National Marine Manufacturers Association

February 28, 2013

Mr. Jeffrey Lantz
Director of Commercial Regulations and Standards
U.S. Coast Guard
Docket Management Facility (M-30)
C/O U.S. Department of Transportation
West Building Ground Floor, Room W12-140
1200 New Jersey Avenue, SE
Washington, DC 20590-0001

RE: Docket No. USCG – 2012 – 0866 – Updates to Voluntary Consensus Standards Incorporated by Reference

Dear Mr. Lantz:

The National Marine Manufacturers Association (NMMA) is pleased that the United States Coast Guard is asking for recommendations to update standards incorporated by reference into the Code of Federal Regulations (USCG— 2012—0866). This is an important project that will do much to keep USCG regulations up-to-date.

By way of background, NMMA is the leading national recreational marine trade association, with nearly 1,400 members involved in every aspect of the boating industry. NMMA members manufacture over 80 percent of recreational boats, engines, trailers, accessories, and gear used in the United States. The NMMA is committed to boating safety and quality through its extensive certification program. The NMMA certification program incorporates safety standards established by the American Boat & Yacht Council.

The American Boat & Yacht Council (ABYC) is a non-profit organization created with the purpose of developing safety standards for the design, construction, equipage, repair and maintenance of boats. ABYC develops standards based on extensive consultation with a standards development technical board, comprised of industry stakeholders and technical experts.

NMMA, in consultation with ABYC, has identified several standards which are currently outdated in the CFR, and therefore ripe for update. NMMA's certification and membership outreach programs take steps to ensure the industry is following the most up-to-date standards. However, NMMA's certification program does not encapsulate the entire market of boat manufacturers. The USCG issues upwards of 3000 Manufacturer Identification Codes (MICs), with only a few hundred being NMMA certified members. By not maintaining updated incorporated by reference standards in the CFR, thousands of U.S. boat manufacturers and foreign importers are relying on outdated information and thereby misapplying critical safety standards. For this reason, it is critical the incorporated by reference standards are updated now, and on a consistent basis thereafter, to ensure uniformity and completeness of standards setting information.

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The following incorporated by reference standards are currently outdated in the CFR and which we therefore recommend be reviewed and updated by the U.S. Coast Guard:

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Standards Incorporated by Reference	Referenced Section in CFR	Current Published Standard	Comment
33 CFR 183.5			
American Boat and Yacht Council, Inc., 3069 Solomons Island Road, Edgewater, Maryland 21037-1416:			Update Address
ABYC A-16 Electric Navigation Lights-1997	§ 183.810	2011	revised for safety issues, technology, and current practices
46 CFR 27.102			
American Boat and Yacht Council (ABYC), 613 Third Street, Suite 10, Annapolis, MD 21403			
H-25-1986—Portable Fuel Systems for Flammable Liquids	27.211	2010	revised for safety issues, technology, and current practices
H-33-1989—Diesel Fuel Systems	27.211	2009 corrected 2010	revised for safety issues, technology, and current practices
46 CFR 28.40			
American Boat and Yacht Council (ABYC),			
613 Third Street, Suite 10, Annapolis, MD 21403			
E-1-1972—Bonding of Direct Current Systems	28.345	Withdrawn	See ABYC E-11 AC & DC Electrical Systems on Boats for DC bonding requirements
E-8-1985—Alternating Current (AC) Electrical Systems on Boats	28.345	Withdrawn 2003	Withdrawn in 2003 and replaced with E-11 AC & DC Electrical Systems on Boats 2012
E-9-1981—Recommended Practices and Standards Covering Direct Current (DC) Electrical Systems on Boats	28.345	Withdrawn 2003	Withdrawn in 2003 and replaced with E-11 AC & DC Electrical Systems on Boats 2012
H-2-1989—Ventilation of Boats Using Gasoline	28.34	2008	revised for safety issues, technology, and current practices
H-25-1986—Portable Fuel Systems for Flammable Liquids	28.335	2010	revised for safety issues, technology, and current practices

