Dow described in detail the fiber PLA. The following description from the petition is substantially verbatim:

1. Synterra fibers are typically made using lactic acid as the starting material for polymer manufacture. This is unique in that lactic acid comes from fermenting various sources of natural sugars. These sugars can come from a variety of annually renewable agricultural crops such as corn or sugar beets.

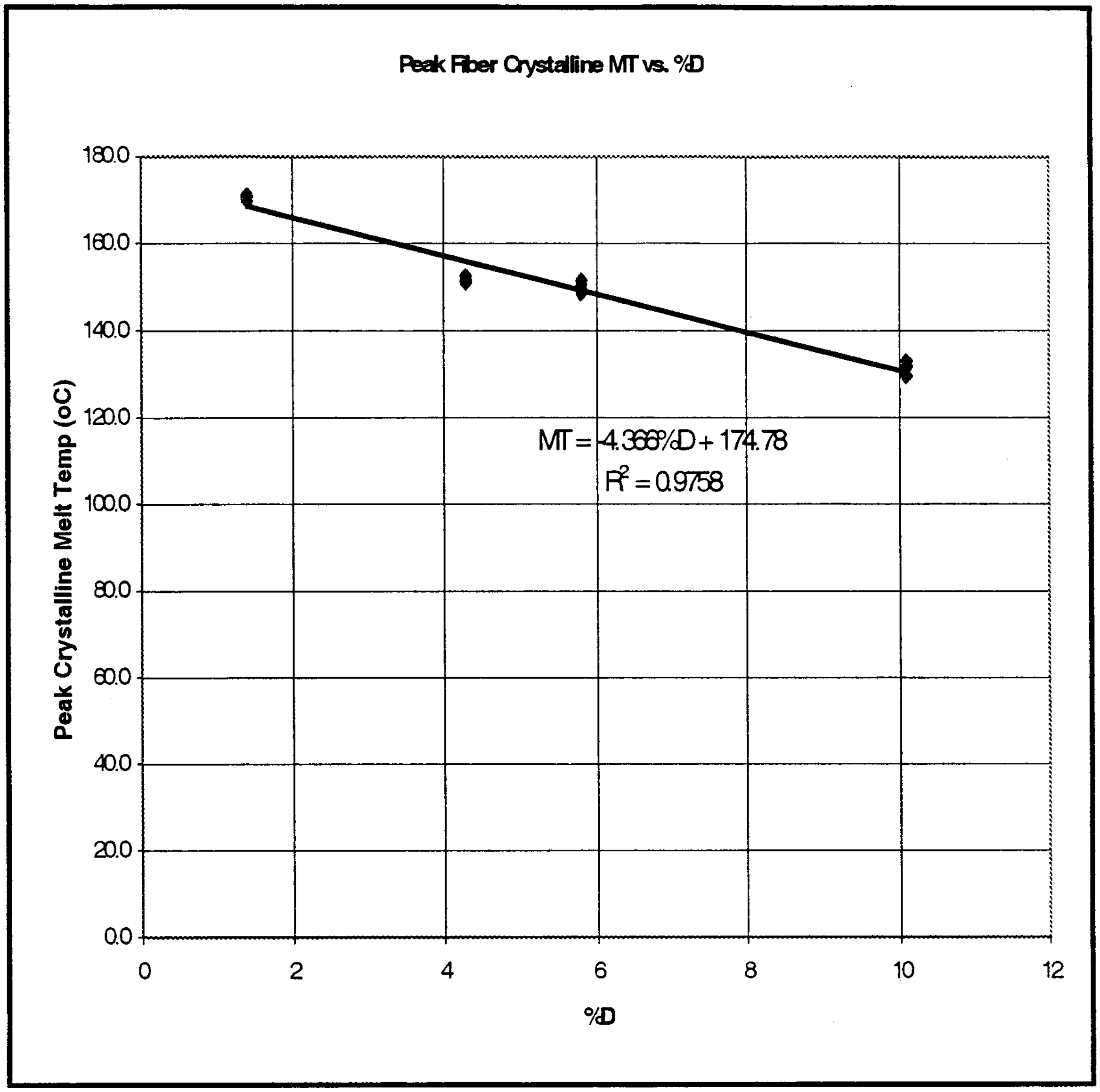
2. PLA used to make the fiber can be polylactic acid or polylactide. Although the lactide intermediate route, used by Cargill Dow, has proven most effective, direct condensation of lactic acid will also result in PLA. The latter route, however, results in a lower molecular weight polymer. Both routes allow for the development of PLA fibers that offer advantages to consumers explained more fully below (although the process used by CDP usually does so more readily), and are shown below:



