

ANSI Z223 Committee on National Fuel Gas Code

2027 First Draft Meeting - **DRAFT** Minutes September 17-19, 2024 in Charlotte, NC

1. **Call to Order** – 8:01 with some audio issues.

2. **Introductions** – Attendees in the room introduced themselves. See **Attachment A: Attendance**.

3. **Chair Report** – Franklin Switzer welcomed everyone and provided an overview of how the meeting would work

4. **Staff Liaison Report** –

NFPA – Alex Ing shared pertinent information which included:

- Editorial cycle after this meeting
- Ballot open for 2 weeks later this fall/winter (probably January 2025)
- March 25, 2025 First Draft Report (Public Comments close June 3, 2025)
- Log into the NFPA website ASAP to make sure you deal with any issues with their new website

ANSI Z223 – Luis Escobar shared pertinent information which included:

- Review of the AGA Antitrust Compliance Guidelines
- The Z223 Committee will vote separately (from the NFPA 54 Committee) on each PI and other items
- Luis to issue a ballot to Z223-only Members after this meeting in conjunction with NFPA ballot
- Members of Z223 *and* NFPA 54 must vote via NFPA website
- Luis will consolidate the Z223 results afterwards
- ANSI Public Review will match with the NFPA First Draft Report and Public Comment closing date
- All committee documents and updates posted to www.aga.org/ansi and go to Z223

5. **Previous Meeting Minutes** – March 2024 Pre-Draft Meeting Minutes were revised and approved unanimously without revision (motion: Lemoff)

6. **NFPA 54 / ANSI Z223.1 First Draft** –

a. Public Inputs – Discussion ended on Wednesday at 2:00 pm. See **Attachment B: Preliminary Actions on Public Inputs**. Note that preliminary First Revision (FR) and Committee Input (CI) numbers may change during the editorial process. See the First Revision Report for final details.

b. Task Force Reports –

i. Multi-Requirements and Exceptions –

Alex Ing provided context for the origin of the group (NFPA 54 is not in compliance with the NFPA Manual of Style). Report was sent out to members of NFPA 54 and ANSI Z223 for their review prior to this meeting – it contained the recommended changes throughout the entire standard.

- Motion to create Committee Input (CI) for Section 1.1.1.1 [APPROVED new CI]
- Motion to create CI for Chapter 1 exclusive of Section 1.1.1.1 and other sections previously addressed in FRs [APPROVED new CI]
- Motion to create CI for Section 4.2 [APPROVED new CI]
- Motion to create CI for Chapter 4 exclusive of Section 4.2 [APPROVED new CI]
- Motion to create CI for Section 5.5.4 [APPROVED new CI]
- Motion to create CI for Section 5.8.1 [APPROVED new CI]

ANSI Z223 Committee on National Fuel Gas Code

- Motion to create CI for Chapter 5 exclusive of Sections 5.5.4 and 5.8.1 and including FR 11 [APPROVED new CI]
- Motion to create CI for Chapter 6 [APPROVED new CI]
- Motion to create CI for Chapter 7 [APPROVED new CI]
- Motion to create CI for Chapter 8 [APPROVED new CI]
- Motion to create CI for Section 9.4.1 [APPROVED new CI]
- Motion to create CI for Section 9.6.1 [APPROVED new CI]
- Motion to create CI for Chapter 9 exclusive of Sections 9.4.1 and 9.6.1 [APPROVED new CI]
- Motion to create CI for Chapter 10 [APPROVED new CI]
- Motion to create CI for Chapter 11 [APPROVED new CI]
- Motion to create CI for Chapter 12 [APPROVED new CI]
- Motion to create CI for Chapter 13 [APPROVED new CI]

The Task Force also developed multiple questions for the Committee to consider. The Committee reviewed and answered those questions.

- Motion to create FR for various tables in chapter 13 to change the notes to explicitly state that NA means “Not Allowed” [APPROVED new FR]
- Motion to create CI to move 7.1.1.2 to 7.1.2 [APPROVED new CI]
- Look up Patel report on combustion air for Section 9.3.3.2
- Motion to create new FR to add ASME B16.38 in various places in Table 5.11 for up to 125 psi [APPROVED new FR 41]

This Task Force was approved to continue working. Members: Bob Torbin, Ted Lemoff, Andy Thielen, Chris Byers, Eric Smith, Gregg Gress, Enrique Gonzalez, April Richardson. This task group will look at removing exception language, breaking out multi-requirement sections, and other items relating to the NFPA Manual of Style

ii. Alternative Fuel –

Met and their recommendations were considered during the discussion of applicable PIs.

