

**DEPARTMENT OF CONSUMER AFFAIRS,  
BUREAU OF ELECTRONIC AND APPLIANCE REPAIR,  
HOME FURNISHINGS AND THERMAL INSULATION**

**FINAL STATEMENT OF REASONS**

Hearing Date: September 17, 2018

Subject Matter of Proposed Regulations: Amendment to Flammability Standards

Sections Affected: 1374 and 1374.3 of Title 4, Division 3, Article 13 of the California Code of Regulations

Updated Information

The Initial Statement of Reasons is included in the file describing the reason, rationale, and necessity of this proposed action. There has not been any change to the initially proposed text or the underlying reasons that the Bureau seeks this regulatory amendment.

Local Mandate

A mandate is not imposed on local agencies or school districts.

Small Business Impact

The Bureau of Electronic and Appliance Repair, Home Furnishings and Thermal Insulation (Bureau) determined that the proposed regulation would not have a significant adverse economic impact on small businesses. Businesses manufacturing Technical Bulletin (TB) 133 compliant products comprise a very small segment of the furniture market in California and nationwide. Nearly all requests for TB 133 compliant furniture are in the form of contract furniture, i.e., when the need arises to meet the mandatory regulations.

Businesses, including small businesses, have stated that meeting the TB 133 standard results in loss of resiliency and comfort, as well as potential degradation of the highly fire-retardant component materials as flame retardants are commonly applied to foams, textiles, and polymers during or after production of upholstered furniture to ensure compliance with the standard. Repealing TB 133 testing and labeling requirements may allow businesses to produce longer-lasting furniture while also maintaining high safety standards. Also, businesses may benefit from the approval of this regulatory action as it is anticipated to lower the labor and material costs associated with manufacturing these types of products.

The anticipated benefits of this regulatory proposal are:

In addition to the benefits mentioned above, extensive scientific research and data over recent years has demonstrated the risk of exposure to flame retardant chemicals. Studies have shown that California residents have higher levels of flame retardants in their bodies

compared with residents of other states. Furniture flammability regulations are thought to contribute to these exposures. The Bureau anticipates that the repeal of the TB 133 standard and labeling requirements may decrease the exposure to hazardous chemical flame retardants. This anticipated benefit may improve public health as it reduces the public's exposure to carcinogenic organohalogen flame retardants.

### Consideration of Alternatives

No reasonable alternative which was considered or that has otherwise been identified and brought to the attention of the Bureau would be more effective in carrying out the purpose for which it was proposed or would be as effective and less burdensome to affected private persons than the adopted regulation or would be more cost effective to affected private persons and equally effective in implementing the statutory policy or other provision of law.

Set forth below are the alternatives which were considered and the reasons each alternative was rejected:

#### Alternative No. 1

Continue to utilize TB 133: Use of the TB 133 standard will mean that consumers will continue to be exposed to large levels of harmful chemicals. Aligning with the TB 117-2013 standard reduces this exposure while still maintaining high fire safety standards and protecting California consumers. TB 133 also creates a confusing regulatory environment for the manufacturers because it is not needed in new developments that are constructed under current building codes.

#### Alternative No. 2

Develop a new regulatory standard specifically addressing public occupancies: Developing a new standard would require a large investment of time and resources for the Bureau. It is the Bureau's contention that TB 117-2013 adequately addresses the matter and provides appropriate levels of fire safety while reducing environmental exposure to hazardous chemicals.

### **Summary of Comments Received During the 45-Day Comment Period:**

The 45-day public comment period began on Monday, July 27, 2018 and ended on Monday, September 17, 2018. The Bureau held a regulatory hearing in Sacramento on September 17, 2018. During the 45-day comment period the Bureau received eight written comments, and 12 comments during the public hearing. Comments providing recommendations and/or objections on the proposed action are set out below. The balance of the comments offered neither objections or recommendations to the proposed action, and were merely expressions of support for the action.

1. Dr. Marcelo Hirschler, representing GBH International, provided the following comments on September 14, 2018:

Comment Summary 1: Fire statistics from the National Fire Protection Agency's (NFPA) 2016 report indicates that home fires caused 2,735 civilian fire fatalities

while another 215 fire fatalities occurred in other structures. These are the types of fatalities that are likely to be severely affected by eliminating an open flame fire test requirement and therefore, are more likely to become more prevalent.

