



Christian Dubay, P.E.
Secretary, Standards Council

13 March 2014

To: Interested Parties

Subject:

Standards Council Decision (Final):	D#14-1 (REVISED)
Standards Council Agenda Item:	SC#14-3-31
Date of Decision*:	3 March 2014
Standards Development Relating to the Storage and Retail Sales of Consumer Fireworks	

Dear Interested Parties:

At its meeting of March 3, 2014 the Standards Council issued the following Decision regarding the above referenced matter.

Please note that a correction has been made to the final decision that was previously sent out on March 12, 2014 for Council agenda item #14-3-31. Specifically, the only change is the last paragraph regarding recusals. The rest of the decision remains unchanged.

“Council Members Chad Beebe and Daniel O’Connor recused themselves during the deliberation and vote on this issue.”

Attached is the final decision on the matter.

Sincerely,

A handwritten signature in black ink, appearing to read "Christian Dubay".

Christian Dubay, P.E.
Secretary, NFPA Standards Council

- c: D. Berry, M. Brodoff, L. Fuller, D. Bellis, M Wixted, N. Pearce, G. Colonna, G. Harrington, R. Solomon
Members, Technical Committee on Pyrotechnics (PYR-AAA)
Members, Technical Committee on Fire Code (FCC-AAA)
Members, NFPA Standards Council (AAD-AAA)

*NOTE: Participants in NFPA’s codes and standards making process should know that limited review of this decision may be sought from the NFPA Board of Directors. For the rules describing the available review and the method for petitioning the Board for review, please consult section 1.7 of the NFPA Regulations Governing Committee Projects and the NFPA Regulations Governing Petitions to the Board of Directors from Decisions of the Standards Council. Since this Council decision is not “related to the issuance of a document” as referenced in 1.7.2 of the Regulations Governing Committee Projects, notice of the intent to file such a petition must be submitted to the Clerk of the Board of Directors within a reasonable time period.



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I. Introduction

This decision arises out of the Standards Council’s review of a complaint that the American Pyrotechnics Association (“APA”) has filed with the American National Standards Institute (“ANSI”). The APA’s complaint to ANSI challenges the Standards Council’s authority to take reasonable action to respond to the consumer fireworks interests’ refusal, over the course of more than ten years, to submit test data demonstrating the technical validity of the sprinkler design criteria for the protection of retail facilities that store and sell consumer fireworks to the general public. Specifically the APA’s complaint seeks, in effect, to oblige the Standards Council to reverse a decision limiting the size and other features of these retail facilities until such time as test data to validate reasonable sprinkler design criteria was submitted to the responsible NFPA Technical Committee on Pyrotechnics (the “Technical Committee”).

In ordinary circumstances, the NFPA would respond to an ANSI complaint through the usual channels within ANSI. We have no doubt that such response to the APA complaint would be successful. In the special circumstances surrounding the NFPA development of consumer fireworks standards, however, the APA’s complaint serves to finally confirm the APA’s unwillingness to meaningfully engage in the kind of standards development that would continue to yield quality standards consistent with the NFPA’s safety mission. This has prompted the Council to reconsider, as it has several times over the troubled history of standards development in this area, whether it was appropriate for NFPA to continue to develop standards for the storage and retail sales of consumer fireworks.

On reconsideration, the Council, pursuant to its authority to determine the scope of NFPA standards activities, has now decided to cease issuing NFPA standards for the storage and retail sales of consumer fireworks. To effectuate that decision, the Council is temporarily withdrawing NFPA 1124, *Code for the Manufacture, Transportation, Storage, and Retail Sales of Fireworks and Pyrotechnic Articles* (2013 edition) (“NFPA 1124”), pending the removal of the consumer fireworks provisions and is providing guidance and taking other actions set forth, below, in Part III of this decision.

