

Amendments to the IGF Code (IMO Resolution MSC.567(109))

Object of Amendment

Rules for the Survey and Construction of Steel Ships Parts GF and N
Guidance for the Survey and Construction of Steel Ships Parts B and GF
Guidance for High Speed Craft
Guidance for the Survey and Construction of Passenger Ships
Guidance for the Survey and Construction of Inland Waterway Ships

Reason for Amendment

The International Code of Safety for Ships Using Gases or Other Low-flashpoint Fuels (hereinafter referred to as the “IGF Code”) entered into force on 1 January 2017 and has already been incorporated into the NK Rules.

Although the IGF Code is intended to apply to newly constructed ships using low-flashpoint fuels, it has been reviewed and amended to provide additional interpretations and make other changes as deemed necessary by the IMO since entering into force. As a result, amendments to the IGF Code were adopted as resolution MSC.567(109) at the 109th session of the IMO Maritime Safety Committee (MSC109) in December 2024, and these amendments will enter into force on 1 January 2028.

Accordingly, relevant requirements are amended based on resolution MSC.567(109).

Outline of the Amendment

The major amendments are outlined below.

- (1) Amends the requirements for suction wells in fuel tanks to permit projections below the inner bottom up to the lesser of 25 % of the double bottom height or 350 mm and the definition of distance “H” to exclude the depth of such suction wells.
- (2) Amends the requirements to direct discharges from pressure relief valves fitted to fuel gas piping systems to the fuel tanks. Additionally, requires the installation of non-return valves at the fuel tank inlets of the discharge lines.
- (3) Specifies the requirements for the thermal protection of boundaries of compartments adjacent to fuel tanks in cases where thermal analysis demonstrates that protection equivalent to an “A-60” class division is provided.
- (4) Clarifies the requirements for the treatment of vacuum-insulated independent type C tanks under the conditions where fuel storage hold spaces are regarded as cofferdams.
- (5) Defines the area above and in the vicinity of the fuel tank vent mast as zone 1 hazardous area, and the surrounding area as zone 2 hazardous area.
- (6) Specifies the requirements for ventilation ducts serving both non-hazardous and hazardous areas.

Effective Date and application

Effective date of the amendment is 1 January 2028.

An asterisk (*) after the title of a requirement indicates that there is also relevant information in the corresponding Guidance.

ID:DD26-11

Amended-Original Requirements Comparison Table (Amendments of IGF Code (Resolution MSC.567(109)))

Amended	Original	Remarks
RULES FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS Part GF SHIPS USING LOW-FLASHPOINT FUELS Chapter 1 GENERAL 1.1 General (<i>IGF Code 2.1</i>) 1.1.3 Approval of Systems and Equipment, etc.* 1 For ships using natural gas as fuel, the systems and equipment following (1) to (21) that are provided to use the gas fuel are to be approved as specified separately by the Society. ((1) to (10) are omitted.) (11) Insulation materials used in fuel containment systems and applied to fuel piping (6.4.8 and 7.3.1-<u>5</u>) ((12) to (21) are omitted.)	RULES FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS Part GF SHIPS USING LOW-FLASHPOINT FUELS Chapter 1 GENERAL 1.1 General (<i>IGF Code 2.1</i>) 1.1.3 Approval of Systems and Equipment, etc.* 1 For ships using natural gas as fuel, the systems and equipment following (1) to (21) that are provided to use the gas fuel are to be approved as specified separately by the Society. ((1) to (10) are omitted.) (11) Insulation materials used in fuel containment systems and applied to fuel piping (6.4.8 and 7.3.1-<u>4</u>) ((12) to (21) are omitted.)	Renumbered 7.3.1-<u>4</u> as 7.3.1-<u>5</u>, due to the insertion of 7.3.1-4.

Amended-Original Requirements Comparison Table (Amendments of IGF Code (Resolution MSC.567(109)))

Amended	Original	Remarks
Chapter 2 DEFINITIONS 2.2 Definitions (<i>IGF Code 2.2</i>) 2.2.1 Terms* 46 “Ship constructed on or after 1 January 2028” means ships that fall under any of the following. (1) for which the building contract is placed on or after 1 January 2028; (2) in the absence of a building contract, the keels of which are laid or which are at a similar stage of construction on or after 1 July 2028; or (3) the delivery of which is on or after 1 January 2032. Chapter 5 SHIP DESIGN AND ARRANGEMENT 5.3 General Requirements (<i>IGF Code 5.3</i>) 5.3.3 Fuel Tank Location The fuel tank(s) are to be protected from external damage caused by collision or grounding in the following way: ((1) to (4) are omitted.) (5) The lowermost boundary of the fuel tank(s) is to be located above the minimum distance of $B'/15$ or 2.0m, whichever is less, measured from the moulded line of the bottom shell plating at the centreline. <u>For ships with suction wells installed in fuel tanks, the</u>	Chapter 2 DEFINITIONS 2.2 Definitions (<i>IGF Code 2.2</i>) 2.2.1 Terms* (Newly added) Chapter 5 SHIP DESIGN AND ARRANGEMENT 5.3 General Requirements (<i>IGF Code 5.3</i>) 5.3.3 Fuel Tank Location The fuel tank(s) are to be protected from external damage caused by collision or grounding in the following way: ((1) to (4) are omitted.) (5) The lowermost boundary of the fuel tank(s) is to be located above the minimum distance of $B'/15$ or 2.0m, whichever is less, measured from the moulded line of the bottom shell plating at the centreline.	Res.MSC.567(109) Item.1 Res.MSC.567(109) Item.2