Response: The Bureau rejects this comment. NFPA's 2016 report Dr. Hirschler refers to indicates that the structure fire fatalities increased, in a large part, due to the Ghost Ship warehouse fire in Oakland where 36 civilians died. Although classified as a warehouse, this property was being used as a dwelling that is not easily classified. This report also indicates that fires occurring in public assemblies decreased 17.7 percent, and fires occurring in other residential areas such as hotels, motels, and dorms decreased by 13.3 percent since 2015.

As mentioned in the Initial Statement of Reasons, data collected during 2010-2014 in NFPA's 2017 report demonstrates that there is a low risk from fire deaths in structures that may require TB 133 compliant furniture. Deaths occurring in public assemblies accounted for 0.2 percent of the total number of deaths. According to NFPA's 2015 report on hotel and motel fires, nationwide civilian fire deaths occurring in 2013 amounted to six people nationwide out of a total of 3,780 fires reported. Upholstered seating furniture was not among the leading factors contributing to ignition in hotel and motel structure fires.

Building codes have been significantly strengthened and all newly-constructed public buildings are required to install working automatic fire sprinkler systems that meet the strict NFPA codes and regulations. State-of-the-art fire detection and suppression systems provide enhanced levels of fire protection in commercial buildings. Many existing buildings are now required to install or update fire sprinkler systems, as well as the fire alarm equipment. All these factors have contributed to significant improvements toward fire safety of public buildings and far fewer occurrences of fires in such occupancies.

Comment Summary 2: The rationale provided in the notice to eliminate TB 133, which states that "TB 133 is a redundant test standard that causes confusion within the industry," is untrue. TB 133 has been successfully used to assess the flammability of upholstered furniture for more than 25 years. A key reason for its wide "popularity" is that it assesses heat release in a realistic scenario which has been demonstrated to be the most important property in a fire as cited by the National Institute of Standards and Technology (NIST) research. The National Institute of Justice commissioned a study demonstrating that the TB 133 flammability test could be used to predict whether a fire on an upholstered furniture item would become an uncontrolled fire, based on heat release measurements. TB 133 is a widely used fire test that is extremely helpful for improving fire safety associated with upholstered furniture.

The rationale for eliminating TB 133 also states, incorrectly, that it will eliminate "competing flammability standards." TB 117-2013 is a smoldering flammability test addressing individual materials without considering how they will be present in the upholstered furniture product while TB 133 is a fire test on an actual product which ensures that a finished product is exposed to the fire ignition source. Both are

essential to ensure fire safety of a product.

TB 133 has always been intended primarily for use in public occupancies where fire risk is highest, as opposed to its use in private homes. The Bureau is urged to reconsider its intent to eliminate TB 133 from the California Code of Regulations. In the absence of TB 133, no fire test will remain in California, to assess open flame resistance to ignition of such an important contributor to fire losses as upholstered furniture.

Response: The Bureau rejects this comment. The TB 117-2013 standard has been widely accepted by the general public and industry, whereas, full scale tests are not cost effective and are not industry accepted. TB 133 was developed in 1991 and is obsolete in most areas of the state. TB 133 was developed at a time when many public buildings were not equipped with automatic fire sprinkler systems and smoke alarms, and smoking in many public buildings was allowed. Building codes have significantly strengthened since then and all newly-constructed public buildings are required to install working automatic fire sprinkler systems that meet the strict NFPA codes and regulations. State-of-the-art fire detection and suppression systems provide enhanced levels of fire protection in commercial buildings. Many existing buildings are now required to install or update fire sprinkler systems, as well as the fire alarm equipment. All these factors have contributed to significant improvements towards fire safety of public buildings and far fewer occurrences of fires in such occupancies.

TB 117-2013 addresses both home and public occupancies and provides methods for smolder resistance of cover fabrics, barrier materials, resilient filling materials, and decking materials for use in upholstered furniture. TB 117-2013 was adopted in 2013 to provide a greater fire safety protection against smoldering sources, which is the leading ignition sources of fires and losses today and which was also demonstrated in NFPA's 2015 report.

Therefore, the requirement of TB 133 is unnecessary as it no longer provides a meaningful fire safety protection to consumers or to industry. Contrary to its original intent, the requirement of TB 133 places an undue burden on the public and the industry due to the risks associated with the exposure to added flame retardant chemicals and due to the increased manufacturing costs. The repeal of TB 133 is necessary to simplify testing and labeling requirements, remove the burden of costly, unnecessary standards, and to add clarity to the Bureau's regulatory requirements.

In the absence of TB 133, ASTM E1537-16, Standard Test Method for Fire Testing of Upholstered Furniture, is still available for the general public to follow and use if interested.