3. PLA is also unique in that the lactic acid monomer exists in two optically active forms. Use of the lactide intermediate route results in three different lactide forms. These forms include D-lactide, L-lactide, or meso-lactide:



4. These different monomers, when polymerized, dictate the crystalline nature of the polymer. By controlling the ratio of D units in the polymer through polymerizing more D-lactide or meso-lactide, the amount of crystallinity the polymer is capable of being varied from a very high amount to none. As would be expected, this results in polymers with distinctly different properties. By controlling the level of the "D" units in the polymer chain, the resulting polymer and fiber melt temperature can be varied in the semi-crystalline polymers. For instance, the following graph gives the fiber peak crystalline melt temperatures for a range of different percent D polymers that were mechanically spun and drawn.



5. As a naturally-derived but synthetic product, synterra fibers exhibit properties some of which are similar to and some of which are different from many of the fibers commercially available today, including the various types of polyesters, nylons, acrylics and naturally occurring fibers such as cotton, wool, silk and rayon. See the table below, which compares several properties of fibers and fabrics against PLA. Importantly, the unique chemistry of PLA results in physical property differences such that existing fiber definitions do not fully or exactly describe PLA. Of likely significance to consumers is that PLA fibers are derived from a fully renewable natural resource, but offer many key advantages of synthetic fabrics as well.

Fiber property	Nylon 6	Acrylic	PET	PLA	Rayon	Cotton	Silk	Wool
Specific Gravity	1.14	1.18	1.39	1.25	1.52	1.52	1.34	1.31
Tm (°C)	215–220	−320 °C (Degrades)	254–260	130–175	None	None	None	None
Tenacity (g/d)	5.5	4.0	6.0	6.0	2.5	4.0	4.0	1.6
Elastic Recovery (5% strain).	89	50	65	93	32	52	52	69
Moisture regain (%)	4.1	1–2	0.2–0.4	0.4–0.6	11	7.5	10	14–18
Contact Angle (θ)	70	Not Measured	82	76				
Wicking (L–W slope; higher slope, more wicking.		Not Measured	0.7–0.8 (no finish)	6.3–7.5 (no finish); 19–26 (with finish)				
Heat of Combustion (MJ/kg).	31	31	23	19	17	17		21

Fiber property	Nylon 6	Acrylic	PET	PLA	Rayon	Cotton	Silk	Wool
Flammability	Medium smoke; melts	Moderate flammability; melts	High smoke; burns 6 min after flame removed	Low smoke; burns 2 min after flame removed	Burns	Burns	Burns	Burns slowly; self-extinguishing
LOI (%)	20–24	18	20–22	26	17–19	16–17		24–25
UV resistance	Poor	Excellent	% Change in Elong. at Peak=30 (100 hrs. xenon arc)	% Change in Elong. at Peak=0 (100 hrs. xenon arc)	Poor	Fair–Poor	Fair–Poor	Fair
Refractive Index	1.52	1.50	1.54	1.45	1.52	1.53	1.54	1.54

For consumers, the interaction of PLA with water, including moisture regain, wicking and contact angle, another measure of interaction with moisture, is likely to be significant. PLA exhibits low moisture absorption (0.4–0.6% moisture regain), similar to polyester, but lower than nylon, acrylic and natural fibers. At the same time, the rate of wicking is higher than other fibers like PET, with a Lucas-Washburn slope of 6.3–7.5 for PLA, versus 0.7–0.8 for PET.