H-33-1989—Diesel Fuel Systems	28.335	2009 corrected 2010	revised for safety issues, technology, and current practices
P-1-1986—Installation of Exhaust Systems for Propulsion and Auxiliary Engines	28.38	2009 corrected 2010	revised for safety issues, technology, and current practices
46 CFR 58.03-1			
(b) *American Boat and Yacht Council (ABYC),* 613 Third Street, Suite 10, Annapolis, MD 21403:			
(1) P-1-73, Safe Installation of Exhaust Systems for Propulsion and Auxiliary Machinery, 1973 ("ABYC P-1"), ;	58.10-5	2009 corrected 2010	revised for safety issues, technology, and current practices
46 CFR 147.7			
American Boat and Yacht Council, Inc. (ABYC), 3069 Solomons Island Road, Edgewater, MD 21037			update address
ABYC H-25-81—Portable Fuel Systems and Portable Containers for Flammable Liquids, May 12, 1981.	119.458	2010	revised for safety issues, technology, and current practices
46 CFR 175.600			
American Boat and Yacht Council (ABYC), 613 Third Street, Suite 10, Annapolis, MD 21403			
A-1-93—Marine Liquefied Petroleum Gas (LPG) Systems ("ABYC A-1")	184.240.	2006	revised for safety issues, technology, and current practices
A-3-93—Galley Stoves ("ABYC A-3")	184.200.	2007 corrected 2010	revised for safety issues, technology, and current practices
A-7-70—Boat Heating Systems ("ABYC A-7")	184.200.	2006	revised for safety issues, technology, and current practices
A-16-89—Electric Navigation Lights ("ABYC A-16")	183.130.	2011	revised for safety issues, technology, and current practices
A-22-93—Marine Compressed Natural Gas (CNG) Systems ("ABYC A-22")	184.240.	2012	revised for safety issues, technology, and current practices

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E-8 Alternating Current (AC) Electrical Systems on Boats (July 2001) (“ABYC E-8”)	183.130; 183.340.	Withdrawn 2003	Withdrawn in 2003 and replaced with E-11 AC & DC Electrical Systems on Boats 2012
E-9 Direct Current (DC) Electrical Systems on Boats (May 28, 1990) (“ABYC E-9”)	183.130; 183.340.	Withdrawn 2003	Withdrawn in 2003 and replaced with E-11 AC & DC Electrical Systems on Boats 2012
H-2-89—Ventilation of Boats Using Gasoline (“ABYC H-2”)	183.130; 182.460.	2008	revised for safety issues, technology, and current practices
H-22-86—DC Electric Bilge Pumps Operating Under 50 Volts (“ABYC H-22”)	182.130; 182.500.	2011	revised for safety issues, technology, and current practices
H-24-93—Gasoline Fuel Systems (“ABYC H-24”)	182.130; 182.440; 182.445; 182.450; 182.455.	2012	revised for safety issues, technology, and current practices
H-25-94—Portable Gasoline Fuel Systems for Flammable Liquids (“ABYC H-25”)	182.130; 182.458.	2010	revised for safety issues, technology, and current practices
H-32-87—Ventilation of Boats Using Diesel Fuel (“ABYC H-32”)	182.130; 182.465; 182.470.	2008	revised for safety issues, technology, and current practices
H-33-89—Diesel Fuel Systems (“ABYC H-33”)	182.130; 182.440; 182.445; 182.450; 182.455.	2009 corrected 2010	revised for safety issues, technology, and current practices
P-1-93—Installation of Exhaust Systems for Propulsion and Auxiliary Engines (“ABYC P-1”)	177.405; 177.410; 182.130; 182.425; 182.430.	2009 corrected 2010	revised for safety issues, technology, and current practices
P-4-89—Marine Inboard Engines (“ABYC P-4”)	182.130; 182.420.	2012	revised for safety issues, technology, and current practices

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In addition to the above mentioned suggested updates, 33 CFR 183, Subpart G&H, Table 4 (see below), the table listing the **Weights (pounds) of Outboard Motors and Related Equipment for Various Boat Horsepower Ratings** is grossly outdated. This table is used in 183 Subpart G & H for reference when applying the loaded weights of outboard engines and its components in preparation for flotation tests. The weights used were reflective of outboard engines with averaged less horsepower and which were naturally aspirated, accounting for a lighter engine as compared to today's models.

Today's engines, with their direct injected two stroke cycle, and along with additional components are considerably heavier. Additionally, today's four stroke cycle engines, which are taking a larger part of the US market every year, are heavier than their like horsepower two stroke counterparts. A boat using the CFR engine and component weights for flotation testing may not pass the flotation test requirements if they are using today's new heavier engines. Using less foam than is actually required can lead to a boat swamping or sinking.

This table was intended to ensure safety and prevent the potential for serious accidents, yet by failing to properly update the Weights of Outboard Motors table, the USCG is allowing the potential manufacturing of boats with serious safety concerns. For these reasons we ask you review 33 CFR 183, Subpart G & H, Table 4 and consider the following necessary and immediate changes.