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Amended	Original	Remarks
<u>bottom of the suction well may protrude into the vertical extent of the minimum distance, provided that such wells are as small as practicable and the protrusion below the inner bottom plating does not exceed 25 % of the depth of the double bottom or 350 mm, whichever is less.</u> ((6) to (8) are omitted.) 5.3.4 Alternative Fuel Tank Locations As an alternative to 5.3.3(1) above, the following calculation method may be used to determine the acceptable location of the fuel tanks: (1) (Omitted) (2) The f_{CN} is calculated by the following formulation: $f_{CN} = f_l \times f_t \times f_v$ where: f_l: calculated by use of the formulations for factor p contained in 2.3.2.2-2., Part 1, Part C. The value of $x1$ is to correspond to the distance from the aft terminal to the aftmost boundary of the fuel tank and the value of $x2$ is to correspond to the distance from the aft terminal to the foremost boundary of the fuel tank. f_i: calculated by use of the formulations for factor r contained in 2.3.2.2-3., Part 1, Part C, and reflects the probability that the damage penetrates beyond the outer boundary of the fuel tank. The formulation is follows. When the outermost boundary of the fuel tank is outside the boundary given by the deepest subdivision waterline the value of b is to be taken as 0. $f_t = 1 - r(x1, x2, b)$ f_v: calculated by following formulation:	((6) to (8) are omitted.) 5.3.4 Alternative Fuel Tank Locations As an alternative to 5.3.3(1) above, the following calculation method may be used to determine the acceptable location of the fuel tanks: (1) (Omitted) (2) The f_{CN} is calculated by the following formulation: $f_{CN} = f_l \times f_t \times f_v$ where: f_l: calculated by use of the formulations for factor p contained in 2.3.2.2-2., Part 1, Part C. The value of $x1$ is to correspond to the distance from the aft terminal to the aftmost boundary of the fuel tank and the value of $x2$ is to correspond to the distance from the aft terminal to the foremost boundary of the fuel tank. f_i: calculated by use of the formulations for factor r contained in 2.3.2.2-3., Part 1, Part C, and reflects the probability that the damage penetrates beyond the outer boundary of the fuel tank. The formulation is follows. When the outermost boundary of the fuel tank is outside the boundary given by the deepest subdivision waterline the value of b is to be taken as 0. $f_t = 1 - r(x1, x2, b)$ f_v: calculated by following formulation:	

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$f_v = 1.0 - 0.8 \cdot ((H - d)/7.8)$, if $(H - d)$ is less than or equal to $7.8m$. f_v is not to be taken greater than 1. $f_v = 0.2 - (0.2 \cdot ((H - d) - 7.8)/4.7)$, in all other cases f_v is not to be taken less than 0. where: H: the distance from baseline, in metres, to the lowermost boundary of the fuel tank <u>excluding the suction well, if installed</u> d: the deepest draught (summer load line draught) ((3) to (8) are omitted.) Chapter 7 MATERIAL AND GENERAL PIPE DESIGN 7.3 General Pipe Design (IGF Code 7.3) 7.3.1 General* (-1 to -3 are omitted.) 4 <u>For ships constructed on or after 1 January 2028, pressure relief valves discharging liquid or gas from the piping system are to discharge into the fuel tanks whenever the tank MARVS pressure is lower than the setting of the pressure relief valves in accordance with the arrangements in 9.4.2, and are to be designed to ensure that the required discharge capacity is met. Alternatively, they may discharge to the vent mast, if means are provided to detect and dispose of any liquid that may flow into the vent system.</u> 5 (Omitted) 6 (Omitted)	$f_v = 1.0 - 0.8 \cdot ((H - d)/7.8)$, if $(H - d)$ is less than or equal to $7.8m$. f_v is not to be taken greater than 1. $f_v = 0.2 - (0.2 \cdot ((H - d) - 7.8)/4.7)$, in all other cases f_v is not to be taken less than 0. where: H: the distance from baseline, in metres, to the lowermost boundary of the fuel tank d: the deepest draught (summer load line draught) ((3) to (8) are omitted.) Chapter 7 MATERIAL AND GENERAL PIPE DESIGN 7.3 General Pipe Design (IGF Code 7.3) 7.3.1 General* (-1 to -3 are omitted.) (Newly added) 4 (Omitted) 5 (Omitted)	Res.MSC.567(109) Item.3 Res.MSC.567(109) Item.4

Amended-Original Requirements Comparison Table (Amendments of IGF Code (Resolution MSC.567(109)))

Amended	Original	Remarks
Chapter 9 FUEL SUPPLY TO CONSUMERS 9.4 Safety Functions of Gas Supply System (<i>IGF Code</i> 9.4) 9.4.1 (Omitted) 9.4.2 Installation of Non-return Valves <u>For ships constructed on or after 1 January 2028, fuel tank inlets from pressure relief valve discharge lines, protecting the piping system according to 7.3.1-4, are to be provided with non-return valves in lieu of valves that are automatically operated when the safety system required in 15.2.2-2 is activated. Safe means for tank isolation during maintenance are to be available according to 17.4 without affecting the proper operation of pressure relief valves.</u> 9.4.3 (Omitted) 9.4.4 (Omitted) 9.4.5 (Omitted) 9.4.6 Shutoff Valves of Double Block and Bleed Valves The two valves specified in 9.4.5 are to be of the fail-to-close type, while the ventilation valve is to be fail-to-open. 9.4.7 Use of Double Block and Bleed Valves The double block and bleed valves specified in 9.4.5 are also to be used for normal stop of the engine.	Chapter 9 FUEL SUPPLY TO CONSUMERS 9.4 Safety Functions of Gas Supply System (<i>IGF Code</i> 9.4) 9.4.1 (Omitted) 9.4.2 (Newly added) (Newly added) 9.4.2 (Omitted) 9.4.3 (Omitted) 9.4.4 (Omitted) 9.4.5 Shutoff Valves of Double Block and Bleed Valves The two valves specified in 9.4.4 are to be of the fail-to-close type, while the ventilation valve is to be fail-to-open. 9.4.6 Use of Double Block and Bleed Valves The double block and bleed valves specified in 9.4.4 are also to be used for normal stop of the engine.	Res.MSC.567(109) Item.5 Renumbered 9.4.4 as 9.4.5, due to the insertion of 9.4.2. Renumbered 9.4.4 as 9.4.5, due to the insertion of 9.4.2.

