CONSUMER PRODUCT SAFETY COMMISSION

16 CFR Part 1632

[Docket No. CPSC-2020-0024]

Standard for the Flammability of Mattresses and Mattress Pads; Amendment

AGENCY: Consumer Product Safety Commission.

ACTION: Final rule.

SUMMARY: The Consumer Product Safety Commission (Commission, or CPSC) is issuing this final rule to amend its Standard for the Flammability of Mattresses and Mattress Pads. The ignition source cigarette specified in the standard for use in the mattress standard’s performance tests, Standard Reference Material cigarette SRM 1196, is no longer available for purchase. This final rule amends the mattress standard to require a revised Standard Reference Material cigarette, SRM 1196a, which was developed by the National Institute of Standards and Technology, as the ignition source for testing to the mattress standard.

DATES: This rule is effective [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

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SUPPLEMENTARY INFORMATION:

A. Background

1. The Standard

The Standard for the Flammability of Mattresses and Mattress Pads (Standard), 16 CFR part 1632, issued pursuant to the Flammable Fabrics Act (FFA), 15 U.S.C. 1191 et seq., sets forth a test to determine the ignition resistance of a mattress or mattress pad when exposed to a lighted cigarette. Lighted cigarettes are placed at specified locations on the mattress or mattress pad. The Standard establishes pass/fail criteria for the tests. The Standard currently specifies the ignition source for these tests as Standard Reference Material cigarette SRM 1196, available for purchase from the National Institute of Standards and Technology (NIST). See 16 CFR 1632.4(a)(2).

2. Development of the Original Standard Reference Material Cigarette

The original specification for the Standard’s ignition source included physical characteristics of a conventional, commercially available, non-filtered, king-sized cigarette. Although no specific brand was identified in the standard, a Pall Mall Red cigarette, manufactured by R. J. Reynolds Tobacco Company (RJR), was commonly known to meet the specifications. In early 2008, RJR notified CPSC that the company intended to convert its production of Pall Mall Red cigarettes to be Fire Standard Compliant (FSC).

In 2008, CPSC sought to find an alternate ignition source and contracted with NIST to develop an ignition source with an ignition strength equivalent to the Pall Mall Red cigarette. The ignition strength value is on a scale from 0 to 100 and is analogous to the percentage of full-length burns on a laboratory substrate. Lower values indicate a cigarette is more likely to self-extinguish when not actively being smoked, while higher values indicate a cigarette is more likely to remain lit while unattended. The non-FSC Pall Mall Red ignition strength varied by vintage from a low of 35 to a high of 95, most often falling at the higher end.
of the range. FSC cigarettes are required to have an ignition strength lower than 25, and in practice, they are often much weaker, to ensure uniform compliance.

In 2010, NIST developed SRM 1196, Standard Cigarette for Ignition Resistance Testing. SRM 1196 was available for purchase starting in September 2010. On November 1, 2010, CPSC proposed the use of SRM 1196 as the standard ignition source. 75 FR 67047. On September 23, 2011, CPSC issued a final rule amending the Standard to specify SRM 1196 as the standard ignition source, which became effective on September 23, 2012. 76 FR 59014.

3. Development of a New Standard Reference Material Cigarette

All of the SRM 1196 cigarettes were produced in one production run in 2010, with a supply estimated to last approximately 10 years. NIST staff made several attempts to procure a new batch of SRM 1196 cigarettes as the supply dwindled; but in late 2018, the supply of SRM 1196 was depleted before NIST was able to complete a new procurement. NIST was unable to find a manufacturer to produce additional SRM 1196 cigarettes. However, NIST successfully procured SRM 1196a as a replacement for SRM 1196.

NIST conducted tests to determine whether the SRM 1196 properties were replicated in the new SRM 1196a. NIST evaluated the suitability of SRM 1196a by examining the cigarette’s ignition strength, tobacco column length and mass, use of unbanded paper, and absence of a filter. Tobacco column length is the length of the cigarette that contains tobacco. Banded paper contains bands that slow the cigarette’s combustion when not actively being smoked, while unbanded paper does not contain these bands. NIST affirmed that these SRM 1196 properties were replicated in the new SRM 1196a, because the latter has a similar ignition strength, tobacco column length and mass, it uses unbanded paper, and it has no filter. NIST began selling SRM 1196a in February 2020.