This Task Force was approved to continue working. TG Chair: Bob Torbin*. Members: Chris Byers, Franklin Switzer, Ted Lemoff, Ted Williams, Jeremy Conjura, Jason Stanek, Jonathan Brania, John Puskar, Bruce Swiecicki, Andy Thielen. This task group will look at alternative fuel use in fuel gas systems.

iii. Repair, Renewal, or Rehabilitation of Piping – Task Force met since the Pre-First Draft meeting and suggested two changes (new Sections 4.6 and revisions to Section 8.1.1.1).

4.6 Inspection and repairs following a fire, explosion or other damage.

Where a gas piping system is affected by fire, explosion, or other damage, the piping system shall be inspected in accordance with chapter 8 and replaced or repaired using materials or methods in accordance with ~~the this code~~ **or approved**. [APPROVED – New FR]

8.1.1.1 Prior to acceptance and initial operation **or after repairs**, all piping installations shall be visually inspected and pressure tested to determine that the materials, design,

ANSI Z223 Committee on National Fuel Gas Code

fabrication, and installation practices comply with the requirements of this code.

[APPROVED – New FR]

SUBSTANTIATION: The committee was made aware that repairs to leaking popping systems post fire, explosion or together damage are not currently addressed in the Code and this requirement specifies what must be done to place the system back in service.

This Task Force was closed.

iv. Piping Underground Under Structures –

No report at this meeting.

This Task Force was approved to continue working. TG Chair: Mike Gorham. Members: Bob Torbin*, Ted Williams, Andy Thielen, Phil Ribbs, Enrique Gonzales, Gregg Gress, Paul Gugliotta, Tung Nguyen . The task group will look at correlating piping underground under structures with the other model codes.

v. Flammable Air Gas Mixtures –

No report at this meeting.

This Task Force was closed.

vi. Industrial Coverage –

They met and submitted multiple PIs.

This Task Force was approved to continue working. TG Chair: John Puskar. Members: Mike Gorham, Gregg Gress, Ted Lemoff, Andy Thielen, Steen Hagensen, Franklin Switzer. The task group will look into revising requirements based on common industrial applications.

vii. Chapter 8 Purging –

No report at this meeting.

This Task Force was approved to continue working.

viii. Table Consolidation –

Met and their recommendations were considered during the discussion of applicable PIs.

This Task Force was closed. TG Chair: Matt Wilber. Members: John Puskar, Adam Hansen*, Jean McDowell, Gregg Gress, Sean George, Mike Gorham, Adam Smith, Mike Bethany, Chris Wagner*, Enrique Gonzalez. The task group will look into the following: 1. Attempt to define a flow to the requirements that addresses how the work would actually be performed safely in the field similar to how NFPA 56 addresses purging workflows. 2. Address issues related to residential small

ANSI Z223 Committee on National Fuel Gas Code

commercial that can be distinct and separate from industrial piping systems purging. 3. Address distances that are given for work practices where this is no scientific basis for the distances that are provided.

ix. Nonapplication –

Met and their recommendations were considered during the discussion of applicable PIs.

This Task Force was closed.

x. New Business –

Diversity Factors – Ted Lemoff requests for research foundation to look into establishing diversity factors. Luis to bring it up with GTI/OTD.

7. Other Business –

a. Equivalency Revision – Ted Lemoff requests for research foundation to look into establishing diversity factors. Luis to bring it up with GTI/OTD.

8. Future Meetings – Selection of dates and TBD on whether it will be in-person or virtual depending on the amount of Public Comments.

Various suggestions on locations and when we should NOT meet (definitely not September 2025).

Doodle poll in the spring for dates and locations.