For applications in apparel, but especially in furnishings, PLA's favorable combustion characteristics, including low smoke generation and LOI attributes, offer advantages to consumers. PLA polymer is an aliphatic chain, and thus burns cleanly, with only a small amount of faint, white smoke, as testing on PLA fibers demonstrates, per the table above. This means that in applications where especially stringent fire performance characteristics are required (necessitating fire retardant treatment even with PLA), reduced amounts of fire retardants will likely be needed relative to other fibers. This is an added environmental benefit.

Also, the unique modulus of PLA fiber allows fabrics to be made which are stiffer and more shape retaining than nylon, but softer, with better drape and hand than polyester. Furthermore, Natureworks™ PLA fibers exhibit a unique index of refraction, which may allow very lustrous fabrics to be made and dyed with very deep color. Excellent resistance to UV light is another significant differentiating property, as is elastic recovery, which is considerably higher than most other fibers.

6. PLA can be processed on conventional fiber equipment. PLA fibers have been manufactured and used in continuous filament, staple, and several nonwoven processes, as well as via new technologies such as high speed spinning and microdenier fibers. High speed spinning can be used to produce lower denier fibers and to produce more fiber per unit time, increasing productivity, which should ultimately offer economic benefits to consumers. Lower deniers and microdenier technologies have been increasing in apparel markets to give better hand and softer feel. Because of the unique properties of fibers made from Natureworks™ PLA, these fibers can and are being used in a broad range of applications. Sports and performance apparel, fashion apparel and general apparel, technical textiles, along with nonwovens are applications that best utilize the unique properties described above.

Cargill Dow also provided additional information about the launderability and drycleanability of PLA fiber, which appears in detail on the public record, relevant parts of which appear substantially verbatim as follows:

Summary of Fabric Cleaning Results

Summary of PLA Fabric Cleaning

- At cotton sturdy cleaning temperatures, both the drycleaned and laundered samples show high shrinkage in both directions after one cycle, but held relatively constant up to the 50th drycleaning and 100th laundering. This was due to the fabric not being heat set.
- The bursting strength dropped off slightly at the 75th laundry measurement and the 25th drycleaning measurement. The drycleaned samples show higher bursting strength as compared to the laundered samples.
- The fabric weight of the laundered and drycleaned samples increased after the first cleaning. This is attributed to the shrinkage of the fabric. The weight held relatively constant after the first cleanings; and after the 25th cycle for drycleaning.
- The drycleaned samples exhibited less wrinkling and puckering after cleaning.
- Minimal change in molecular weight occurred after the laundry and dry-cleaning regimes, indicating minimal hydrolytic degradation.

To verify that the initial dimensional change was due to not being heat set, Cargill Dow repeated the testing with an interlocking knit fabric, made from Flat Drawn Yarn which was heat set and dyed, prior to testing. Results were as contained in the figure, below:

Washing and Drycleaning Results on dyed filament fabric

Textile Testing Laboratory Results

Home Washing (AATCC 135) and Drycleaning (AATCC 158)

Testing was conducted on **100% PLA light blue continuous filament,** interlocking stitch knit fabric, knitted on a double circular knitting machine.

Home Washing		Original	1xHW	50xHW
Shrinkage	Wales		0.7	0.7
	Courses		1	1.3
Appearance*			3	4
Bursting Strength (lbf)		102	113	114
Weight (oz/yd^2)		15.1	16.7	18.3
Molecular Weight** (Dalton)	Mn	61500	65796	63645
	Mw	125540	128293	123370

*denotes Class 5.0 = no wrinkling and/or puckering; 1.0 = severe wrinkling and/or puckering
**via GPC, relative to polystyrene standards; Confidence Intervals @ 95% = Mn +/- 6300, Mw +/- 8900

Drycleaning		Original	1xDC	25xDC
Shrinkage	Wales		0.3	0.3
	Courses		1.7	1
Appearance*			5	5
Bursting Strength (lbf)		102	111	110
Weight (oz/yd^2)		15.1	16.6	17.6
Molecular Weight** (Dalton)	Mn	61500	63336	63955
	Mw	125540	126108	126295