4. CPSC Staff Evaluation of SRM 1196a¹

¹ This final rule is based on information and analysis provided in the Staff Briefing Package, Final Rule: Amendment to 16 CFR Part 1632 Standard for the Flammability of Mattresses and Mattress Pads, available at
CPSC staff evaluated SRM 1196a in a pilot study and then a full-scale study to determine whether it is a comparable, safety-neutral replacement for SRM 1196.

CPSC staff conducted an initial pilot study in late 2019 to evaluate the suitability of SRM 1196a as a substitute for SRM 1196. The goal of the pilot study was to ensure the full-scale study met statistically robust and scientifically meaningful criteria. Staff evaluated the confidence interval and margin of error to use in the full-scale study, based on an examination of the 2010 transition from the original ignition source to SRM 1196, CPSC compliance data, and the number of test replicates required by the Standard. Based on this analysis and testing during the pilot study, staff subject matter experts determined that a 90 percent confidence interval and equivalence margin of 35 percent were appropriate.

CPSC staff then conducted a full-scale study in early 2020, to determine whether there is statistical equivalence between SRM 1196 and SRM 1196a. In the full-scale study, staff evaluated SRM 1196 and SRM 1196a and found statistically equivalent char length pass/fail patterns for all tested mattress substrates. Test results were within a 90 percent confidence interval and equivalence margin of 35 percent. Staff noted that NIST certified the ignition strengths of both SRMs to be comparable, based on a 95 percent confidence interval with a 5 percent margin in laboratory testing. Although the bounds found by CPSC staff are larger than the NIST confidence interval, staff determined that the NIST tests only examined the cigarette characteristics on substrates that have little variability. The CPSC testing included representative mattress materials that are inherently more variable than the benchmark substrates in the NIST cigarette tests. Furthermore, staff analysis of both SRM cigarettes found that the physical dimensions of SRM 1196 and SRM 1196a are nearly identical. Based on the evidence provided by the full-scale study, pilot study, and NIST certification, as well as examination of CPSC compliance data and data from the 2010 transition from the original ignition source to SRM

1196, CPSC staff’s review showed that SRM 1196a cigarettes are statistically equivalent to SRM 1196. On these bases, the Commission finds that SRM 1196a is a comparable, safety-neutral replacement for SRM 1196.

**B. Statutory Provisions**

The FFA sets forth the process by which the Commission can issue or amend a flammability standard. 15 U.S.C. 1193. In accordance with those provisions, the Commission is amending the Standard to specify SRM 1196a as the ignition source for testing under the Standard. As required by the FFA, the Commission published a proposed rule containing the text of the ignition source revision, alternatives considered, and a preliminary regulatory analysis. 15 U.S.C. 1193(i); 85 FR 68803 (Oct. 30, 2020).

Before issuing a final rule, the Commission must prepare a final regulatory analysis and make findings concerning any relevant voluntary standard, the relationship of costs and benefits of the rule (in this case, the ignition source revision), and the burden imposed by the rule. 15 U.S.C. 1193(j). In addition, the Commission must find that the rule: (1) is needed to adequately protect the public against the risk of the occurrence of fire leading to death, injury, or significant property damage; (2) is reasonable, technologically practicable, and appropriate; (3) is limited to fabrics, related materials, or products which present unreasonable risks; and (4) is stated in objective terms. *Id.* 1193(b).

The Commission also must provide an opportunity for interested persons to make an oral presentation concerning the rulemaking before the Commission may issue a final rule. *Id.* 1193(d). In the preamble to the proposed rule, the Commission requested that anyone who wanted to make an oral presentation concerning this rulemaking contact the Commission’s Division of the Secretariat within 45 days of publication of the proposed rule. The Commission did not receive any requests to make an oral presentation.

**C. Description of the Revised Ignition Source**
Currently, the Standard requires that the ignition source for testing mattresses “shall be a Standard Reference Material cigarette (SRM 1196), available for purchase from the National Institute of Standards and Technology….” 16 CFR 1632.4(a)(2). CPSC is amending the Standard to require the use of SRM 1196a instead of SRM 1196 cigarettes.

D. Response to Comments on the Proposed Rule

The Commission received four public comments. One commenter supported amending the standard to update the SRM ignition source, citing the need for consistency in flammability performance and test methods. Three other commenters opposed the amendment. The issues raised in the comments are summarized and addressed below.

Comment: The cost of implementing SRM 1196a would negatively impact mattress manufacturers, due to the higher price charged for SRM 1196a over SRM 1196, and the cost increase associated with SRM 1196a over SRM 1196 should be considered substantial.