II. Background

The Standards Council has addressed issues concerning standards for the storage and retail sales of consumer fireworks in a string of decisions that is unprecedented in length and detail. Those decisions should be consulted for a full understanding of the basis of this decision. See especially Standards Council Decision #12-4 (Standards Council Agenda Item #12-8-11, August 9, 2012) (the “August 2012 Decision”) and Standards Council Decision #08-19 (Standards Council Agenda Item #08-7-38, July 24, 2008) (the “2008

Decision”), and decisions and minute items cited in those decisions. The following briefly summarizes the background necessary for this decision.

NFPA, as a safety organization, has and continues to have, a long-standing advocacy position opposing, on well-documented safety grounds, any use of fireworks by consumers or other members of the general public. In light of that policy, the NFPA did not allow standards development activities related to the use of fireworks by the general public. Nevertheless, despite that opposition, and because the use of consumer fireworks was allowed in most states, the NFPA Board of Directors, in 1999, authorized the development of standards concerning the storage and retail sales of consumer fireworks, should the Standards Council choose to do so. At the urging of the APA and others, the Standards Council decided to proceed with this activity. This eventually led to the incorporation of consumer storage and retail sales provisions (“the consumer fireworks provisions”) into an expanded Chapter 6 and a new Chapter 7 of NFPA 1124 beginning with the 2003 edition followed by new editions in 2006 and 2013.

From the inception, this work has been marked by difficulties. Initial wrangling over which technical committee would have jurisdiction for developing the consumer fireworks provisions gave way over the years to persistent and recurring concerns, voiced repeatedly by the Standards Council, with the paucity of technical data and test results supporting many of the provisions. [See, e.g., Standards Council Decision #03-13 (Standards Council Agenda Item #03-1-10-a, January 17, 2003) (rejecting exemption of existing facilities from certain requirements, based on reasons which included “the Council’s own concerns whether the safety issues [respecting the exemption]. . . have been given adequate consideration”). Standards Council Decision #06-04 (Standards Council Agenda Item #06-3-11, March 21, 2006) (rejecting Technical Committee request to enter three new draft fire test standards on packaging, covered fuses, and flame breaks used in the retail sale and display of consumer fireworks where “little if any research or testing was produced to support the draft standards and there is no clear prospect that the standards development process, once begun, would be supported by adequate technical substantiation”).]

Prominent among these concerns, from the very beginning, was the adequacy of the technical data available to support requirements for how and when storage and retail sales facilities should be protected by automatic sprinklers. See Standards Council Decision #03-14 (Standards Council Agenda Item #03-1-10-d, January 17, 2003) (rejecting as technically unjustified the Technical Committee’s recommended 12,000 square foot area threshold for requiring an automatic sprinkler system in permanent retail sales facilities, noting the lack of adequate large scale fire testing to justify the effective treatment of consumer fireworks as an ordinary hazard occupancy as defined by NFPA 13, *Standard for the Installation of Sprinkler Systems*, and accepting instead a 6,000 square foot area threshold); Standards Council Decision #04-05 (Standards Council Agenda Item #04-4-13/14/15/16, April 15, 2004) (accepting a Tentative Interim Amendment extending the area threshold for automatic sprinkler requirements to 7,500 square feet for existing permanent facilities, but noting further review and consideration should be forthcoming during the full revision cycle).

Against the background of growing concern with the technical adequacy of the consumer fireworks provisions, the Fire Protection Research Foundation (the Research Foundation) conducted a literature review to assemble and analyze research data related to the hazards

associated with the storage and retail sales of consumer fireworks and to identify research needed to develop appropriate facility fire safety provisions. The Research Foundation hazard assessment, released in October 2007, identified a serious lack of data and clear scientific or technical basis underlying many of the consumer fireworks provisions in NFPA 1124. Prominently included among the noted deficiencies was the sprinkler design criteria (See, Research Foundation report entitled “Fire Safety in Consumer Fireworks Storage and Retail Facilities – Hazard Assessment” released October 1, 2007 authored by Jonathan Perricone, P.E., Schirmer Engineering Corporation) (the “Research Foundation Hazard Assessment”).