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Amended	Original	Remarks
9.4.8 (Omitted) 9.4.9 (Omitted) 9.4.10 (Omitted) 9.4.11 (Omitted) Chapter 11 FIRE SAFETY 11.3 Fire Protection (<i>IGF Code 11.3</i>) 11.3.1 General* 1 (Omitted) 2 <u>Any spaces facing fuel tanks and the fuel tanks themselves are to comply with the following (1) and (2).</u> (1) Any boundary of accommodation spaces, service spaces, control stations, escape routes and machinery spaces, facing fuel tanks on open deck, are to be shielded by “A-60” class divisions. The “A-60” class divisions are to extend up to the underside of the deck of the navigation bridge. <u>For ships constructed on or after 1 January 2028, any such boundary facing the fuel tank on the open deck which is separated by a minimum distance, as determined to the satisfaction of the Administration through a heat analysis to provide protection equivalent to an “A-60” class division, is to be considered acceptable,</u>	9.4.7 (Omitted) 9.4.8 (Omitted) 9.4.9 (Omitted) 9.4.10 (Omitted) Chapter 11 FIRE SAFETY 11.3 Fire Protection (<i>IGF Code 11.3</i>) 11.3.1 General* 1 (Omitted) 2 Any boundary of accommodation spaces, service spaces, control stations, escape routes and machinery spaces, facing fuel tanks on open deck, are to be shielded by “A-60” class divisions. The “A-60” class divisions are to extend up to the underside of the deck of the navigation bridge. In addition, fuel tanks are to be segregated from cargo in accordance with the requirements of the International Maritime Dangerous Goods Code (<i>IMDG Code</i>) where the fuel tanks are regarded as bulk packaging. For the purposes of the stowage and segregation requirements of the <i>IMDG Code</i>, a fuel tank on the open deck is to be considered a <i>class 2.1</i> package.	Res.MSC.567(109) Item.6

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<u>and intermediate structures providing heat protection to the above spaces may also be considered acceptable. Notwithstanding the above-mentioned requirements:</u> <u>(a) For oil tankers and chemical tankers constructed on or after 1 January 2028, “A-60” insulation required by 9.2.4-3, Part R, is to be considered to meet the abovementioned requirements provided that the fuel tank is located in the cargo area forward of accommodation spaces, service spaces, control stations, escape routes and machinery spaces. Consideration for the protection of accommodation block sides may be necessary.</u> <u>(b) For ships constructed on or after 1 January 2028, where no source of gas release from the fuel containment system is considered possible, e.g. a type C tank in which tank connections are in a tank connection space, “A-60” class shielding is not required.</u> <u>(2) Fuel tanks are to be segregated from cargo in accordance with the requirements of the International Maritime Dangerous Goods Code (IMDG Code) where the fuel tanks are regarded as bulk packaging. For the purposes of the stowage and segregation requirements of the IMDG Code, a fuel tank on the open deck is to be considered a class 2.1 package.</u> 3 The space containing fuel containment system is to be separated from the machinery spaces of category <i>A</i> or other rooms with high fire risks. The separation is to be done by a cofferdam of at least 900 <i>mm</i> with insulation of “A-60” class. When determining the insulation of the space	3 The space containing fuel containment system is to be separated from the machinery spaces of category <i>A</i> or other rooms with high fire risks. The separation is to be done by a cofferdam of at least 900 <i>mm</i> with insulation of “A-60” class. When determining the insulation of the space	

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containing fuel containment system from other spaces with lower fire risks, the fuel containment system is to be considered as a machinery space of category <i>A</i>, in accordance with Chapter 9, Part R. For type <i>C</i> tanks, the fuel storage hold space may be considered as a cofferdam. (1) Notwithstanding the last sentence of -3 above, for ships constructed on or after 1 January <u>2028</u>, the fuel storage hold space may be considered as a cofferdam provided that: (a) the type <i>C</i> tank is not located directly above machinery spaces of category <i>A</i> or other rooms with high fire risk; and (b) the minimum distance to the “<i>A</i>-60” boundary from the outer <u>surface of the insulation system</u> of the type <i>C</i> tank or the boundary of the tank connection space, if any, is not less than 900 <i>mm</i>. <u>For the vacuum insulated type <i>C</i> tank, outer surface of the insulation system means outer surface of the outer shell.</u> (-4 to -7 are omitted.) Chapter 12 EXPLOSION PREVENTION 12.5 Hazardous Area Zones (IGF Code 12.5) 12.5.2 Hazardous Area Zone 1* This zone includes, but is not limited to: (1) (Omitted) (2) (Omitted) (3) <u>For ships constructed on or after 1 January 2028,</u> areas on open deck, or semi-enclosed spaces on	containing fuel containment system from other spaces with lower fire risks, the fuel containment system is to be considered as a machinery space of category <i>A</i>, in accordance with Chapter 9, Part R. For type <i>C</i> tanks, the fuel storage hold space may be considered as a cofferdam. (1) Notwithstanding the last sentence of -3 above, for ships constructed on or after 1 January <u>2024</u>, the fuel storage hold space may be considered as a cofferdam provided that: (a) the type <i>C</i> tank is not located directly above machinery spaces of category <i>A</i> or other rooms with high fire risk; and (b) the minimum distance to the “<i>A</i>-60” boundary from the outer <u>shell</u> of the type <i>C</i> tank or the boundary of the tank connection space, if any, is not less than 900 <i>mm</i>. (-4 to -7 are omitted.) Chapter 12 EXPLOSION PREVENTION 12.5 Hazardous Area Zones (IGF Code 12.5) 12.5.2 Hazardous Area Zone 1* This zone includes, but is not limited to: (1) (Omitted) (2) (Omitted) (3) Areas on open deck, or semi-enclosed spaces on deck, within 3 <i>m</i> of any fuel tank outlet, gas or	Res.MSC.567(109) Item.7