Response: The economic analysis of SRM 1196a shows that it will not have a significant economic impact on small domestic firms that supply the U.S. mattress market. The most expensive testing scenario a firm might encounter would fall well below the threshold to be considered significant. Furthermore, because SRM 1196a is a safety-neutral replacement for SRM 1196, firms are not required to retest existing prototypes with SRM 1196a. So, for existing prototypes that firms intend to continue to offer for sale, there is no additional cost associated with this amendment. Additionally, although the price of SRM 1196a is more than the price of SRM 1196, the cost of SRM 1196a is determined by NIST using the actual costs incurred in the production of SRM 1196a and applicable overhead and surcharge rates. The Commission has determined that the cost increase of adopting SRM 1196a is not considered significant to even the smallest domestic suppliers in the United States.

Comment: The additional cost of SRM 1196a would be passed along to consumers, increasing the cost of mattresses nationwide.
Response: The increase in cost associated with adopting SRM 1196a could potentially be passed on to the consumer. Under the Standard’s testing requirements, however, the cost of testing is born over the size of the production run for a given prototype. For a regular production run, the cost per mattress product that could be passed on to the consumer associated with adopting SRM 1196a as the ignition source is negligible. Furthermore, because SRM 1196a is a safety-neutral replacement for SRM 1196, firms are not required to retest existing prototypes. So, for existing prototypes that firms intend to continue to offer for sale, there is no additional cost associated with this amendment and no associated cost passed on to the consumer.

Comment: The U.S. market for mattress products faces challenges stemming from supply chain shortages and disruptions related to the COVID-19 pandemic and tariffs on trade.

Response: Preliminary data published by the U.S. Bureau of Labor Statistics (BLS) for the Mattress Manufacturing Industry (NAICS 337910) show that prices charged to producers to manufacture mattresses have increased by 2.2 percent since the start of the pandemic. The Producer Price Index data published by the BLS does not provide details on what causes industry production price changes. Nor does it attribute price increases to supply chain shortages or disruptions; but it does provide a reliable indication that production prices have increased. Although cost increases currently may be impacting industry, the cost associated with adopting SRM 1196a is small. The marginal cost increase associated with amending the Standard will not have a significant impact on suppliers. Delaying the rule, or electing not to adopt SRM 1196a as the standard ignition source, would not result in any significant cost savings.

Comment: The SRM ignition source is not representative of FSC cigarettes consumers can purchase. It is too strong to be a standardized ignition source for testing. The Commission should use FSC cigarettes as the ignition source for testing to the Standard.

Response: The SRM 1196a cigarette is a more appropriate test ignition source than FSC cigarettes for the following reasons:
• The SRM cigarette is a test instrument with calibration and traceability to NIST. Its ignition characteristics are more important than whether it looks like a consumer cigarette.

• Cigarette ignition of mattresses and bedding remains a substantial cause of residential fire deaths and injuries each year. Weakening the standard ignition strength would lower the threshold for smoldering ignition of these products, potentially increasing the incidence of these events. The SRM 1196a cigarette maintains the current level of safety because it is a safety-neutral replacement for SRM 1196.

• FSC cigarettes are intended to self-extinguish when not actively being smoked. The Standard states: “If a cigarette extinguishes before burning its full length on any mattress surface location . . . the test must be repeated with a freshly lit cigarette.” Because FSC cigarettes are designed to reduce the amount of time a cigarette burns while unattended, testing with FSC cigarettes could lead to many test locations with an incomplete initial data point. In addition, it also could lead to substantially more repeated tests. This would require firms to use more cigarettes to complete a test and increase the time required to complete the test.

Comment: The Commission should consider SRM 1082, NIST’s FSC Cigarette Ignition Strength Standard material.

Response: SRM 1082 is not a suitable replacement for SRM 1196 because it is an FSC cigarette. SRM 1082 would not provide the same level of safety, given its ignition strength of 15.8, compared to the ignition strength of SRM 1196a of 95.6 (on a scale of 0-100). SRM 1082 is also more expensive than SRM 1196a, with a cost of $405 for one carton, which is 85 percent costlier per cigarette than SRM 1196a ($437 for two cartons). Additionally, because SRM 1082 is an FSC cigarette, it could self-extinguish, requiring substantially more individual cigarettes to complete the testing.

Comment: It is not fair to obligate industry to procure SRM cigarettes from NIST, and NIST has a vested financial interest in revising the Standard.
Response: SRM cigarettes are available for purchase from NIST, and no other source.