At its October 2007 meeting, the Standards Council considered this report and concluded that it raised serious concerns regarding the technical basis for the consumer fireworks provisions of NFPA 1124 and “calls into question whether sufficient research and other technical substantiation exists to support meaningful standards development in this area.” (See Standards Council Agenda Item #08-1-8, January 10, 2008 [revising previous Minute Item #07-10-35, October 3-4, 2007].)

Based upon the findings presented in the Research Foundation Hazard Assessment, the Council indicated that it was contemplating a halt to the further development of NFPA standards on consumer fireworks. Following further proceedings, including a public hearing conducted at the NFPA Annual Meeting, the Council considered the matter further and issued its decision. In that decision the Council cited a number of factors weighing against continued standards development. Although the Council was seriously inclined at this point to end the standards development activities for consumer pyrotechnics, it was highly mindful of the countervailing views expressed by the enforcement community. They urged that the consumer fireworks provisions of NFPA 1124, even though imperfect, were essential to their enforcement activities as these provisions established some important limits. (See 2008 Decision at pp. 3-4.)

The Council stressed that it did not subscribe to the view that the development of a standard by the NFPA is invariably better than no NFPA standard. Indeed, said the Council:

It is possible that a standard set at a low level and without adequate support can, at some point, impede rather than promote progress and safety. NFPA does not wish to be associated with sustaining a weak standard, without limit, based solely on the argument that it is better than nothing. (Id.)

It concluded, however, that it might still be possible to materially improve and validate the standards. The Council, therefore, decided to allow the consumer fireworks provisions to remain in place in NFPA 1124, extending no further than the 2012 Annual Revision Cycle. In doing so, however, the Council prescribed special conditions related to the nine areas of concern identified in the Research Foundation Hazard Assessment, for the processing of the consumer fireworks provisions through the next revision cycle of NFPA 1124. One of those special conditions addressed the need for validation of the sprinkler design criteria, in relevant part as follows:

The Council directs that sprinkler system design and installation provisions for both the storage and retail sale of consumer pyrotechnics be developed and adequately substantiated and that supporting testing, data, and other relevant studies be submitted and referenced. (2008 Decision at p. 12.)

In agreeing to continue standards development through one more cycle, the Council stressed that, if the compliance with the special conditions, including the sprinkler design conditions, was not completed by the end of the Annual 2012 cycle, the Council would remove the consumer fireworks provisions from the next edition of NFPA 1124, and the NFPA would no longer develop standards on this subject. (See the 2008 Decision at p. 6.) The Council expressed guarded optimism that the standard could be materially improved, but it noted that:

Ultimately, of course, producing acceptable standards within the time framework set forth in this decision will require a concerted commitment of the industry or others to fund and implement reliable and reviewable research and testing. It is hoped that such a commitment together with the energy and dedication of the participants in the NFPA standards development process will result in enhanced standards in the interests of public safety. (2008 Decision at p. 12)

Four years later, in August 2012, the proposed new edition of NFPA 1124 was presented to the Standards Council for issuance. Although eight of the nine subject areas identified in the 2008 Decision had been addressed, virtually nothing had been done to validate the sprinkler design criteria. Indeed, although the APA had belatedly sponsored the Research Foundation to develop a test plan, (the "Research Foundation Test Plan"), the consumer fireworks interests had taken no steps to even begin the testing. (See August 2012 Decision.) The failure to address the validation of the sprinkler design criteria meant that one of the most important conditions the Council had set for the continued NFPA development of consumer fireworks provisions had, without any justification, not been met.