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Amended	Original	Remarks
deck, within 3 <i>m</i> of any fuel tank outlet, gas or vapour outlet <u>(for example, all areas within 3 <i>m</i> of fuel tank hatches, ullage openings or sounding pipes for fuel tanks located on open deck and gas vapour outlets), bunker manifold valve, other fuel valve, fuel pipe flange, ventilation outlets from zone 1 spaces and fuel tank openings for pressure release provided to permit the flow of small volumes of gas or vapour mixtures caused by thermal variation;</u>	vapour outlet, bunker manifold valve, other fuel valve, fuel pipe flange, <u>fuel preparation room</u> ventilation outlets and fuel tank openings for pressure release provided to permit the flow of small volumes of gas or vapour mixtures caused by thermal variation;	Res.MSC.567(109) Item.8
(4) <u>for ships constructed on or after 1 January 2028, areas on open deck, or semi-enclosed spaces on open deck above and in the vicinity of a fuel tank vent mast outlet within a vertical cylinder of unlimited height and 6 <i>m</i> radius centred upon the centre of the outlet, and within a hemisphere of 6 <i>m</i> radius below the outlet. Where it is not possible to maintain the above distances due to the size and layout of the ship, a reduced zone can be accepted based on a dispersion analysis, using 50 % <i>LEL</i> criteria. The zone dimensions are not to be less than those given in 12.5.2(3), and are to include a surrounding zone 2 hazardous area meeting the dimensions given in 12.5.3(1).</u>	(Newly added)	Res.MSC.567(109) Item.9
(5) (Omitted)	(4) (Omitted)	
(6) (Omitted)	(5) (Omitted)	
(7) (Omitted)	(6) (Omitted)	
(8) (Omitted)	(7) (Omitted)	
(9) (Omitted)	(8) (Omitted)	
(10) (Omitted)	(9) (Omitted)	
12.5.3 Hazardous Area Zone 2* This zone includes, but is not limited to:	12.5.3 Hazardous Area Zone 2* This zone includes, but is not limited to:	
(1) (Omitted)	(1) (Omitted)	

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Amended	Original	Remarks
(2) (Omitted) (3) <u>In lieu of (1) above, for ships constructed on or after 1 January 2028, this zone includes spaces 4 m beyond the cylinder and 4 m beyond the hemisphere defined in 12.5.2(4).</u> Chapter 13 VENTILATION 13.3 General Requirements (<i>IGF Code</i> 13.3) 13.3.5 Air Inlets for Hazardous Enclosed Spaces <u>For ships constructed on or after 1 January 2028, air inlets for hazardous enclosed spaces are to be taken from areas that, except for the inlets, would be non-hazardous. Air inlets for non-hazardous enclosed spaces are to be taken from non-hazardous areas at least 1.5 m away from the boundaries of any hazardous area.</u> <u>13.3.8 Ventilation Duct Penetration through Hazardous Areas</u> <u>For ships constructed on or after 1 January 2028:</u> (1) <u>Where the ventilation ducts serving non-hazardous spaces pass through a hazardous space, the ducts are to be gastight and have overpressure relative to that hazardous space; and</u> (2) <u>Where the ventilation ducts serving hazardous spaces pass through less hazardous or non-hazardous spaces, the ducts are to be gastight and have underpressure relative to the less hazardous or</u>	(2) (Omitted) (Newly added) Chapter 13 VENTILATION 13.3 General Requirements (<i>IGF Code</i> 13.3) 13.3.5 Air Inlets for Hazardous Enclosed Spaces Air inlets for hazardous enclosed spaces are to be taken from areas that, <u>in the absence of the considered inlet, would be non-hazardous. Air inlets for non-hazardous enclosed spaces are to be taken from non-hazardous areas at least 1.5 m away from the boundaries of any hazardous area. Where the inlet duct passes through a more hazardous space, the duct is to be gas-tight and have over-pressure relative to this space.</u> (Newly added) (Newly added)	Res.MSC.567(109) Item.10 Res.MSC.567(109) Item.11 Res.MSC.567(109) Item.12

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Amended	Original	Remarks
<u>non-hazardous spaces. Ventilation pipes serving hazardous spaces that pass through less hazardous or non-hazardous spaces are acceptable without the need for underpressure, provided that they are fully welded and designed in accordance with Chapter 7.</u> 13.3.9 (Omitted) 13.3.10 (Omitted) 13.3.11 (Omitted) Annex 1.1.3-3 GAS-FUELLED ENGINES Chapter 1 GENERAL 1.4 Terms 2 <i>Double block and bleed valves</i> means a set of two valves in series in a pipe and a third valve enabling the pressure release from the pipe between those two valves, specified in 2.2.1-9, Part GF of the Rules. The arrangement may also consist of a two-way valve and a closing valve instead of three separate valves. The valves are to be in accordance with 9.4.5 to 9.4.7, Part GF of the Rules.	13.3.8 (Omitted) 13.3.9 (Omitted) 13.3.10 (Omitted) Annex 1.1.3-3 GAS-FUELLED ENGINES Chapter 1 GENERAL 1.4 Terms 2 <i>Double block and bleed valves</i> means a set of two valves in series in a pipe and a third valve enabling the pressure release from the pipe between those two valves, specified in 2.2.1-9, Part GF of the Rules. The arrangement may also consist of a two-way valve and a closing valve instead of three separate valves. The valves are to be in accordance with 9.4.4 to 9.4.6, Part GF of the Rules.	Renumbered 9.4.4 and 9.4.6 as 9.4.5 and 9.4.7, respectively, due to the insertion of 9.4.2.