According to NIST’s pricing policy published online, it establishes the prices of its measurement services in accordance with federal statutes. The prices of SRMs are determined by production costs, overhead, and surcharge rates incurred by NIST. Twice each calendar year, SRMs may be re-priced taking into account updates for overhead and surcharge rates, as determined by NIST and the Department of Commerce.

Other Comments

We also received other comments that are out of scope in this rulemaking proceeding. Commenters stated that 16 CFR part 1632 should be revoked because 16 CFR part 1633 is a more robust standard. Another commenter raised an issue regarding flame retardants in health care products. The scope of this rulemaking is limited to revising the ignition source in the Standard. The Commission is not making any other changes to the Standard. Because the comments do not address the replacement of SRM 1196 with SRM 1196a, these comments fall outside the scope of this rulemaking. We note that CPSC separately published an advance notice of proposed rulemaking to consider the revocation or amendment of 16 CFR part 1632, and those issues are appropriately addressed in that proceeding. 70 FR 36357.

E. Final Regulatory Analysis

Section 4(j) of the FFA requires that the Commission prepare a final regulatory analysis when it issues a regulation under section 4 of the FFA and that the analysis be published with the rule. 15 U.S.C. 1193(j). The following discussion fulfills this requirement.

1. Market/Industry Information

The size of the U.S. mattress market increased from $17.4 billion in 2018, to $18.1 billion in 2019. Roughly 23.6 million mattress units shipped in 2018. Approximately 29 percent (6.8 million) of units shipped were imported products. Three industry sectors supply mattresses and mattress pads to the U.S. market, categorized under the North American Industry Classification System (NAICS): NAICS Sector 337910 – Mattress Manufacturing, NAICS...
The Mattress Manufacturing Sector (337910) includes establishments primarily engaged in manufacturing innerspring, box spring, and non-innerspring mattresses. The Curtain and Linen Mills Sector (314120) comprises establishments primarily engaged in manufacturing household linens, bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials. This sector includes mattress pad and mattress protector manufacturing. The Furniture and Merchant Wholesalers Sector (423210) is primarily engaged in the merchant wholesale distribution of furniture, except hospital beds and medical furniture. Importers of mattresses are typically categorized under NAICS code 423210.

According to the Small Business Administration (SBA), a firm in the Mattress Manufacturing sector (NAICS sector 337910) can be defined as “small” if the firm employs fewer than 1,000 workers. Under this definition, among the 250 firms identified by staff in the sector, 240 are small businesses that supply mattress products. The SBA defines a firm within the Curtain and Linen Mills Sector (NAICS sector 314120) as small if the firm employs fewer than 750 workers. Under this definition, among the 20 firms identified by staff, 19 firms are small and currently supply mattress products to the U.S. mattress market. Finally, a firm in the Furniture and Merchant Wholesale Sector (NAICS sector 423210) is defined as small if the firm employs fewer than 100 workers. All of the 88 firms identified in this sector meet this definition of small. Under SBA-provided definitions, the majority of firms supplying the U.S. market for mattresses and mattress pads are small businesses.

2. The Mattress Standard

The mattress standard at 16 CFR part 1632 requires premarket, full-scale prototype testing for each new mattress design. Prototype testing also must be performed for each change in materials of an existing design that may affect cigarette ignition resistance.
Under the Standard, four defined test procedures require the use of an SRM ignition source: the mattress test procedure, the mattress pad test procedure, the ticking classification test procedure, and the tape edge substitution test procedure. The number of test cigarettes required by these test procedures range from 18 SRM test cigarettes consumed during the ticking classification test, to 108 SRM test cigarettes consumed during the mattress or mattress pad test procedures. Furthermore, under the Standard only SRM test cigarettes from unopened packages can be selected for a series of tests, and if a cigarette extinguishes before burning its full length on any mattress surface location, the test must be repeated with a freshly lit cigarette. Therefore, mattress and mattress pad test procedures require, in practice, six packs of SRM cigarettes, the ticking classification test procedure requires in practice one pack of SRM cigarettes, and the tape edge substitution test requires, at a minimum, two packs of SRM cigarettes.

SRM 1196a is available for purchase from NIST at a minimum order of 2 cartons. A carton contains 10 packs, and each pack contains 20 cigarettes; therefore, two cartons from NIST will contain 400 SRM cigarettes. Based on information collected by staff from a selection of domestic third-party testing facilities, a third-party testing facility uses an average of 10 to 40 packs of SRM cigarettes (or between 200–800 test cigarettes) per month. These data provide insight into the number of test cigarettes used by third party testing facilities located in the United States, as an order of magnitude. A testing facility that uses 400 test cigarettes per month would need to purchase two cartons of SRM cigarettes from NIST every month.