Coast Guard, DHS Pt. 183, Subpt. H, Table 4

TABLE 4 TO SUBPART H OF PART 183—WEIGHTS (POUNDS) OF OUTBOARD MOTOR AND RELATED EQUIPMENT FOR VARIOUS BOAT HORSEPOWER RATINGS

Boat horsepower rating	Motor and control weight		Battery weight		Full portable fuel tank weight	1+3+5
	Dry	Swamped	Dry	Submerged		
	Column No.					
	1	2	3	4	5	6
0.1 to 2	25	20	.....	.....	.....	25
2.1 to 3.9	40	34	.....	.....	.....	40
4.0 to 7	60	52	.....	.....	25	35
7.1 to 15	90	82	20	11	50	160
15.1 to 25	125	105	45	25	50	220
25.1 to 45	170	143	45	25	100	315
45.1 to 60	235	195	45	25	100	380
60.1 to 80	280	235	45	25	100	425
80.1 to 145	405	352	45	25	100	550
145.1 to 275	430	380	45	25	100	575
275.1 and up	605	538	45	25	100	750
TRANSOMS DESIGNED FOR TWIN MOTORS						
50.1 to 90	340	286	90	50	100	530
90.1 to 120	470	390	90	50	100	660
120.1 to 160	560	470	90	50	100	750
160.1 to 290	810	704	90	50	100	1000
290.1 to 550	860	760	90	50	100	1050
550.1 and up	1210	1076	90	50	100	1400

[CGD 83–012, 49 FR 39328, Oct. 5, 1984]

In order to update 33 CFR 183, Subpart G&H, Table 4, the following solutions are recommended:

- Delete Table 4 from 33 CFR 183 and reference ABYC standard S-30, 7/12, in Subpart G&H, or
- Delete Table 4 from 33 CFR 183 and substitute the current table 1A from S-30, 7/12.

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Table 1A in S-30, is a rewrite of Table 4, containing the same information but is reflective of the engines in the recreational boat fleet today, accommodating the heavier four-stoke cycle engines and the larger horsepower engines (up to 350 HP).[1]

TABLE IA - WEIGHTS (IN POUNDS) OF GASOLINE OUTBOARD ENGINES AND RELATED EQUIPMENT FOR VARIOUS RATED POWER (HORSEPOWER) RANGES

1	2	3	4	5	6	7	8	9
Engine Power Range (Horsepower)	Dry Weight[1]	Running Weight[2]	Swamped Weight[3]	Controls & Rigging[4]	Battery Weight		Full Portable Fuel Tank[5]	Total Weight (Sum of Columns 3,5,6,8)
					Dry	Sub-merged		
SINGLE ENGINE INSTALLATIONS								
0.1 - 2.0	30	32	27	0	0	0	0	32
2.1 - 3.9	42	44	37	0	0	0	0	44
4.0 - 6.9	66	69	59	0	0	0	25	94
7.0 - 10.9	105	110	94	5	20	11	50	185
11.0 - 22.9	127	133	113	6	45	25	50	234
23.0 - 34.9	187	196	167	9	45	25	100	350
35.0 - 64.9	286	300	255	14	45	25	100	459
65.0 - 94.9	439	461	392	22	45	25	100	628
95.0 - 104.9	458	481	409	23	45	25	100	649
105.0 - 144.9	526	552	469	26	45	25	100	723
145.0 - 194.9	561	589	501	28	45	25	100	762
195.0 - 209.9	652	685	582	33	45	25	100	863
210.0 - 300.0	699	734	624	35	45	25	100	914
300.1 - 350.0	884	928	789	44	45	25	100	1117
MULTIPLE ENGINE INSTALLATIONS								
For multiple engine installations, multiply the final value in Column 9 by the number of engines								

[1] Dry Weight is the manufacturers published weight for the shortest midsection increased by 10% to account for longer midsections and additional required hardware usually not included in published weights. This weight is intended to represent the heaviest model in each power category. For boats designed with a transom height of 20 inches or less, the weight in column 2 may be reduced by 10%. Recalculate columns 3, 4 and 9 as appropriate.

[2] Running Weight is the dry weight plus fluids (including 2-stroke oil) and the heaviest recommended propeller. Calculated as 5% of Dry Weight.

[3] Swamped Weight is 85% of Running Weight

[4] Rigging and controls includes engine related hardware required to complete the installation (e.g. controls, cables, hydraulic hoses, steering pumps and cylinders). Calculated as 5% of Dry Weight.

[5] If the boat is equipped with a permanent fuel system and is not intended to use a portable tank, the portable fuel tank weight may be omitted, provided that the weight used is not less than 33 CFR part 183, subpart h, Table 4, Column 6. For monohull boats less than 20 ft. (6.1 m) in length, Title 33 CFR Part 183.41 requires that the boat be tested with the weight of the full portable fuel tank as shown in Column 8.

[6] For diesel outboards, replace the value in Column 2 with the manufacturers published dry weight + 10%

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NMMA welcomes the opportunity to further discuss and review these suggested incorporated standards in need of update. Should you have any questions or require additional information, please do not hesitate to contact me nvasilaros@nmma.org or 202-737-9763.

Sincerely,

T. Nicole Vasilaros

T. Nicole Vasilaros, Esq.
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National Marine Manufacturers Association