Amended-Original Requirements Comparison Table (Amendments of IGF Code (Resolution MSC.567(109)))

Amended	Original	Remarks
Chapter 2 CONSTRUCTION AND EQUIPMENT OF GAS-FUELLED ENGINES 2.4 Accessory Equipment 2.4.2 Gas Pipes 5 For piping attached to gas-fuelled engines, the following (1) to (8) also apply. ((1) to (4) are omitted.) (5) Arrangement of the gas piping system on the engine Pipes and equipment containing fuel gas are defined as hazardous area zone 0 (refer to 12.5.1, Part GF of the Rules). The space between the gas fuel piping and the wall of the outer pipe or duct is defined as hazardous area zone 1 (refer to 12.5.2(7), Part GF of the Rules). ((6) to (8) are omitted.)	Chapter 2 CONSTRUCTION AND EQUIPMENT OF GAS-FUELLED ENGINES 2.4 Accessory Equipment 2.4.2 Gas Pipes 5 For piping attached to gas-fuelled engines, the following (1) to (8) also apply. ((1) to (4) are omitted.) (5) Arrangement of the gas piping system on the engine Pipes and equipment containing fuel gas are defined as hazardous area zone 0 (refer to 12.5.1, Part GF of the Rules). The space between the gas fuel piping and the wall of the outer pipe or duct is defined as hazardous area zone 1 (refer to 12.5.2(6), Part GF of the Rules). ((6) to (8) are omitted.)	Renumbered 12.5.2(6) as 12.5.2(7), due to the insertion of 12.5.2(4).

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Amended	Original	Remarks
RULES FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS Part N SHIPS CARRYING LIQUEFIED GASES IN BULK Annex 16.1.1-3 GAS-FUELLED ENGINES Chapter 2 CONSTRUCTION AND EQUIPMENT OF GAS-FUELLED ENGINES 2.4 Accessory Equipment 2.4.2 Gas Pipes 4 For piping attached to gas-fuelled engines, the following (1) to (8) also apply. ((1) to (4) are omitted.) (5) Arrangement of the gas piping system on the engine Pipes and equipment containing fuel gas are defined as hazardous area zone 0 (refer to 12.5.1, Part GF of the Rules). The space between the gas fuel piping and the wall of the outer pipe or duct is defined as hazardous area zone 1 (refer to 12.5.2(7), Part GF of the Rules). ((6) to (8) are omitted.)	RULES FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS Part N SHIPS CARRYING LIQUEFIED GASES IN BULK Annex 16.1.1-3 GAS-FUELLED ENGINES Chapter 2 CONSTRUCTION AND EQUIPMENT OF GAS-FUELLED ENGINES 2.4 Accessory Equipment 2.4.2 Gas Pipes 4 For piping attached to gas-fuelled engines, the following (1) to (8) also apply. ((1) to (4) are omitted.) (5) Arrangement of the gas piping system on the engine Pipes and equipment containing fuel gas are defined as hazardous area zone 0 (refer to 12.5.1, Part GF of the Rules). The space between the gas fuel piping and the wall of the outer pipe or duct is defined as hazardous area zone 1 (refer to 12.5.2(6), Part GF of the Rules). ((6) to (8) are omitted.)	Renumbered 12.5.2(6) as 12.5.2(7), due to the insertion of 12.5.2(4).

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Amended	Original	Remarks
GUIDANCE FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS Part B CLASS SURVEYS B1 GENERAL B1.1 Surveys B1.1.3 Intervals of Class Maintenance Surveys 3 The Occasional Surveys specified in 1.1.3-3(5), Part B of the Rules are as specified below: ((1) to (21) are omitted.) (22) Ships using low-flashpoint fuels (a) For ships <u>which convert to using low-flashpoint fuels on or after 1 January 2017 or undertake to use low-flashpoint fuels different from those which they were originally approved to use before 1 January 2017</u>, a survey is to be carried out to verify compliance with Part GF of the Rules. (b) For ships <u>which convert to using natural gas on or after 1 July 2019</u>, a survey is to be carried out to verify compliance with GF11.3.1-1,	GUIDANCE FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS Part B CLASS SURVEYS B1 GENERAL B1.1 Surveys B1.1.3 Intervals of Class Maintenance Surveys 3 The Occasional Surveys specified in 1.1.3-3(5), Part B of the Rules are as specified below: ((1) to (21) are omitted.) (22) Ships using low-flashpoint fuels (a) For ships <u>that fall under the following i) or ii), a survey is to be carried out to verify compliance with Part GF of the Rules before using low-flashpoint fuels or undertaking to use different low-flashpoint fuels than specified:</u> i) <u>Ships which convert to using low-flashpoint fuels on or after 1 January 2017; or</u> ii) <u>Ships which, on or after 1 January 2017, undertake to use low-flashpoint fuels different from those which they were originally approved to use before 1 January 2017.</u> (b) For ships <u>that fall under the following i) or ii), a survey is to be carried out to verify compliance with GF11.3.1-1, GF11.3.1-2, GF12.5.2-2 and</u>	

Amended-Original Requirements Comparison Table (Amendments of IGF Code (Resolution MSC.567(109)))