3. Potential Benefits and Costs

The SRM 1196a cigarette would have approximately the same ignition strength characteristics as originally intended by the Standard. The use of SRM 1196a cigarettes would not change the flammability performance tests or test method required under the Standard.

a. Potential Benefits

Cigarette ignition of mattresses and mattress pads is a substantial cause of residential fire deaths and injuries each year. This rule will allow firms to comply with the Standard, with
consistent and reliable results, preventing injury and death due to mattress fires. This rule is “safety-neutral,” so mattresses that passed or failed under the existing Standard would be expected to generate similar results when SRM 1196a is used. The level of protection provided by the Standard would neither increase nor decrease as a result of the change from SRM 1196 to SRM 1196a. Thus, there would be no impact on the level or value of fire safety benefits derived from the Standard.

Because NIST has exhausted its supply of SRM 1196, adopting this rule to require the use of SRM 1196a will allow firms access to an ignition source that would permit them to continue testing mattresses and mattress pads to the Standard. This rule would thus provide significant benefits to firms, since failing to adopt this amendment would mean that the Standard would require firms to test using an ignition source that is no longer available for purchase.

As an interim measure in 2018, when NIST’s stock of SRM 1196 cigarettes was depleted, CPSC’s Office of Compliance issued guidance stating that testing to the Standard could be completed with commercial king-size, non-filtered FSC cigarettes. CPSC’s Office of Compliance amended its Interim Enforcement Policy guidance, effective September 2020, to allow testing with either reserved stock of SRM 1196 or new stock of SRM 1196a. Accordingly, testing with FSC cigarettes to the Standard is no longer permitted.

SRM cigarettes provide a common ignition source for all laboratories, while commercially available FSC cigarettes do not offer that consistency. The ignition strength of FSC cigarettes vary from one brand to another. Because FSC cigarettes are required to have an ignition strength lower than 25 and are often much weaker, FSC cigarettes would have an ignition strength substantially lower than SRM 1196a. As a result, test results would vary between a test conducted with one brand of FSC cigarette and another, making testing, reporting, and enforcement inconsistent and unreliable.

Furthermore, FSC cigarettes are intended to self-extinguish when left unattended. Under the Standard, results from a cigarette that does not burn its full length are not accepted. Any
cigarette which extinguishes before burning its full length on any mattress surface location must be retested with a freshly lit cigarette. As a result, use of the FSC cigarette as the ignition source would likely lead to an increase in the average number of cigarettes used for each complete test. FSC cigarettes would likely self-extinguish, requiring multiple freshly lit cigarettes to complete a test, thereby increasing the costs of testing and time burdens associated with testing.

In contrast to the inconsistency and unreliability of FSC cigarettes, SRM 1196a is a statistically equivalent replacement for SRM 1196, and will reduce the need for retesting and lighting fresh FSC cigarettes. Furthermore, SRM 1196a allows for consistency in reporting and testing between laboratories. This rule specifying SRM 1196a as a replacement cigarette will achieve consistency and prevent uncertainty for industry, testing laboratories, and CPSC.

b. Potential Costs

The cost increase associated with this rule is related to the SRM test cigarettes used as the ignition source for testing. A carton of SRM cigarettes contains 10 packs, and each pack contains 20 cigarettes; therefore, two cartons from NIST will contain 400 SRM cigarettes. Prices for SRM 1196a are set by NIST. At the time the Commission published the proposed rule, NIST charged $400 to purchase a “unit” of two cartons of SRM 1196a. Since then, NIST increased the price for two cartons to $437. The current price of SRM 1196a reflects a number of increases in surcharges accrued over the last calendar year, which includes NIST personnel costs and NIST overhead. The price increase from the previous NIST listed price of $400 per unit of two cartons is a price increase of 9.25 percent. At the new per-unit price, the cost of a pack of SRM 1196a cigarettes increased from $20 per pack to $21.85.

Manufacturers and importers of mattresses will be responsible for ensuring that their mattress products are tested using SRM 1196a. If a supplier’s mattress product does not comply with the requirements, they will need to either modify the product, or cease their manufacture or importation. Additionally, as required by the CPSIA and its implementing regulations, manufacturers and importers of youth mattresses would be required to certify that their
mattresses intended for children comply with the requirements of the Standard. Many domestic manufacturers of youth mattresses are small entities as defined by SBA. The following analysis reviews possible impacts of using SRM 1196a in the Standard.