*denotes Class 5.0 = no wrinkling and/or puckering; 1.0 = severe wrinkling and/or puckering
**via GPC, relative to polystyrene standards; Confidence Intervals @ 95% = Mn +/- 6300, Mw +/- 8900

The results suggest that fabrics made with fibers from PLA are very stable to laundering and drycleaning. The fabrics exhibited very little shrinkage during cleaning, since they were thermally stable prior to testing.[3]

In addition to suggesting the generic name ''synterra,'' Cargill Down proposed the following definition for PLA fiber.

synterra: A manufactured fiber in which the polymer is produced either (a) by the condensation of lactic acid or (b) by ring opening of the cyclic dimer, lactide, in both cases where at least 85% of the primary component is derived from a renewable resource as an integral part of the polymer chain.

B. Commercial Uses of PLA

Addressing the extent to which its fiber has been put into active commercial use, Cargill Dow stated in its petition:

Fibers produced from Natureworks™ PLA have been made * * * into finished goods that are ready to commercialize, and several are in test markets. Cargill Dow is in the process of building a second polymer plant in Blair, Nebraska, capable of producing 140,000 Metric Tons, or approximately 30,000,000 pounds per year of PLA polymer. Cargill Dow has customer commitments in fiber applications to purchase or use a significant portion of this polymer capacity, and anticipates that 50% or more of the plant's capacity to be sold as fiber-grade polymer. This plant is under construction and is expected to be commissioned in the fourth quarter of 2001.

C. Importance of New Generic Name to the Public

Cargill Dow argued that granting the petition would facilitate the use of this fiber in commercial consumer applications. It also stated that a new generic term (like synterra) would help consumers identify products made from PLA. Thus, Cargill Dow maintained that a new generic name would be important to the public at large, not just knowledgeable professionals.

IV. Regulatory Flexibility Act

The provisions of the Regulatory Flexibility Act relating to an initial regulatory analysis (5 U.S.C. 603–604) are not applicable to this proposal

[3] Cargill Dow did not evaluate wash or dry clean color fastness in either of the tests above. However, Cargill Dow stated that BASF has been developing the dyeing process, using disperse dyes on PLA. As part of its work, BASF studied colorfastness in washing. This information can be obtained from Cargill Dow's website, at the following address: <<http://www.cdpoly.com/images/BASF__Dye__Study.pdf>> Basically, BASF has identified dye combinations which give standard and high colorfastness to washing with fabrics made from these fibers. The launderability of PLA fibers was also examined (among other qualities) in a study by James Lunt, Ph.D., and Andrew L. Shafer, at Cargill Dow Polymers, LLC, entitled Polylactic Acid Polymers from Corn; Potential Applications in the Textiles Industry (also available at Cargill Dow's website.

because the Commission believes that the amendment, if promulgated, will not have a significant economic impact on a substantial number of small entities. The Commission has tentatively reached this conclusion will respect to the proposed amendment because the amendment would impose no additional obligations, penalties or costs. Ten amendments simply would allow covered companies to use a new generic name for a new fiber that may not appropriately fit within current names and definitions. The amendment would impose no additional labeling requirements.

To ensure that no substantial economic impact is being overlooked, however, the Commission requests public comment on the effect of the proposed amendment on costs, profits, and competitiveness of, and employment in, small entities. After receiving public comment, the Commission will decide whether preparation of a final regulatory flexibility analysis is warranted. Accordingly, based on available information, the Commission certifies, pursuant to the Regulatory Flexibility Act (5 U.S.C. 605(b)), that the proposed amendment, if promulgated, would not have a significant economic impact on a substantial number of small entities.

V. Paperwork Reduction Act

This proposed amendment does not constitute a ''collection of information'' under the Paperwork Reduction Act of 1995 (PL 104–13, 109 Stat. 163) and its implementing regulations. (5 CFR 1320 *et seq.*) The collection of information imposed by the procedures for establishing generic names (16 CFR 303.8) has been submitted to OMB and has been assigned control number 3084–0101.

List of Subjects in 16 CFR Part 303

Labeling, Textile, Trade practices.