9. Adjournment – Meeting ended 5:09 pm on Thursday, September 19, 2024.

ANSI Z223 Committee on National Fuel Gas Code

ATTACHMENT A

Attendance

ANSI Z223 Committee							
Attendance - 2027 First Draft Meeting							
Cat.	Member Status	First Name	Last Name	DAY 1	DAY 2	DAY 3	Representing
M	PV	Eric	Adair	Y		Y	Hearth, Patio & Barbecue Association
SE	PV	Thomas	Andrews	Y	Y	Y	Self
SE	PV	Michael	Bethany	Y	Y		Gas Piping Safety Service
AR-TL	PV	Jonathan	Brania	Y	Y	Y	Underwriters Laboratories:
I-M	PV	James P.	Brewer	Y	Y	Y	National Chimney Sweep Guild
SE	PV	Charles	Brown				Advanced Engineering Investigations (AEI)
I-M	PV	Daniel	Buuck	Y	Y	Y	National Assoc. of Home Builders
ES	PV	Christopher	Byers	Y	Y	Y	American Gas Association
M	PV	Bob	Carpenter				Orbia (Wavin)
SE	PV	Jeremy	Conjura	Y	Y	Y	Corning
I-M	PV	Gerald	Davis	Y	Y	Y	Williams Construction and Meter Services
M	PV	Tom	Deary		Y		Air Conditioning, Heating, and Refrigeration Institute
ES	PV	Ralph	Euchner		Y		American Gas Association
AR-TL	PV	Marvin	Evans	Y	Y	Y	CSA Group
M	PV	Pennie	Feehan	Y	Y	Y	Copper Development Association
ES	PV	Jean	McDowell				Texas Propane Gas Association
EA	PV	Enrique	Gonzalez	Y	Y	Y	International Assoc. of Plumbing & Mech. Officials
ES	PV	Michael R.	Gorham	Y		Y	The National Propane Gas Association
EA	PV	Gregg	Gress	Y	Y	Y	International Code Council
M	PV	Steen	Hagensen				ENERVEX, Inc.
EA	PV	Peter	Holmes	Y	Y	Y	Maine Fuel Board
SE	PV	Nasir	Hussain	Y	Y	Y	Combustion Science & Engineering
SE	PV	Zuhair	Ibrahim		Y		Ibrahim & Associates
M	PV	James	Kendzel				American Supply Association
M	PV	Jeff	Kleiss	Y	Y	Y	Air Conditioning, Heating, and Refrigeration Institute
SE	PV	Theodore	Lemoff	Y	Y	Y	TLemoff Engineering
ES	PV	Andrea	Papageorge	Y	Y	Y	American Gas Association
M	PV	John	Park				Association of Home Appliance Manufacturers
I	PV	Brett	Readout	Y	Y		EMC Insurance Companies
EA	PV	April Dawn	Richardson	Y	Y	Y	Railroad Commission of Texas
ES	PV	Jon	Russell	Y	Y	Y	American Public Gas Association
M	PV	Adam	Smith	Y	Y	Y	Viega
EA	PV	Eric C.	Smith	Y	Y		International Fire Marshals Association
ES	PV	Jason	Stanek	Y	Y	Y	American Gas Association
SE	PV	Franklin	Switzer	Y	Y	Y	S-afe, Inc.
M	PV	Calvin	Timmons	Y	Y	Y	Willbanks & Associates
SE	PV	Andy	Thielen				ESi
M	PV	Robert	Torbin	Y	Y	Y	Air Conditioning, Heating, and Refrigeration Institute
ES	PV	Christopher	Wagner	Y	Y	Y	The National Propane Gas Association

ANSI Z223 Committee on National Fuel Gas Code

M	PV	Brian	Williams	Y	Y	Y	Ferguson Enterprises
SE	PV	Ted	Williams	Y	Y		Natural Gas Direct
SE	PV	Duane	Wolf	Y	Y		Wolf Engineering
EA	A	Hugo	Aguilar				International Assoc. of Plumbing & Mech. Officials
ES	A	Eric	Benstock				Texas Propane Gas Assocaiiton
EA	A	LaToya	Carraway	Y	Y	Y	International Code Council
I	A	Kody	Daniel	Y		Y	EMC Insurance Companies
ES	A	Paul	Gugliotta	Y	Y		American Gas Association
M	A	Young	Han		Y	Y	ENERVEX, Inc.
AR-TL	A	Travis	Hardin				Underwriters Laboratories:
I-M	A	Vladimir	Kochkin				National Assoc. of Home Builders
AR-TL	A	Colin	Moorhouse				CSA Group
M	A	Harold	Moret				Copper Development Association
SE	A	John	Puskar	Y	Y		Technical Services LLC
ES	A	Stan	Smith	Y		Y	American Gas Association
ES	A	Bruce	Swiecicki	Y	Y	Y	The National Propane Gas Association
EA	A	Kent	Thompson	Y			Railroad Commission of Texas
SE	A	Matt	Wilber	Y	Y	Y	ESi

