



CHARLES D. BAKER
GOVERNOR

KARYN E. POLITO
LT. GOVERNOR

TERRENCE M. REIDY
SECRETARY

The Commonwealth of Massachusetts
Executive Office of Public Safety and Security
Fire Prevention Regulations Appeals Board
P.O. Box 1025 ~ State Road

Stow, Massachusetts 01775
(978) 567-3181 Fax: (978) 567-3121

ANTHONY P. CAPUTO
CHAIRMAN

Docket # 2021-07
871 West Broadway
Gardner, Massachusetts

FIRE PREVENTION REGULATIONS APPEALS BOARD DECISION

A) Statutory and Regulatory Framework

This matter is an administrative appeal filed in accordance with Massachusetts General Laws Chapter 22D, Section 5. The Appellant is seeking the Board of Fire Prevention Regulation's review of the Gardner Fire Department's Order which states that foam blocks being used by the Meridian Gymnastics and Preschool, located at 871 West Broadway, Gardner, MA, did not comply with 527 CMR 1.00, 20.1.2.2 and NFPA 289. The business owner is Christine Caron (hereinafter referred to as the Appellant).

B) Procedural History

By a notice dated March 10, 2021, the Gardner Fire Department issued an Order of Notice to Meridian Gymnastics and Preschool, located at 871 West Broadway, Gardner, MA, that foam blocks in use in a gymnastics training put did not comply with code requirements pursuant to 527 CMR 1.00, 20.1.2.2 and NFPA 289 and ordered the foam blocks to be removed from the building.

The Appellant filed an appeal with the Fire Prevention Regulations Appeals Board on October 19, 2021, some 224 days after service of the subject Order of Notice from the Gardner Fire Department. This appeal was dismissed for lack of jurisdiction (untimely) pursuant to M.G.L. Ch. 22D, section 5.

On November 1, 2021, the Gardner Fire Department issued a second Order of Notice to Meridian Gymnastics and Preschool, once again determining that foam blocks in use in a gymnastics training put did not comply with code requirements pursuant to 527 CMR 1.00, 20.1.2.2 and NFPA 289.

On December 14, 2021, the Appellant timely filed an appeal of the Gardner Fire Department's second Order of Notice with the Fire Prevention Regulations Appeals Board. The Board held a video conference hearing on this matter on January 12, 2022.

Appearing on behalf of the Appellant was: Christine Caron, Owner, Meridian Gymnastics and Preschool and Jessica Deloge, Manager.

Appearing on behalf of the Gardner Fire Department and City of Gardner was: Ethan Kolondy, Esq., Assistant City Solicitor; Fire Chief Gregory Lagoy, Gardner Fire Department; Captain Craig Osowski, Gardner Fire Department; Lt. Mark Bettez, Gardner Fire Department, Fire Prevention; and Roland Jean, Building Commissioner, Gardner Building Department.

Also present was: Kristin McDonough, Fire Protection Engineer, Department of Fire Services and Carrie Noseworthy, member of the public.

Present for the Board were: Anthony Caputo, Presiding Panel Member; John Cox; Deputy Chief Edward Williams; and Alfonso Ibarreta, alternate. Glenn M. Rooney, Esq., was the Attorney for the Board.

C) Issue(s) to be Decided

Whether the Board should affirm, reverse or modify the Order of the Gardner Fire Department prohibiting the use of and requiring the removal of foam blocks used in gymnastics training in accordance with 527 CMR 1.00, 20.1.2.2 and NFPA 289?

D) Evidence Received

1. Application for Appeal by Appellant
2. Statements in Support of Appeal with attached documents/exhibits
- 2-1. Documents showing Flame Retardancy of Polyurethane cubes and covers from Wm. T. Burnett & Co. (dated 4/23/2019) and a Safety Data Sheet from Diversified Testing Laboratories, Inc. (dated 5/12/2020)
- 2-2. Technical Bulletin regarding NFPA 701/BARFIRE OTF-NEW from Apollo Chemical (dated 7/1/2015)
- 2-3. Original Notice of Violation to the Appellant from the Gardner Fire Dept. (dated 3/10/2021)
- 2-4. Second Notice of Violation to the Appellant from the Gardner Fire Dept. (dated 11/1/2021)
- 2-5. Gardner Fire Department Inspection Report (dated 3/11/2020)
- 2-6. Gardner Fire Department Inspection Report (dated 9/9/2021) with Certificate of Inspection attached (issued 9/7/2021)
- 2-7. 5 Photographs of the pit at Meridian Gymnastics
- 2-8. 11 screen prints of websites of similar gymnastics schools also with foam block pits
- 2-9. Photos of screen shots showing free foam specifications listed on supplier websites
- 2-10. E-mails from foam suppliers stating the product does not exist or do not have products that meet the standards of NFPA 289
- 2-11. Case study from Elsevier / Environmental International "Intervention to reduce gymnast exposure to flame retardants from pit foam" (dated 2019)
- 2-12. Article from TURI – UMass Lowell "Gym Creates Healthier and Safer Foam Pits" (Undated)
3. Notice of Hearing to Appellant (dated 12/22/2021)
4. Notice of Hearing to Gardner Fire Department (dated 12/22/2021)
5. Memorandum regarding Remote Hearing Procedures (dated 5/7/2020)
6. Copy of Guidance Document that accompanies Hearing Notices (dated 5/1/2020)
7. Statement in Support of Order of Notice with exhibits from Gardner Fire Dept.
- 7-1. Building Permit for Meridian Gymnastics listing facility as Use Group A-3 (dated 6/21/2006)