The annual cost of adopting the SRM 1196a test cigarette will vary among small firms. Different firms offer a variety of mattress products and have different operational procedures for mattress product development and testing. Among other considerations, the number of mattresses produced annually by small firms is not uniform. Furthermore, some firms perform testing procedures in-house, while others elect or are required to have testing performed by a CPSC-approved conformity assessment body. The number of new prototypes that a firm will bring to market, and the size of a production run by a small firm, is up to the firm to decide; but the cost per firm of the amendment would be impacted by these individual decisions.

Commission staff reviewed a variety of likely cost increases that may be faced by small firms in adopting SRM 1196a, in three separate testing scenarios. To determine the likely costs faced by small firms from use of SRM 1196a cigarettes, staff analyzed testing costs related to the Standard in a manner that is consistent with past economic analysis of the industry. The analysis uses commercial data published online for mattress manufacturing, bedding manufacturing, and wholesale mattress product importers acquired from Dun and Bradstreet. Staff also reviewed current mattress products available on the market from a variety of small domestic suppliers and received input from industry on the type and frequency of testing performed under the Standard.

The number of new prototypes that a small firm will bring to market is up to the individual firm to decide, but the cost per firm due to this rule would be impacted by these individual business decisions. A small firm may choose to make new prototypes every year and bring them to market, or it may elect to substitute ticking and modify existing models of mattress products that are selling well or are customer favorites.

The Commission previously published cost estimates for three testing scenarios. 85 FR 68806. To supplement that analysis, the following discusses the effect of the SRM 1196a price
increase from $20 per pack to $21.85 per pack since publication of the proposed rule. The most expensive of the three testing scenarios was Scenario 1, which used 46 packs of SRM 1196a to test mattresses and mattress products annually. At $11.50 per pack, a firm’s cost of using SRM 1196 would be $529 (46 packs x $11.50 per pack = $529). At $21.85 per pack for SRM 1196a, the same testing scenario would cost a firm $1,005.10 (46 packs x $21.85 per pack = $1,005.10). As a result of adopting SRM 1196a as the replacement SRM, at a price of $21.85 per pack, the firm would incur a cost increase of $476.10 ($1,005.10 - $529 = $476.10). This example of a cost impact is for the most expensive testing scenario a firm might reasonably choose. The lowest reported annual revenue for any small domestic firm in the mattress manufacturing sector is $128,000. One percent of annual revenue for the firm is $1,280 ($128,000 x 1 percent). For this small domestic supplier, any impact smaller than $1,280 should be considered insignificant. Therefore, the cost increase of $476.10 of using SRM 1196a at the price of $437, as charged by NIST, would not be significant for even the smallest firm currently supplying the sector.

In summary, this rule is not expected to have a significant impact on expected benefits or costs of the Standard in 16 CFR part 1632. Both the expected benefits and costs of the amendment are small, and the likely effect on testing costs per new prototype mattress or ticking substitution would be minor, especially when the projected cost is allocated over a production run of complying mattresses.

4. Regulatory Alternatives

The Commission considered two basic alternatives: (1) allow for the use of FSC cigarettes as the ignition source; or (2) take no action on the smoldering ignition source issue.

Neither SRM 1196a nor FSC cigarettes (alternative one) would likely have a substantial economic impact. There would, however, be some relative differences in terms of resource costs and potential effects on the level of benefits the Standard affords. Alternative two would impose a significant economic impact, as it would require firms to use an ignition source that is no
longer available, effectively making it impossible for firms to comply with the Standard. The advantages and disadvantages of these two basic alternatives are discussed below.

**a. Allow for the Use of FSC Cigarettes**

Under the first alternative, manufacturers and testers could conduct tests with any available FSC cigarettes.

A possible advantage of the Commission taking this alternative action is that some of the projected minor increase in resource costs of testing would not be incurred, since FSC cigarettes are less expensive than SRM 1196a. As noted, however, firms would likely have to use many more FSC cigarettes than SRM 1196a cigarettes due to the likelihood that FSC cigarettes would extinguish before testing is complete.

Disadvantages of the Commission taking this action include an increase in test result variability due to differences in cigarettes. Tests would be less reliable and results would vary depending on which cigarette was used. This would create uncertainty and confusion surrounding the reliability of tests for compliance with 16 CFR part 1632. Manufacturers and testing firms would have to conduct tests that are either wasteful (in terms of extra cigarettes required to complete a test due to cigarettes prematurely extinguishing) or have irreproducible and unreliable results.