Amended	Original	Remarks
GF11.3.1-2, GF12.5.2-2 and GF15.10.1, Part GF of the Guidance. (c) For ships <u>which convert to using natural gas on or after 1 January 2024</u>, a survey is to be carried out to verify compliance with 11.8.1, Part GF of the Rules and GF11.3.1-2, Part GF of the Guidance. (d) For ships <u>which convert to using natural gas on or after 1 January 2026</u>, a survey is to be carried out to verify compliance with 4.2.2, 5.12.1, 6.7.3-1(1), 6.9.1-1, 7.3.2-1, 8.4, 9.3.1, 9.4.8, 9.4.9, 9.6.1, 9.8.1, 9.8.2, 9.8.4, 11.3.1-1, 11.6.1-2, 12.5.1, 12.5.2, 15.4.1-3, Part GF of the Rules and GF11.7.1, Part GF of the Guidance.	GF15.10.1, Part GF of the Guidance <u>before using low-flashpoint fuels or undertaking to use different low-flashpoint fuels than specified:</u> <u>i) Ships which convert to using low-flashpoint fuels on or after 1 July 2019; or</u> <u>ii) Ships which, on or after 1 July 2019, undertake to use low-flashpoint fuels different from those which they were originally approved to use before 1 July 2019.</u> (c) For ships <u>that fall under the following i) or ii)</u>, a survey is to be carried out to verify compliance with 11.8.1, Part GF of the Rules and GF11.3.1-2, Part GF of the Guidance <u>before using low-flashpoint fuels or undertaking to use different low-flashpoint fuels than specified:</u> <u>i) Ships which convert to using low-flashpoint fuels on or after 1 January 2024; or</u> <u>ii) Ships which, on or after 1 January 2024, undertake to use low-flashpoint fuels different from those which they were originally approved to use before 1 January 2024.</u> (d) For ships <u>that fall under the following i) or ii)</u>, a survey is to be carried out to verify compliance with 4.2.2, 5.12.1, 6.7.3-1(1), 6.9.1-1, 7.3.2-1, 8.4, 9.3.1, 9.4.7, 9.4.8, 9.6.1, 9.8.1, 9.8.2, 9.8.4, 11.3.1-1, 11.6.1-2, 12.5.1, 12.5.2, 15.4.1-3, Part GF of the Rules and GF11.7.1, Part GF of the Guidance <u>before using low-flashpoint fuels or undertaking to use different low-flashpoint fuels than specified:</u> <u>i) Ships which convert to using low-flashpoint</u>	Renumbered 9.4.7 and 9.4.8 as 9.4.8 and 9.4.9, respectively, due to the insertion of 9.4.2.

Amended-Original Requirements Comparison Table (Amendments of IGF Code (Resolution MSC.567(109)))

Amended	Original	Remarks
(e) <u>For ships which convert to using natural gas on or after 1 January 2028, a survey is to be carried out to verify compliance with 7.3.1-4, 9.4.2, 11.3.1-2(1), 11.3.1-3, 12.5.2(3), 12.5.2(4), 12.5.3(3), 13.3.5 and 13.3.8, Part GF of the Rules.</u> ((23) to (28) are omitted.)	<u>fuels on or after 1 January 2026; or</u> ii) <u>Ships which, on or after 1 January 2026, undertake to use low-flashpoint fuels different from those which they were originally approved to use before 1 January 2026.</u> (Newly added) ((23) to (28) are omitted.)	

Amended-Original Requirements Comparison Table (Amendments of IGF Code (Resolution MSC.567(109)))

Amended	Original	Remarks
GUIDANCE FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS Part GF SHIPS USING LOW-FLASHPOINT FUELS GF5 SHIP DESIGN AND ARRANGEMENT GF5.8 Fuel Preparation Room Design In applying 5.8, Part GF of the Rules, fuel preparation rooms are to be in accordance with the following (1) to (5): ((1) to (4) are omitted.) (5) The requirements for tank connection spaces to apply to the designs of fuel preparation rooms not located on open decks are as follows: (a) Access arrangements and associated hazardous areas i) (Omitted) ii) (Omitted) iii) An access to a fuel preparation room with direct access onto an open deck, or to a semi-enclosed space on deck, does not require an airlock. In the absence of an airlock, the area outside the door will be classified as a hazardous area according to 12.5.2(5) and 12.5.3(1), Part GF of the Rules. (b) Bilge wells (Omitted)	GUIDANCE FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS Part GF SHIPS USING LOW-FLASHPOINT FUELS GF5 SHIP DESIGN AND ARRANGEMENT GF5.8 Fuel Preparation Room Design In applying 5.8, Part GF of the Rules, fuel preparation rooms are to be in accordance with the following (1) to (5): ((1) to (4) are omitted.) (5) The requirements for tank connection spaces to apply to the designs of fuel preparation rooms not located on open decks are as follows: (a) Access arrangements and associated hazardous areas i) (Omitted) ii) (Omitted) iii) An access to a fuel preparation room with direct access onto an open deck, or to a semi-enclosed space on deck, does not require an airlock. In the absence of an airlock, the area outside the door will be classified as a hazardous area according to 12.5.2(4) and 12.5.3(1), Part GF of the Rules. (b) Bilge wells (Omitted)	Renumbered 12.5.2(4) as 12.5.2(5), due to the insertion of 12.5.2(4).

Amended-Original Requirements Comparison Table (Amendments of IGF Code (Resolution MSC.567(109)))