- 7-2. Code Analysis conducted by William V. DeFlavio, Registered Engineer for Meridian Gymnastics (dated 4/21/2006)
- 7-3. Photo of Interior of Meridian Gymnastics and Preschool, showing elevated platform showing front/left side of the foam pit
- 7-4. Photo of Meridian Gymnastics and Preschool foam pit (old foam blocks)
- 7-5. Photo of Meridian Gymnastics and Preschool foam pit (new foam blocks)
- 7-6. Gardner Fire Department inspection report (dated 3/11/2020)
- 7-7. Document showing Meridian Gymnastics and Preschool receiving grant from TURI to Replace fire retardant foam blocks with non-fire retardant foam blocks (dated 2019)
- 7-8. Document for California Technical Bulletin 117 (Wm. T. Barrett & Co. Foam Division) (dated 4/23/2019)
- 7-9. Performance based analysis conducted by Jensen Hughes about a model gym in Woburn, MA used as comparison (dated 1/6/2016)
- 7-10. Gardner Fire Department inspection report (dated 3/3/2021)
- 7-11. Document for California Technical Bulletin 117 (Envirolite / Diversified Testing Labs)
- 7-12. Notice of Violation issued to Meridian Gymnastics and Preschool by Gardner Fire Dept. (dated 3/10/2021)
- 7-13. Signature receipt signed by Ms. Caron for Notice of Violation
- 7-14. Document provided by DGS regarding California 117 Testing (dated 10/28/2009)
- 7-15. NFPA 701, Standard Methods of Fire Tests for Flame Propagation of Textiles and Films From UL LLC (dated 1/2/2018)
- 7-16. E-mail to Ms. Caron from Gardner Fire Dept. regarding options for temporary occupancy (dated 3/18/2021)
- 7-17. Technical Bulletin regarding BARFIRE OTF-NEW (Apollo Chemical)
- 7-18. Gardner Fire Department inspection report (conducted 9/9/2021)
- 7-19. 2021 Occupancy Inspection Certificate (issued 9/7/2021)
- 7-20. Photo of Foam Blocks
- 7-21. Photo of Foam Blocks packed for shipping
- 7-22. FedEx tracking information (dated 9/24/2021)
- 7-23. E-Mail from Meridian Gymnastics and Preschool stating the NFPA 289 test failed (dated 10/13/2021)
- 7-24. Order of Notice issued to Meridian Gymnastics and Preschool by Gardner Fire Dept. (dated 11/1/2021)
- 7-25. Copy of 527 CMR 1.00, 20.1.2.2
- 7-26. E-mail from Ms. Caron to Captain Osowski of Gardner Fire Dept. (dated 3/17/2021)

E) Subsidiary Findings of Fact

- 1. The Appellant sought this Board's review of the Gardner Fire Department's Order under the provisions of M.G.L. c. 22D, s. 5.
- 2. The Appellant testified that she is the owner and operator of Meridian Gymnastics and Preschool in Gardner, Massachusetts. At issue is the Order of the Gardner Fire Department requiring that the 8x8 foam blocks used within the Appellant's gymnastics training pit be removed, as they did not comply with the code requirements of 527 CMR 1.00, 20.1.2.2 and NFPA 289.
- 3. The Appellant testified that her business' use of foam blocks in a gymnastics training setting is not unique, rather, it is customary in gymnastics and cheerleading training gyms throughout the Commonwealth and at similar businesses nationwide. The Appellant

testified that she had used the same foam blocks for over fifteen (15) years at her facility and that the Gardner Fire Department raised code concerns regarding these foam blocks for the first time in March 2021.