The Council, however, did not end the development of the consumer fireworks provisions. Rather, the Council offered those interested in continuing the activity an additional opportunity to validate the sprinkler design criteria. Specifically, it issued the 2013 edition of NFPA 1124 with the consumer fireworks provisions, but it set a deadline of one additional year for validation of sprinkler design criteria. The Council cautioned that it would not allow the consumer fireworks provisions to remain in place for more than one year without appropriate substantiation. (August 2012 Decision at p. 8.) During that year, the full scale fire tests set forth in the Research Foundation Test Plan were to be completed and the results used to formulate requirements for sprinkler system design criteria and installation for the storage and retail sales of consumer fireworks. In the event the testing had not occurred by its August 2013 meeting, the Council would direct the processing of a Tentative Interim Amendment ("TIA") to limit the threshold of all permanent consumer fireworks retail sales and storage facilities to the threshold below which automatic sprinkler systems are not required under NFPA 1124 (i.e. less than 3,000 sq. ft. for new buildings and less than 7,500 sq. ft. for existing buildings). In the event neither of these actions had occurred, the Council again reiterated its intent to cease development of the consumer fireworks provisions and withdraw two related test method standards, PYR 1128, *Standard Method of Fire Test for Flame Breaks* and PYR 1129, *Standard Method of Fire Test for Covered Fuse on Consumer Fireworks*. (See August 2012 Decision at p. 8.)

Less than six months into the extended deadline, the APA appeared before the Council. It made clear, not only that the consumer fireworks interests would fail to begin or complete the Research Foundation Test Plan within the year, but that these interests had abandoned any intention to conduct the Research Foundation Test Plan and had, instead, decided to

investigate an “alternative test strategy” without specifying or defining what that alternative strategy might be. [See Standards Council Decision #12-17 at p. 4 (Standards Council Agenda Item #12-10-12, October 29-30, 2012).] Given the request for still more time and no apparent commitment on the part of the industry to complete this important safety work, the Council determined that, pursuant to its 2012 Decision, the Council would proceed with a TIA that limited consumer fireworks storage and retail sales facilities to those facilities that, due to such factors as limited area and quantity of materials are not required by NFPA 1124 to have automatic sprinklers. It is the Council’s eventual issuance of this TIA on March 7, 2013, [Standards Council Decision #13-2 (Standards Council Agenda Item #13-3-14-d)] that led the APA to file the appeal to ANSI described at the beginning of this decision.

III. Actions and Guidance.

As indicated earlier, the Council, in the face of the continuing failure to validate the sprinkler design criteria and the consumer fireworks industry’s unwillingness, confirmed in its ANSI appeal, to commit itself to providing such validation, has decided that the NFPA should no longer develop standards for the storage and retail sales of consumer fireworks. In the Council's view, the NFPA cannot develop such standards without the participation of the consumer fireworks industry and related interests, and it is apparent that these interests lack the commitment to the development of consumer fireworks standards in a manner that can produce and sustain such standards consistent with NFPA’s safety mission.

In order to effectuate that decision, the Council, pursuant to its authority under Sections 2.2, 3.1 and 4.7 of the *Regulations Governing the Development of NFPA Standards*, is taking the following actions:

(i) Committee Scope. The scope of the Technical Committee on Pyrotechnics is revised to exclude the storage and retail sale of consumer fireworks as follows:

This Committee shall have primary responsibility for documents on the manufacture, transportation, and storage of consumer and display fireworks, pyrotechnic special effects, and model and high power rocket motors. This Committee shall have primary responsibility for the use of display fireworks and for model and high power rocketry, and the construction, launching, and other operations that involve model and high power rocket motors. ~~The Committee shall have primary responsibility for documents on the wholesale and retail sale and storage of consumer fireworks. The Committee shall have responsibility for the development of fire test standards applicable to the packaging, covered fuses, and flame breaks used in retail sales display of consumer fireworks. The Committee shall coordinate the fire test documents with the Fire Test Committee.~~ The Committee does not have responsibility for documents on the storage and retail sales of consumer fireworks or the use of consumer fireworks by the general public; on the use of pyrotechnic special effects before a proximate audience; on the manufacture, transportation, storage for use of military, automotive, agricultural, and industrial pyrotechnics.