2. Dr. Joseph Zicherman, representing Berkeley and Research Inc., provided the following comments on September 14, 2018:

Comment Summary 1: Dr. Zicherman opposes the proposed rulemaking as the

Bureau's response to his request for a final statement of reasons and rulemaking file was met with a response that the documents would not be available until after the hearing was held.

Response: The Bureau rejects this comment. The Bureau received an email on August 14, 2018 specifically requesting the final statement of reasons as soon as possible. The Bureau responded that the public comment period was currently open until September 17, 2018 and the final statement of reasons would be prepared and made available after the close of the public comment period.

The Bureau has complied with the requirements of the Administrative Procedures Act by submitting to the Office of Administrative Law the Notice of proposed changes which was published on July 27, 2018. The Notice, the Initial Statement of Reasons, and the Proposed Language were made available on the Bureau's website and all interested parties were notified and directed to the Bureau's website on this date. The Bureau confirmed that Dr. Zicherman is subscribed to the Bureau's interested parties list and therefore was sent notice regarding the availability of the rulemaking documents on July 27, 2018.

Comment Summary 2: The repeal of TB 133 is opposed due to its usefulness by local jurisdictions for fire prevention and building safety should they need to have available a vetted test method to characterize the fire hazard of furniture used in public occupancies. TB 133 is a far more rigorous test method and keeping it on the books makes more sense than having to develop a new standard and go through the regulatory process at a later date. It is understood that its continued status as inactive may have caused some confusion but that is a small price to pay to keep a valid test method on the books here in California. While disastrous fires in public occupancies are infrequent, there still is a need to provide tools to ensure that furniture used in those locations are resistant to ignition and display low rates of heat release.

Response: The Bureau rejects this comment. The TB 117-2013 standard has been widely accepted by the general public and industry, whereas, full scale tests are not cost-effective and are not industry accepted. With this being said, the Bureau has no intention of developing a new standard at this point in time. TB 133 was developed in 1991 and is obsolete in most areas of the state. TB 133 was developed at a time when many public buildings were not equipped with automatic fire sprinkler systems and smoke alarms and smoking in many public buildings was allowed. The requirement of TB 133 is unnecessary as it no longer provides a meaningful fire safety protection to consumers or to industry. Contrary to its original intent, the requirement of TB 133 places an undue burden on the public and the industry due to the risks associated with the exposure to added flame retardant chemicals and due to the increased manufacturing costs. The repeal of TB 133 is necessary to simplify testing and labeling requirements, remove the burden of costly, unnecessary standards, and to add clarity to the Bureau's regulatory requirements.

3. Drs. Mauro Zammarano, William M. Pitts, Anthony Hamins, and Richard Gann,

representing National Institute of Standard and Technology, provided the following comments on September 17, 2018:

Comment Summary 1: TB 117-2013 is a test to evaluate the smoldering ignition of upholstered furniture while TB 133 is a test to evaluate the open flame ignition of upholstered furniture. Scientists have shown the ignition mechanism and mitigation strategies differ for these two types of ignition sources. Protection from a smoldering ignition source, such as a cigarette, can result in increasing the fire hazard from the other type of ignition source, such as an open flame.

Most fire losses (civilian deaths and injuries, and property damage) from upholstered furniture fires occur after the fire spreads beyond the upholstered furniture. Since smoldering is a localized combustion process, for fire to spread beyond the upholstered furniture, smoldering must transition to flaming. Limiting the size of a fire is an important and commonly used metric for reducing fire risk.

Response: The Bureau rejects this comment. As mentioned in the Initial Statement of Reasons, data collected during 2010-2014 in NFPA's 2017 report demonstrates that there is a low risk from fire deaths in structures that may require TB 133 compliant furniture. Deaths occurring in public assemblies accounted for 0.2 percent of the total number of deaths. According to NFPA's 2015 report on hotel and motel fires, nationwide civilian fire deaths occurring in 2013 amounted to six people nationwide out of a total of 3,780 fires reported. Upholstered seating furniture was not among the leading factors contributing to ignition in hotel and motel structure fires.

Building codes have significantly strengthened, contributing to significant improvements towards fire safety of public buildings and far fewer occurrences of fires in such occupancies. Combining these improvements with the TB 117-2013 smoldering resistance standard is anticipated to maintain high safety standards for public occupancies.

Comment Summary 2: There are technologies that have been shown to reduce upholstered furniture flammability without the use of carcinogenic organohalogen flame retardants. For example, a commercial fire barrier is advertised as a "PBDE (polybrominated diphenyl ether) free and halogen free" fire barrier that "should pass California Technical Bulletin 133."