**b. No Action**

If the Commission took no action, firms would be required to use an ignition source that is no longer available for purchase. Firms would be unable to comply with the Standard.

In summary, there are no readily available or technically feasible alternatives to SRM 1196a that would have lower estimated costs and still address the need for a consistent ignition source that retains the “safety-neutral” approach of this rule.

**F. Regulatory Flexibility Act Certification**

Under the Regulatory Flexibility Act (RFA), 5 U.S.C. 601 et seq., an agency that engages in rulemaking generally must prepare initial and final regulatory flexibility analyses describing
the impact of the rule on small businesses and other small entities. Section 605 of the RFA provides that an agency is not required to prepare a regulatory flexibility analysis if the head of an agency certifies that the rule will not have a significant economic impact on a substantial number of small entities.

This rule retains the current mattress test procedure, but requires that entities performing cigarette ignition tests (including the CPSC, other state agencies, and industry testing organizations) purchase and use SRM 1196a cigarettes at a higher cost than the price at which SRM 1196 cigarettes had been sold. No additional actions will be required of small entities. The costs associated with the rule will essentially be borne by mattress manufacturers and importers that perform (or pay fees for) compliance testing.

The Commission has determined that this rule will have little or no effect on small producers. The design and construction of existing, compliant mattress products will remain unchanged, and the resource cost increase of using SRM 1196a cigarettes will represent a minimal increase in total testing costs. We have addressed comments concerning the impact of this rule on small entities, and we are not aware of any other information that would change the conclusion that the rule will not have a significant impact on a substantial number of small businesses or other small entities.

Based on the information presented here, in the proposed rule, and in the staff briefing package, the Commission concludes that the rule will have little or no effect on small producers. Thus, the Commission certifies that the rule will not have a significant impact on a substantial number of small businesses or other small entities.

G. Environmental Considerations

Pursuant to the National Environmental Policy Act, and in accordance with Council on Environmental Quality regulations and CPSC procedures for environmental review, the Commission has assessed the possible environmental effects associated with the rule. The Commission’s regulations state that amendments to rules providing performance requirements
for consumer products normally have little or no potential for affecting the human environment. 16 CFR 1021.5(c)(1). Nothing in this rule alters that expectation. Therefore, because this rule would have no adverse effect on the environment, neither an environmental assessment nor an environmental impact statement is required.

H. Preemption

The rule will modify a flammability standard issued under the FFA. With certain exceptions that are not applicable in this instance, “no state or political subdivision of a state may establish or continue in effect a flammability standard or other regulation” applicable to the same fabric or product covered by an FFA standard if the state or local flammability standard or other regulations is “designed to protect against the same risk of the occurrence of fire” unless the state or local flammability standard or regulation “is identical” to the FFA standard. 15 U.S.C. 1203(a). The rule will not alter the preemptive effect of the existing mattress standard. Thus, the rule will preempt nonidentical state or local flammability standards for mattresses or mattress pads designed to protect against the same risk of the occurrence of fire.

I. Effective Date

Section 4(b) of the FFA (15 U.S.C. 1193(b)) provides that an amendment of a flammability standard shall become effective one year from the date it is promulgated, unless the Commission finds for good cause that an earlier or later effective date is in the public interest, and the Commission publishes the reason for that finding. The Commission believes that an effective date of thirty days will give adequate notice to all interested persons for firms to obtain SRM 1196a cigarettes from NIST. Section 4(b) of the FFA requires that an amendment of a flammability standard shall exempt products “in inventory or with the trade” on the date the amendment becomes effective, unless the Commission limits or withdraws that exemption because those products are so highly flammable that they are dangerous when used by consumers for the purpose for which they are intended. This rule merely changes the ignition source, however, without any change to the test requirements of the Standard, so there is no relevant
exemption for products in inventory or with the trade. The purpose of this rule is to allow manufacturers to replace SRM 1196 cigarettes which are no longer available. Accordingly, manufacturers are already purchasing SRM 1196a cigarettes as the SRM 1196 stock is depleted. Therefore, the Commission finds for good cause that the rule will become effective 30 days after publication in the Federal Register.

J. Congressional Review Act

The Congressional Review Act (CRA; 5 U.S.C. 801-808) states that, before a rule may take effect, the agency issuing the rule must submit the rule, and certain related information, to each House of Congress and the Comptroller General. 5 U.S.C. 801(a)(1). The submission must indicate whether the rule is a “major rule.” The CRA states that the Office of Information and Regulatory Affairs (OIRA) determines whether a rule qualifies as a “major rule.” Pursuant to the CRA, OIRA designated this rule as not a “major rule,” as defined in 5 U.S.C. 804(2).