Authority: Sec. 7(c) of the Textile Fiber Products Identification Act (15 U.S.C. 70e(c)).

By direction of the Commission.

Donald S. Clark,

Secretary.

[FR Doc. 00–29468 Filed 11–16–00; 8:45 am]

BILLING CODE 6750–01–M

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 635

[Docket No. 001113318-0318-01; I.D. 110200D]

RIN 0648-AO75

Atlantic Highly Migratory Species Fisheries; Atlantic Bluefin Tuna Incidental Catch

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Advance notice of proposed rulemaking (ANPR); request for comments.

SUMMARY: NMFS intends to undertake rulemaking to reduce the level of Atlantic bluefin tuna (BFT) that is discarded dead by vessels in the pelagic longline fishery, and issues this ANPR to request comments on potential changes to the Atlantic tuna regulations that could reduce the level of dead discards of BFT including the adjustment of target catch requirements for landing incidental catch. The level of allowed discards needs to be reduced in order to decrease the waste of valuable bycatch.

DATES: Written comments on this ANPR must be received on or before December 14, 2000.

ADDRESSES: Written comments should be addressed to Christopher Rogers, Acting Chief, Highly Migratory Species Management Division (F/SF1), National Marine Fisheries Service, 1315 East-West Highway, Silver Spring, MD 20910.

FOR FURTHER INFORMATION CONTACT: Brad McHale or Pat Scida, 978-281-9260.

SUPPLEMENTARY INFORMATION: The Atlantic pelagic longline fishery, which commonly targets swordfish, sharks, and yellowfin and bigeye tunas, also occasionally catches BFT incidental to these other fisheries. Because the U.S. longline fleet has not historically targeted BFT, the portion of the U.S. national BFT quota allocated to the longline category has always been intended to account for incidental catch only. Accordingly, under current BFT regulations, vessels permitted in the Atlantic Tunas Longline category are permitted to retain and land BFT caught with pelagic longline gear only if a specific minimum level of other fish species are landed from the same trip. While the regulations pertaining to landing incidental BFT catch have been adjusted on several occasions, the pelagic longline industry continues to comment that the target catch requirements are overly restrictive and result in unnecessary dead discards.

Background

The history of U.S. regulatory activity and public comment regarding this issue dates back to the early 1980's. A full description of this history is provided in the Fishery Management Plan for Atlantic Tunas, Swordfish, and Sharks (HMS FMP) chapter 3, section 3.5.3 ''Management Measures to Address Bycatch Problems.''

In 1998, the International Commission for the Conservation of Atlantic Tunas (ICCAT), in its recommendation on western BFT rebuilding, required that nations minimize dead discards of BFT to the extent practicable and established a dead discard allowance of 79 metric tons (mt) for western BFT, 68 mt of which was allocated to the United States. The 1998 ICCAT recommendation also provided that, if a nation exceeds its dead discard allowance in one year, that nation must deduct the excess from its following year's landing quota. If the actual amount of dead discards is less than the allowance, one-half of the difference may be added to the allocation of catch that can be retained. Dead discards of BFT are reported to ICCAT by NMFS, along with landings data, and are summarized in the U.S. National Report to ICCAT.

The final rule that implemented the HMS FMP addressed the dead discard issue by establishing a time/area closure for the use of pelagic longline gear in the Northwestern Atlantic from 39° to 40° N. lat. and 68° to 74° W. long. during the month of June. This closed area was chosen to meet the goal of minimizing BFT dead discards while having the least economic impact on the directed pelagic longline fisheries. Since NMFS first implemented BFT incidental catch regulations, the agency has received public comment and inquiries regarding the target catch requirements to retain incidental catch of BFT and the effectiveness of the regulations in avoiding dead discards. These comments have continued after the publication of the HMS FMP.

Potential Adjustments

Several reviews of landings, logbook, and observer data have been conducted in recent years regarding the pelagic longline fisheries interaction with BFT. Observer data from longline trips (from 1991 to 1994) indicate that two or fewer BFT were hooked on 91 percent of all