Guests:

Jim Bunsey (Propane Education and Research Council)
Roger Griffith (Griffith Engineering)
Tim McNulty (RM Maniform Group)
Marek Kulik (Carrier/UTC)
George Ragula (RagulaTech)
Brian Ryglewicz (Chimney Design Solutions)
Chris Mobley (UL Solutions)
Brian Kurtz (Carrier/UTC)
Lisa Reiheld (ICC)
Ndir Khalifa (AHRI)
Larry Gill (IPEX)
Tung Nguyen (Emerson Automation Solutions)
Charon McNab (National Carbon Monoxide Awareness Association)
Christina Binkowski (NCMAA)
Gaitano Altomare (IPEX)
Phil Ribbs (California State Pipe Trades Council)
John Sargeant (OmegaFlex)

ANSI Z223 Committee on National Fuel Gas Code

ATTACHMENT B

Preliminary Meeting Actions (Agenda Item 6.a)

Meeting Order	Section	PI #	Submitter	Intent/Comment	Action
90	1.1.1.1(A)	14	John Puskar	See Committee statement	Resolve
91	A.1.1.1.1(A)	16	John Puskar	See Committee statement	Resolve
92	1.1.1.1(D)	15	John Puskar	See Committee statement	Resolve
93	1.1.1.1(F)	17	John Puskar	See Committee statement	Resolve
94	1.1.1.2	19	John Puskar	See Committee statement	CI
95	1.1.1.2	33	John Puskar	See Committee statement	Resolve
97	1.1.1.2	34	John Puskar	See TG statement	FR based on TG
97	1.1.1.2	36	John Puskar	See TG statement	Resolve
98	1.1.1.2	37	John Puskar	See TG statement	FR based on TG
99	1.1.1.2	38	John Puskar	See TG statement	FR based on TG
101	1.1.1.2	39	John Puskar	See Committee statement	FR
102	1.1.1.2	43	John Puskar	See Committee statement	Resolve
103	1.1.1.2	44	John Puskar	See Committee statement	Resolve
100	1.1.1.2	45	John Puskar	See TG statement	Resolve
104	1.2	86	Theodore Lemoff	See Committee statement	FR 26
126	2.3.5	87	Kelly Nicoletto		See New13
106	3.3.4.4.2	5	Theodore Lemoff	See Committee statement	FR 28
107	3.3.4.4.3	2	Theodore Lemoff	See Committee statement	FR 29
108	3.3.4.4.4	9	Theodore Lemoff	See Committee statement	FR 30
109	3.3.4.4.5	3	Theodore Lemoff	See Committee statement	FR 31
110	3.3.13	4	Theodore Lemoff	See Committee statement	FR 32
11	3.3.16.5.1	11	Theodore Lemoff	See Committee statement	FR 33
1	3.3.49 [Excluding any Sub-Sections]	117	Ted Williams	Can be resolved by FR for 119/120	Resolve
2	New Section after 3.3.59	118	Ted Williams	Can be resolved by FR for 119/120	Resolve
111	3.3.83	76	Sean George	See Committee statement	Resolve
112	3.3.83	77	Sean George	See Committee statement	Resolve
113	3.3.83	78	John Puskar	See Committee statement	Resolve
114	3.3.83	92	John Puskar	See Committee statement	FR 34
115	3.3.93	10	Theodore Lemoff	See Committee statement	FR 35
116	3.3.99.2	6	Theodore Lemoff	See Committee statement	FR 36
117	3.3.99.4	7	Theodore Lemoff	See Committee statement	FR 37
122	3.3.99.6	8	Theodore Lemoff	See Committee statement	Resolve
3	Chapter 4	119	Ted Williams	TBD	FR for 119/120 based on TG rec
4	Chapter 4	120	Ted Williams	TBD	FR for 119/120 based on TG rec
5	4.1	90	John Puskar	See Committee statement	FR 1
34	4.1	91	John Puskar	See Committee statement	Resolved w/ 46
6	4.2.1	79	Theodore Lemoff	See FR statement	FR 2
35	New Section after 4.2	46	John Puskar	See Committee statement	Resolved w/ 91
7	4.3.1	54	John Puskar	See Committee statement	Resolve
8	4.3.2	55	John Puskar	See Committee statement	FR 3 (deletes annex too)
9	4.3.2.1	56	John Puskar	See PI 55	See PI 55
10	4.3.2.2	57	John Puskar	See PI 55	See PI 55
11	4.4	58	John Puskar	See Committee statement	Resolve
12	4.5	48	John Puskar	See Committee statement	Resolve
13	5.2.1	52	John Puskar	See Committee statement	Resolve
15	5.2.2.2	53	John Puskar	See Committee statement	FR 4
16	5.3.2.3	98	John Puskar	See Committee statement	FR 5
17	5.5.4.1.1	65	Ian Wright	See Committee statement	Resolve
18	New Section after 5.5.4.1	12	Adam Smith	See Committee statement	FR 6 (new 5.5.4.1.2 and renumber the rest)
19	5.5.4.2	115	Bruce Swiecicki	See Committee statement	Resolve
20	5.5.5	116	Theodore Lemoff	See Committee statement	FR 7
36	Sections 5.5.7.1, 5.5.7.2, 5.5.7.3, 5.5.7.4, 5.5.7.5	51	Theodore Lemoff	See Committee statement	FR 14
21	5.5.8	24	Theodore Lemoff	See Committee statement	Resolve
22	5.5.10 [Excluding any Sub-Sections]	80	Theodore Lemoff	See Committee statement	Resolve
24	5.7.2	13	Kevin Carlisle	See Committee statement	FR 9