Amended	Original	Remarks
GF9 FUEL SUPPLY TO CONSUMERS	GF9 FUEL SUPPLY TO CONSUMERS	
GF9.4 Safety Functions of Gas Supply Systems	GF9.4 Safety Functions of Gas Supply Systems	
GF9.4.8 Ventilation of Gas Supply Branch Downstream of the Double Block and Bleed Valves In applying 9.4.8, Part GF of the Rules , for ships other than those constructed on or after 1 January 2026, in cases where the master gas fuel valve is automatically shutdown, the complete gas supply branch downstream of the double block and bleed valve is to be automatically ventilated assuming reverse flow from the engine to the pipe.	GF9.4.7 Ventilation of Gas Supply Branch Downstream of the Double Block and Bleed Valves In applying 9.4.7, Part GF of the Rules , for ships other than those constructed on or after 1 January 2026, in cases where the master gas fuel valve is automatically shutdown, the complete gas supply branch downstream of the double block and bleed valve is to be automatically ventilated assuming reverse flow from the engine to the pipe.	Renumbered 9.4.7 as 9.4.8, due to the insertion of 9.4.2.
GF9.4.11 Protection against Rupture With regard to the wording “shut off” specified in 9.4.11, Part GF of the Rules , shutdown is to be time delayed to prevent shutdown due to transient load variations	GF9.4.10 Protection against Rupture With regard to the wording “shut off” specified in 9.4.10, Part GF of the Rules , shutdown is to be time delayed to prevent shutdown due to transient load variations	Renumbered 9.4.10 as 9.4.11, due to the insertion of 9.4.2.
GF13 VENTILATION	GF13 VENTILATION	
GF13.3 General Requirements	GF13.3 General Requirements	
GF13.3.10 Non-hazardous Areas with Entry Openings to a Hazardous Area The wording “standard recognized by the Society” specified in 13.3.10(2)(b), Part GF of the Rules means those specified in table 5 of <i>IEC 60092-502</i> .	GF13.3.9 Non-hazardous Areas with Entry Openings to a Hazardous Area The wording “standard recognized by the Society” specified in 13.3.9(2)(b), Part GF of the Rules means those specified in table 5 of <i>IEC 60092-502</i> .	Renumbered 13.3.9 as 13.3.10, due to the insertion of 13.3.8.

Amended-Original Requirements Comparison Table (Amendments of IGF Code (Resolution MSC.567(109)))

Amended	Original	Remarks
Annex 2 GUIDANCE FOR GAS-FUELLED BOILERS Chapter 3 CONTROL SYSTEMS AND SAFETY SYSTEMS 3.2 Safety Systems 3.2.1 Safety Systems and Alarm Systems of Boilers 1 Safety systems and alarm systems of boilers are to be in accordance with the following (1) to (4) requirements, in addition to the requirements of 9.9.10, and 18.4.4 and 18.4.5, Part D of the Rules. (1) Safety systems are to be provided so that gas fuel supplies to all burners are cut off to stop the operation of boilers when the following (a) to (g) occur during gas burning or oil/gas burning. The double block and bleed valves specified in 9.4.5, Part GF of the Rules may be used as automatic cut off valves for this purpose. ((a) to (d) are omitted.) (e) when the double block and bleed valves specified in 9.4.5, Part GF of the Rules fail (f) when the master gas fuel valves specified in 9.4.3, Part GF of the Rules close (g) (Omitted) ((2) to (4) are omitted.) 2 Boilers of ships subject to the 1.1.1 of the Rules for Automatic and Remote Control Systems are to be in accordance with the requirements of 3.2 and 3.3.3 of said rules as well as -1 above. In addition, such boilers are to be	Annex 2 GUIDANCE FOR GAS-FUELLED BOILERS Chapter 3 CONTROL SYSTEMS AND SAFETY SYSTEMS 3.2 Safety Systems 3.2.1 Safety Systems and Alarm Systems of Boilers 1 Safety systems and alarm systems of boilers are to be in accordance with the following (1) to (4) requirements, in addition to the requirements of 9.9.10, and 18.4.4 and 18.4.5, Part D of the Rules. (1) Safety systems are to be provided so that gas fuel supplies to all burners are cut off to stop the operation of boilers when the following (a) to (g) occur during gas burning or oil/gas burning. The double block and bleed valves specified in 9.4.4, Part GF of the Rules may be used as automatic cut off valves for this purpose. ((a) to (d) are omitted.) (e) when the double block and bleed valves specified in 9.4.4, Part GF of the Rules fail (f) when the master gas fuel valves specified in 9.4.2, Part GF of the Rules close (g) (Omitted) ((2) to (4) are omitted.) 2 Boilers of ships subject to the 1.1.1 of the Rules for Automatic and Remote Control Systems are to be in accordance with the requirements of 3.2 and 3.3.3 of said rules as well as -1 above. In addition, such boilers are to be	Renumbered 9.4.2 and 9.4.4 as 9.4.3 and 9.4.5, respectively, due to the insertion of 9.4.2.

Amended-Original Requirements Comparison Table (Amendments of IGF Code (Resolution MSC.567(109)))

Amended	Original	Remarks
provided with devices which issue alarms in the event any of the abnormalities specified in the following (1) to (10) occurs: ((1) to (6) are omitted.) (7) activation of the double block and bleed valves specified in 9.4.5, Part GF of the Rules; (8) closing of the master gas fuel valves specified in 9.4.3, Part GF of the Rules; (9) (Omitted) (10) (Omitted) Annex 2A GUIDANCE FOR GAS COMBUSTION UNITS Chapter 3 CONTROL SYSTEMS AND SAFETY SYSTEMS 3.2 Safety Systems and Alarm Systems 3.2.1 Safety Systems and Alarm Systems of <i>GCU</i> 1 Safety systems and alarm systems of <i>GCU</i> are to be in accordance with the following (1) and (2) requirements. (1) Safety systems are to be provided so that gas fuel supplies to all burners are cut off to stop the operation of <i>GCU</i>s when the following (a) to (i) occur during gas burning or oil/gas burning. The automatic double block and bleed valves specified in 9.4.5, Part GF of the Rules may be used as automatic cut off valves for this purpose: ((a) to (e) are omitted.)	provided with devices which issue alarms in the event any of the abnormalities specified in the following (1) to (10) occurs: ((1) to (6) are omitted.) (7) activation of the double block and bleed valves specified in 9.4.4, Part GF of the Rules; (8) closing of the master gas fuel valves specified in 9.4.2, Part GF of the Rules; (9) (Omitted) (10) (Omitted) Annex 2A GUIDANCE FOR GAS COMBUSTION UNITS Chapter 3 CONTROL SYSTEMS AND SAFETY SYSTEMS 3.2 Safety Systems and Alarm Systems 3.2.1 Safety Systems and Alarm Systems of <i>GCU</i> 1 Safety systems and alarm systems of <i>GCU</i> are to be in accordance with the following (1) and (2) requirements. (1) Safety systems are to be provided so that gas fuel supplies to all burners are cut off to stop the operation of <i>GCU</i>s when the following (a) to (i) occur during gas burning or oil/gas burning. The automatic double block and bleed valves specified in 9.4.4, Part GF of the Rules may be used as automatic cut off valves for this purpose: ((a) to (e) are omitted.)	Renumbered 9.4.2 and 9.4.4 as 9.4.3 and 9.4.5, respectively, due to the insertion of 9.4.2. Renumbered 9.4.2 and 9.4.4 as 9.4.3 and 9.4.5, respectively, due to the insertion of 9.4.2.