K. Findings

Sections 4(a), (b), and (j) of the FFA require the Commission to make certain findings when it issues or amends a flammability standard. The Commission must find that the standard or amendment: (1) is needed to adequately protect the public against the risk of the occurrence of fire leading to death, injury, or significant property damage; (2) is reasonable, technologically practicable, and appropriate; (3) is limited to fabrics, related materials, or products which present unreasonable risks; and (4) is stated in objective terms. 15 U.S.C. 1193(b). In addition, the Commission must find that: (1) if an applicable voluntary standard has been adopted and implemented, that compliance with the voluntary standard is not likely to adequately reduce the risk of injury, or compliance with the voluntary standard is not likely to be substantial; (2) that benefits expected from the regulation bear a reasonable relationship to its costs; and (3) that the regulation imposes the least burdensome alternative that would adequately reduce the risk of injury. These findings are discussed below.
The amendment to the Standard is needed to adequately protect the public against unreasonable risk of the occurrence of fire. The current Standard specifies as the ignition source cigarettes that are no longer being produced. In order for the Standard to continue to be effective (and for labs to test mattresses and mattress pads to determine whether they comply with the Standard), it is necessary to change the ignition source specification. Changing the ignition source to SRM 1196a, rather than FSC cigarettes, will ensure that testing is reliable and that results will not vary from one lab or manufacturer to another. Such variation would be likely if labs or manufacturers were able to use different ignition sources that have similar physical properties but different burning characteristics. The Commission finds that the amendment is needed to adequately protect the public against unreasonable risk of the occurrence of fire leading to death, personal injury or significant property damage.

The amendment to the Standard is reasonable, technologically practicable, and appropriate. The amendment is based on technical research conducted by NIST and CPSC staff, which established that the SRM 1196a cigarette is capable of providing reliable and reproducible results in flammability testing of mattresses and mattress pads. The SRM 1196a ignition source represents an equivalent, safety-neutral ignition source for use in testing to establish compliance with the Standard. The Commission finds that the amendment is reasonable, technologically practicable and appropriate.

The amendment to the Standard is limited to fabrics, related materials, and products that present an unreasonable risk. The amendment will continue to apply to the same products as the existing Standard, so the Commission finds that it is limited to fabrics, related materials, and products that present an unreasonable risk, and it is stated in objective terms.

Voluntary standards. There is no applicable voluntary standard for mattresses. The rule amends an existing federal mandatory standard.

Relationship of benefits to costs. Amending the Standard to specify SRM 1196a cigarettes as the ignition source allows testing to the Standard to continue without interruption,
maintains the effectiveness of the Standard, and will not significantly increase testing costs to manufacturers and importers of mattresses and mattress pads. Both expected benefits and costs of the amendment are small. The effect on testing costs will be minor. Thus, the Commission finds that there is a reasonable relationship between benefits and costs of the amendment.

Least burdensome requirement. No other alternative would allow the Standard’s level of safety and effectiveness to continue. Thus, the Commission finds that the amendment imposes the least burdensome requirement that would adequately address the risk of injury.

L. Conclusion

For the reasons discussed above, the Commission finds that amending the mattress flammability standard (16 CFR part 1632) to specify SRM 1196a cigarettes as the ignition source is needed to adequately protect the public against the unreasonable risk of the occurrence of fire leading to death, injury, and significant property damage. The Commission also finds that the amendment to the Standard is reasonable, technologically practicable, and appropriate. The Commission further finds that the amendment is limited to the fabrics, related materials, and products that present such unreasonable risks.

List of Subjects in 16 CFR Part 1632

Consumer protection, Flammable materials, Labeling, Mattresses and mattress pads, Records, Textiles, Warranties.

For the reasons given above, the Commission amends 16 CFR part 1632 as follows:

PART 1632—STANDARD FOR THE FLAMMABILITY OF MATTRESSES AND MATTRESS PADS (FF 4-72, AMENDED)

1. The authority citation for part 1632 continues to read as follows:


2. Revise § 1632.4(a)(2) to read as follows:

§ 1632.4 Mattress test procedure.
(2) Ignition source. The ignition source shall be a Standard Reference Material cigarette (SRM 1196a), available for purchase from the National Institute of Standards and Technology, 100 Bureau Drive, Gaithersburg, MD 20899.

* * * * *

Alberta E. Mills,

Secretary,


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