ANSI Z223 Committee on National Fuel Gas Code

25	New Section after 5.7	67	Jonathan Sargeant	See Committee statement	FR 10
26	5.8.4	93	John Puskar	See Committee statement	FR 11
27	5.8.7	94	John Puskar	See Committee statement	FR 12 based on MOS TG
28	5.8.8	95	John Puskar	See Committee statement	Resolve
30	5.13	63	John Puskar	See Committee statement	Resolve
29	5.14	96	John Puskar	See Committee statement	Resolve
32	5.14	97	John Puskar	See Committee statement	Resolve
37	Chapter 6 [Title Only]	59	John Puskar	See Committee statement	Resolve
38	6.1	60	John Puskar	See Committee statement	Resolve
39	6.2 [Excluding any Sub-Sections]	47	John Puskar	See Committee statement	Resolve
49	7.2.4	61	John Puskar	See Committee statement	Resolve
50	7.2.5	62	John Puskar	See Committee statement	FR 15
51	7.4.1	68	John Puskar	See Committee statement	Resolve
52	7.7.1.2	69	John Puskar	See Committee statement	Resolve
53	7.7.1.3	70	John Puskar	See Committee statement	Resolve
54	7.7.2.1	71	John Puskar	See Committee statement	Combine and Resolve 71 and 72
55	7.7.2.1	72	John Puskar	See Committee statement	Combine and Resolve 71 and 72
56	7.11	81	Theodore Lemoff	See Committee statement	FR 16
59	8.1.1.11	18	Steven Winstead	See Committee statement	Resolve
60	8.1.3.1	22	Theodore Lemoff	See Committee statement	FR 17
61	8.2.3	49	Jean McDowell	See Committee statement	Resolve
63	8.3.1 [Excluding any Sub-Sections]	64	John Puskar	See Committee statement	Resolve
64	8.3.1 [Excluding any Sub-Sections]	74	Sean George	See Committee statement	Resolve
65	8.3.1.3	99	John Puskar	See Committee statement	Combine and Resolve 99, 101, 101, and 104
66	8.3.1.3	100	John Puskar	See Committee statement	Combine and Resolve 99, 101, 101, and 104
67	8.3.1.3	101	John Puskar	See Committee statement	Combine and Resolve 99, 101, 101, and 104
68	8.3.1.3	104	John Puskar	See Committee statement	Combine and Resolve 99, 101, 101, and 104
69	8.3.2	103	John Puskar	See Committee statement	Resolve
70	8.3.2 [Excluding any Sub-Sections]	102	John Puskar	See Committee statement	Resolve
71	9.1.1.3	106	John Puskar	See Committee statement	Resolve
73	9.1.4	107	John Puskar	See Committee statement	Resolve
74	9.1.5	108	John Puskar	See Committee statement	Resolve
75	9.1.6.1	109	John Puskar	See Committee statement	Combine and Resolve 109 and 110
76	9.1.6.2	110	John Puskar	See Committee statement	Combine and Resolve 109 and 110
77	9.1.9	111	John Puskar	See Committee statement	Resolve
78	9.3.1.1	112	John Puskar	See Committee statement	Resolve
84	9.3.2.2	29	Thomas Andrews	See Committee statement	FR 23
85	A.9.3.2.2	20	Thomas Andrews	See Committee statement	FR 23
86	A.9.3.2.2	21	Thomas Andrews	See Committee statement	FR 23
87	A.9.3.2.2	30	Thomas Andrews	See Committee statement	FR 23
79	9.3.7.1	113	John Puskar		FR based on MOS TG
80	9.3.7.3	114	John Puskar		FR based on MOS TG
88	9.6.8	89	Theodore Lemoff	See Committee statement	Resolve
81	New Section after 10.18	122	NFPA Holds	See Committee statement	FR 18
82	10.24.2	84	Theodore Lemoff	See Committee statement	FR 19
58	12.3.2 [Excluding any Sub-Sections]	82	Theodore Lemoff	See Committee statement	Resolve
57	Sections 12.5.2, 12.5.3, 12.5.4	105	Larry Gill	See Committee statement	Resolve
118	G.3.3	1	Richard Martin	See Committee statement	FR 38
127	K.1.2.8	88	Kelly Nicoletto		See New13
119	Global Input	25	Theodore Lemoff	See Committee statement	FR 39
47	Global Input	27	Theodore Lemoff	See Committee statement	FR for Tables 6.2.1 (a), (b), (h), and (i)
41	Global Input	28	Theodore Lemoff	See Committee statement	FR - affects subseq table #s and references
42	Global Input	31	Theodore Lemoff	See Committee statement	FR - affects subseq table #s and references
43	Global Input	32	Theodore Lemoff	See Committee statement	FR - affects subseq table #s and references
44	Global Input	35	Theodore Lemoff	See Committee statement	FR for Table 6.2.1(q)