4. The Appellant testified that she had recently upgraded the foam blocks used in her training pit and following a March 2021 inspection by the Gardner Fire Department, she was requested to provide information to the fire department to establish that the upgraded foam blocks were compliant with 527 CMR 1.00.
5. The Appellant testified that she has made every effort to obtain information on the foam blocks to prove their fire retardancy and has provided the Gardner Fire Department with Safety Data Sheets for the blocks, their covers, and the specific product used to provide flame retardancy for both. However, the Appellant was unable to prove definitively that the foam blocks meet the requirements of NFPA 289 and she removed the same from her facility.
6. The Appellant testified that she had a sample set of the upgraded blocks sent out for laboratory testing and was informed that the foam blocks failed to meet the NFPA 289 flammability standard.
7. The Appellant testified that she, in good faith, attempted to procure foam blocks which would meet the NFPA 289 standard and she offered evidence from several manufacturers indicating their products are not tested to or produced in compliance with NFPA 289. The Appellant testified that to date, she has been unable to locate a single manufacturer producing foam blocks intended for use in gymnastics training which meet the requirements of NFPA 289.
8. In support of the Gardner Fire Department's position, Captain Craig Osowski testified that during a March 2020 inspection of the facility, the Appellant inquired whether she could replace the current foam blocks in the pit with a new non-fire retardant foam block. The Appellant was advised that she would be required to provide safety documentation to the fire department for review prior to the requested replacement, to ensure the foam blocks would be compliant with 527 CMR 1.00. However, following this request by the Appellant, no further information was provided to the fire department.
9. Captain Osowski testified that during the facility inspection in March 2021, it was noted that the foam blocks in the pit had changed from those observed during the March 2020 inspection. Captain Osowski testified that the Appellant was required to provide information on these new blocks to ensure they were compliant with 527 CMR 1.00. Captain Osowski testified that the Appellant provided California Technical Bulletin 117 (2017) regarding the blocks. Captain Osowski testified that the Appellant was informed California Technical Bulletin 117 was not the applicable standard and that the new foam blocks had to meet the provisions of NFPA 289.
10. The Appellant, through DGS Gymnastics Equipment, also provided testing results for the blocks using NFPA 701 to address the department's concerns. However, the fire department determined that both California Technical Bulletin 117 tests and NFPA 701 standard were inapplicable to the subject foam blocks.
11. Captain Osowski testified that absent compliance with NFPA 289, the Gardner Fire Department cannot allow the foam blocks to be used in this pit, as they do not meet the

provisions of the State Fire Code and could otherwise create a safety issue for the athletes, spectators and staff of Meridian Gymnastics and Preschool.

F) Ultimate Findings of Fact and Conclusions of Law

1. This is a case of first impressions for the Board as it pertains to the application of 527 CMR 1.00, 20.1.2 to foam blocks commonly used in gymnastics training and/or other physical fitness-type settings when soft landings are necessary.
2. More specifically, 527 CMR 1.00, 20.1.2.2 requires that foamed plastics shall be permitted to be used if they exhibit a heat release rate not exceeding 100kW when tested in accordance with NFPA 289, *Standard Method of Fire Test for Individual Fuel Packages*, using the 20kW ignition source or by specific approval of the authority having jurisdiction [**101**:12.4.5.11.2; **101**:13.4.5.11.2]
3. It is the opinion of the Board that there was insufficient evidence presented by the parties to establish that NFPA 289, *Standard Method of Fire Test for Individual Fuel Packages* is the appropriate flammability standard applicable to the subject foam blocks.
4. The Board recognizes that currently, 527 CMR 1.00 does not provide a clear code path for an Authority Having Jurisdiction (AHJ) to discern the appropriate flammability standards applicable to the subject foam blocks.
5. Given this apparent lack of clarity in 527 CMR 1.00, this Board recommends that the Board of Fire Prevention Regulations specifically consider whether NFPA 289 is the appropriate flammability standard for these types of foam blocks commonly used in gymnastics training and more generally, for other similarly composed materials used in physical fitness-type settings and to amend 527 CMR 1.00, if determined necessary, to provide the requisite clarification.

G) Decision and Order

Based upon the forgoing reasons, this Board unanimously **reverses** the Order of the Gardner Fire Department prohibiting the use of and requiring the removal of the subject foam blocks from Meridian Gymnastics and Preschool and allows the use of the subject foam blocks with the following conditions:

- Appellant installing fire resistive treatment, of at least 1 hour rating to be applied on the structural steel members both within the foam block pit, on the ceiling above the foam block pit, and within the 10 feet of the foam block pit; and
- To install and/or maintain a monitored fire detection alarm system, which shall be approved by the Gardner Fire Department.

H) Vote of the Board

Anthony Caputo, Presiding Panel Member	In Favor
John Cox	In Favor
Deputy Chief Edward Williams	In Favor

I) Right of Appeal

You are hereby advised you have the right, pursuant to section 14 of chapter 30A of the General Laws, to appeal this decision, in whole or in part, within thirty (30) days from the date of receipt of this order.

SO ORDERED,



Anthony Caputo, Presiding Panel Member
Fire Prevention Regulations Appeals Board

Dated: January 18, 2022

A COPY OF THIS DECISION AND ORDER WAS FORWARDED BY E-MAIL AND CERTIFIED MAIL, RETURN RECEIPT REQUESTED TO:

Christine Caron, Owner
Meridian Gymnastics and Youth Fitness
871 Broadway
Gardner, Massachusetts 01440
(Christine.Caron@verizon.net)

Captain Craig Osowski
Gardner Fire Department
70 City Hall Avenue
Gardner, Massachusetts 01440
(cosowski@gardner-ma.gov)