According to the National Research Council (NRC), certain chemical flame retardants that aren't considered carcinogenic have been deemed safe for use in upholstered furniture. NRC states that these safe flame retardants can be used by manufacturers to meet TB 133. For example, several inorganic additives, including alumina trihydrate, have been deemed safe by NRC and, furthermore, NIST research has shown that these fire retardants do significantly reduce upholstered furniture flammability.

Response: The Bureau rejects this comment. Business and Professions Code Section 19161 requires all upholstered furniture sold in California to be fire

retardant, as defined by the Bureau, and labeled in such manner. The Bureau enforces these mandates by developing flammability standards for which manufacturers must comply. The Bureau's flammability standards are performance-based standards that do not prescribe the use of flame-retardant chemicals, manufacturing methods, or specific materials to meet the standards. The decision is solely at the discretion of the manufacturer if they intend to use or not use flame retardant chemicals in the manufacturing of their products.

4. Robert J. Simon, representing American Chemistry Council North American Flame Retardant Alliance, provided the following comments on September 17, 2018:

Comment Summary 1: A regulation that focuses exclusively on smoldering fires ignores the potential for ignition by an open flame source and does not take into account the importance of the probability of the furniture item to resist the spread of the flame once transition from smoldering to flaming occurs. The stagnant air condition used in the smoldering test does not properly represent real life conditions where air currents encourage the transition from smolder to flaming combustion.

It is reiterated that the Bureau's rationale provided in the notice to eliminate TB 133, which states that "TB 133 is a redundant test standard that causes confusion within the industry," is an incorrect statement. TB 133 has been successfully used to assess the flammability of upholstered furniture. A key reason for its wide "popularity" is that it assesses heat release in a realistic scenario which has been demonstrated to be the most important property in a fire. The National Institute of Justice used the standard as the basis for an extensive report assessing burning rates of upholstered furniture.

National model fire codes and the life safety code all reference TB 133 as a requirement for protection in several public occupancies. It is unlikely that the bodies that manage these codes would continue to reference a "redundant test standard that causes confusion." NAFRA strongly disagrees with and doubts the accuracy of the Bureau's characterization. A fire safety standard that does not include a test to account for flaming ignition sources is insufficient to fire safety which is widely recognized by numerous organizations.

Response: The Bureau rejects this comment. The TB 117-2013 standard has been widely accepted by the general public and industry, whereas full scale tests are not cost effective and are not industry accepted. The air currents of real life conditions are constantly changing. Therefore, TB 117-2013 or any testing standard must control the range of the airflow rate to ensure all testing results are comparable.

The Bureau relied on national fire statistics which found that the fatality rate is greater in smoking related fires. TB 117-2013 provides a greater fire safety protection against smoldering sources which is the leading ignition sources of fires and losses today. Building codes have been significantly strengthened, contributing to significant improvements towards fire safety of public buildings and far fewer occurrences of fires in such occupancies. Combining these improvements with the TB 117-2013 smoldering resistance standard is anticipated to maintain high safety

standards for public occupancies.

TB 133 is no longer commonly used, and its requirement is obsolete in most areas of California. Provided that upholstered furniture used in public occupancies may meet TB 117-2013 or TB 133 creates an unnecessary overlap that creates confusion within industry. Therefore, the requirement of TB 133 is unnecessary, outdated, and no longer provides a meaningful fire safety protection to consumers or to industry. Contrary to its original intent, TB 133 places an undue burden on consumers and the industry due to the risks associated with the exposure to added flame retardant chemicals. The repeal of TB 133 is necessary to simplify testing and labeling requirements; remove the burden of costly, unnecessary standards; and to add clarity to the Bureau's regulatory requirements.

Comment Summary 2: The Bureau is attempting to pass a chemical control regulation; however, the Bureau possesses neither the necessary expertise nor the statutory authority to enact regulations that are intended to operate as a chemical restriction. The Bureau relies on incomplete and inaccurately characterized guidance issued by the Consumer Product Safety Commission regarding the public's exposure to non-polymeric, organohalogen flame retardants. By relying on an incomplete description of the Commission's process and not including any of its own analysis, the Bureau failed to demonstrate the public health justification necessary for eliminating TB 133.

Of greater concern, the Bureau is attempting to pass a chemical regulation when it lacks the statutory authority to do so. The Legislature vested that authority to the Department of Toxic Substance Control (DTSC). DTSC's regulations require comprehensive scientific evaluation of multiple factors for listed "Priority Products" and their potential alternatives. The alternatives analyses must be conducted by product manufacturers and are reviewed by DTSC before any decisions are made regarding further regulation of the Priority Product.