ANSI Z223 Committee on National Fuel Gas Code

45	Global Input	40	Theodore Lemoff	See Committee statement	FR for Table 6.2.1(j)
46	Global Input	41	Theodore Lemoff	See Committee statement	FR for Table 6.2.1(p)
48	Global Input	42	Theodore Lemoff	See Committee statement	Resolve
120	Global Input	83	Theodore Lemoff	See Committee statement	FR 40
121	Global Input	124	NFPA TIA	See Committee statement	Resolve - This is our response to the PI
14	5.2.1	New 01	Theodore Lemoff	N/A	New FR for 5.2.1 - FAILED
23	5.5.10	New 02	Theodore Lemoff	See Committee statement	New FR for 5.5.10 - FR 8
31	5.13	New 03	Theodore Lemoff	N/A	New FR for 5.13 - FAIL
33	5.14(1)	New 04	Jeff Kleiss	See Committee statement	New FR for 5.14(1) - FR 13
40	6.1	New 05	Theodore Lemoff	N/A	New FR for 6.1 - FAILED
62	3.3.96.5	New 06	Chris Wagner	N/A	New FR for 3.3.96.5 Piping System - FAILED
72	9.1.1.4	New 07	Theodore Lemoff	N/A	New FR for 9.1.1.4 - FAILED
83	Annex C (new C.2)	New 08	Chris Wagner	See Committee statement	New CI (FR 24)
89	Figures 9.6.8	New 09	Gregg Gress	See Committee statement	New FR for image - FR 25
96	1.1.1.2	New 10	April Richardson	N/A	New FR for 1.1.1.2 - FAILED
105	1.4.1	New 11	Theodore Lemoff	See Committee statement	New FR for 1.4 - FR 27
123	3.3.99.6	New 12	Theodore Lemoff	N/A	New FR for 3.3.99.6 - FAILED
124	Section 2.3 and Appendix K	New 13	Alex Ing	See Committee statement	New FR
125	Section 2.4	New 14	Alex Ing	N/A	New CI for reference extracts