(ii) Temporary withdrawal of NFPA 1124. NFPA 1124 is temporarily withdrawn pending the development of revisions deleting the consumer fireworks provisions from the standard. The Technical Committee should proceed, either through the processing of a TIA

or through the regular revision cycle, to develop revisions removing the consumer fireworks provisions. In addition, the scope statement for the standard should be revised, in a form substantially as follows:

This code shall provide regulations for the construction, use, and maintenance of buildings and facilities for the following: (1) The manufacture and storage of fireworks, novelties and pyrotechnic articles at manufacturing facilities (2) The storage of display fireworks, pyrotechnic articles, salute powder, pyrotechnic and explosive compositions, and black powder at other than display sites ~~(3) The storage of consumer fireworks at distribution facilities~~ (4) ~~The retail sales and related storage of consumer fireworks in consumer fireworks retail sales (CFRS) facilities and stores~~ (5) The transportation on public highways of fireworks, pyrotechnic articles, and components thereof containing pyrotechnic or explosive materials. (6) This code shall not apply to the storage and retail sales of consumer fireworks.

The Council anticipates that it will reissue NFPA 1124 as soon as possible once the Technical Committee has completed this work.

(iii) Withdrawal of PYR 1128 and PYR 1129. Two test standards developed for use in connection with the consumer fireworks provisions of NFPA 1124 are withdrawn. The withdrawn standards are: PYR 1128, *Standard Method of Fire Test for Flame Breaks*, 2013 edition and PYR 1129, *Standard Method of Fire Test for Covered Fuse on Consumer Fireworks*, 2013 edition.

(iv) Other NFPA Standards. The Technical Committee on the Fire Code should process a Tentative Interim Amendment to NFPA 1, *Fire Code*, to remove all provisions concerning the storage and retail sales of consumer fireworks extracted from NFPA 1124. Other Technical Committees should likewise examine their standards and expeditiously remove references to and extracts from the consumer fireworks provisions of NFPA 1124.

To be clear, it is the intention of the Standards Council, in keeping with this decision and with the NFPA's long opposition to consumer fireworks, that no NFPA Committees should develop standards for the storage and retail sales of consumer fireworks or for the use of fireworks by members of the public.

IV. Conclusion

The Council stresses that its decision to end the NFPA's development of standards for the storage and retail sales of fireworks has not been taken lightly. The Council, in particular, is mindful of the enforcer community's interest in having NFPA develop and maintain these standards. Indeed, it was this interest that prompted the Council and the NFPA Board to entertain the possibility of having NFPA develop these standards despite the NFPA's strong institutional policy against the use of consumer fireworks. (See 2008 Decision at p. 4.) It was, moreover, at the urging of many in the enforcement community that the Council held back from halting this activity in the face of the concerns raised in 2007 by the Research Foundation Hazard Assessment. Even when, four years later, the consumer fireworks interests failed to fulfill the sprinkler validation condition set forth by the Council for the continued issuance of consumer fireworks provisions, the Council issued the consumer fireworks provisions in the 2013 edition of NFPA 1124, and extended the time to fulfill that condition for an entire year. It is only now that the Council has felt compelled

to act, after the consumer fireworks interests failed yet again to undertake the necessary testing and after those interests have made clear, through their ANSI appeal, that they will not accept an NFPA standard unless it includes invalidated sprinkler protection provisions for consumer fireworks retail sales facilities.

We believe that the record demonstrates the Council's forbearance and the great lengths to which the Council has gone to accommodate those enforcement officials who urged us to continue. Nevertheless, as we have repeatedly said, the Standards Council does not subscribe to the view, without qualification, that the development of a standard by NFPA is invariably better than no NFPA standard. The Council, after fifteen years of sustained effort, has reluctantly concluded that there should be no NFPA standards for the storage and retail sales of consumer fireworks.

Council Members Chad Beebe and Daniel O'Connor recused themselves during the deliberation and vote on this issue.