NAFRA believes that the proposed regulations would adversely affect the fire safety of upholstered furniture in California. Research on furniture fires and the views of authoritative bodies make clear that the Bureau has understated open flame hazards. Moreover, the proposed regulations to eliminate TB 133 are an improper attempt to implement a chemical regulation without proper authority or expertise. As such, this proposal should be withdrawn.

Response: The Bureau rejects this comment. The Bureau enforces fire retardant requirements by developing flammability standards with which manufacturers must comply. The Bureau's flammability standards are performance-based standards that do not prescribe the use of flame-retardant chemicals, manufacturing methods, or specific materials to meet the standards. The decision is solely at the discretion of the manufacturer if they intend to use or not use flame retardant chemicals in the manufacturing of their products.

As shown in the Initial Statement of Reasons, the Bureau relied on national fire statistics and extensive scientific research and data collected over recent years.



Statistics have demonstrated that there is a low risk from fire deaths in structures that may require TB 133 compliant furniture. Deaths occurring in public assemblies accounted for 0.2 percent of the total number of deaths. Nationwide, civilian fire deaths occurring in 2013 amounted to six people out of a total of 3,780 hotel and motel fires reported. Research has demonstrated the risk of exposure to flame retardant chemicals. California residents have the highest levels of flame retardant chemicals in their bodies compared with residents in other states.

Manufacturers have stated that meeting the TB 133 standard results in loss of resiliency and comfort, as well as potential degradation of the highly fire-retardant component materials as flame retardants are commonly applied to foams, textiles, and polymers during or after production of upholstered furniture to ensure compliance with the standard. Repealing TB 133 testing and labeling requirements may allow businesses to produce longer-lasting furniture while also maintaining high safety standards.

TB 133 is no longer commonly used, and its requirement is obsolete in most areas of California. Provided that upholstered furniture used in public occupancies may meet TB 117-2013 or TB 133 creates an unnecessary overlap that creates confusion within industry. The Bureau is proposing the repeal of the TB 133 requirement as it is unnecessary, outdated, and no longer provides a meaningful fire safety protection to consumers or to industry.

Contrary to its original intent, TB 133 places an undue burden on consumers and the industry due to the risks associated with the exposure to added flame retardant chemicals. Manufacturing products to meet TB 117-2013 does not require the use of flame retardant chemical to ensure that the product meets the flammability standard and allows manufacturers to use their discretion regarding the manufacturing methods and materials they wish to use. Adoption of this proposal would require manufacturers to comply with the flame-retardant chemical statement, as required by Business and Professions Code section 19094, which requires the manufacturer to label their product as containing or not containing added flame-retardant chemicals.

Therefore, the Bureau is acting within its authority, Business and Professions Code section 19004.1, by making protection of the public its highest priority in exercising its regulatory functions. Whenever the protection of the public is inconsistent with other interests sought to be promoted, the protection of the public is paramount. In addition, the Bureau is provided authority under Business and Professions Code section 19034 to adopt regulations necessary for the administration of establishing flammability standards. The repeal of TB 133 is necessary to simplify testing and labeling requirements; remove the burden on stakeholders of costly, unnecessary standards; and to add clarity to the Bureau's regulatory requirements.

5. Donald Lucas provided the following oral comment during the public hearing on September 17, 2018:

Comment Summary 1: The Bureau's efforts regarding this proposal are supported;

however, it is important to come up with standards that can be applied across the nation as it is hard to keep track of them all. Having a lot of different standards is not a good thing.

Response: The Bureau accepts this comment in part and rejects this comment in part. The Bureau appreciates and accepts the support received regarding the Bureau's recent efforts. The Bureau rejects the comment regarding the development of standards that can be applied across the nation. The Bureau actively communicates with its industry members and stakeholders during the development of standards and attempts to implement standards that are the least burdensome to the industry. The Bureau is, however, committed to its mandate of making the protection of California consumers the highest priority when exercising its regulatory authority. Therefore, developing standards that can be applied across the nation is not within the Bureau's purview.

#### Finding of Necessity

The Bureau hereby finds that is necessary for the public health, safety, and welfare of the people of California that this regulation apply to businesses.

If your regulation would require licensees to submit a report: N/A

#### Incorporation by Reference

None.

#### **CEQA Related Comments Received:**

In accordance with the California Environmental Quality Act (CEQA), an Initial Study/Negative Declaration (IS/ND) was prepared and noticed to those potentially affected by this regulatory proposal. The comment period for the IS/ND began on August 2, 2018 and ended September 17, 2018. The Bureau received no CEQA related comments during the comment period.