Amended-Original Requirements Comparison Table (Amendments of IGF Code (Resolution MSC.567(109)))

Amended	Original	Remarks
(f) when the automatic double block and bleed valves specified in 9.4.5, Part GF of the Rules fail; (g) when the master gas fuel valves specified in 9.4.3, Part GF of the Rules close; (h) (Omitted) (i) (Omitted) (2) (Omitted)	(f) when the automatic double block and bleed valves specified in 9.4.4, Part GF of the Rules fail; (g) when the master gas fuel valves specified in 9.4.2, Part GF of the Rules close; (h) (Omitted) (i) (Omitted) (2) (Omitted)	

Amended-Original Requirements Comparison Table (Amendments of IGF Code (Resolution MSC.567(109)))

Amended	Original	Remarks
GUIDANCE FOR HIGH SPEED CRAFT Part 2 CLASS SURVEYS Chapter 1 GENERAL 1.1 Surveys 1.1.3 Occasional Surveys For the occasional surveys specified in 1.1.3(5), Part 2 of the Rules, the following is to be complied with: (1) (Omitted) (2) (Omitted) (3) Crafts Using Low-flashpoint Fuels (a) For crafts <u>which convert to using low-flashpoint fuels on or after 1 January 2017 or undertake to use low-flashpoint fuels different from those which they were originally approved to use before 1 January 2017</u>, a survey is to be carried out to verify compliance with 1.1.8, Part 1 of the Rules. (b) For ships <u>which convert to using natural gas on or after 1 July 2019</u>, a survey is to be carried out	GUIDANCE FOR HIGH SPEED CRAFT Part 2 CLASS SURVEYS Chapter 1 GENERAL 1.1 Surveys 1.1.3 Occasional Surveys For the occasional surveys specified in 1.1.3(5), Part 2 of the Rules, the following is to be complied with: (1) (Omitted) (2) (Omitted) (3) Crafts Using Low-flashpoint Fuels (a) For crafts <u>that fall under the following i) or ii)</u>, a survey is to be carried out to verify compliance with 1.1.8, Part 1 of the Rules <u>before using low-flashpoint fuels or undertaking to use different low-flashpoint fuels than specified</u>: i) Crafts <u>which convert to using low-flashpoint fuels on or after 1 January 2017; or</u> ii) Crafts <u>which, on or after 1 January 2017, undertake to use low-flashpoint fuels different from those which they were originally approved to use before 1 January 2017.</u> (b) For ships <u>that fall under the following i) or ii)</u>, a survey is to be carried out to verify compliance	

Amended-Original Requirements Comparison Table (Amendments of IGF Code (Resolution MSC.567(109)))

Amended	Original	Remarks
to verify compliance with GF11.3.1-1, GF11.3.1-2, GF12.5.2-2 and GF15.10.1, Part GF of the Guidance for the Survey and Construction of Steel Ships. (c) For ships <u>which convert to using natural gas on or after 1 January 2024</u>, a survey is to be carried out to verify compliance with 11.8.1, Part GF of the Rules for the Survey and Construction of Steel Ships and GF11.3.1-2, Part GF of the Guidance for the Survey and Construction of Steel Ships. (d) For ships <u>which convert to using natural gas on or after 1 January 2026</u>, a survey is to be carried out to verify compliance with 4.2.2, 5.12.1, 6.7.3-1(1), 6.9.1-1, 7.3.2-1, 8.4, 9.3.1, 9.4.8, 9.4.9, 9.6.1, 9.8.1, 9.8.2, 9.8.4, 11.3.1-1, 11.6.1-2, 12.5.1, 12.5.2, 15.4.1-3, Part GF of	with GF11.3.1-1, GF11.3.1-2, GF12.5.2-2 and GF15.10.1, Part GF of the Guidance for the Survey and Construction of Steel Ships <u>before using low-flashpoint fuels or undertaking to use different low-flashpoint fuels than specified:</u> i) <u>Ships which convert to using low-flashpoint fuels on or after 1 July 2019; or</u> ii) <u>Ships which, on or after 1 July 2019, undertake to use low-flashpoint fuels different from those which they were originally approved to use before 1 July 2019.</u> (c) For ships <u>that fall under the following i) or ii)</u>, a survey is to be carried out to verify compliance with 11.8.1, Part GF of the Rules for the Survey and Construction of Steel Ships and GF11.3.1-2, Part GF of the Guidance for the Survey and Construction of Steel Ships <u>before using low-flashpoint fuels or undertaking to use different low-flashpoint fuels than specified:</u> i) <u>Ships which convert to using low-flashpoint fuels on or after 1 January 2024; or</u> ii) <u>Ships which, on or after 1 January 2024, undertake to use low-flashpoint fuels different from those which they were originally approved to use before 1 January 2024.</u> (d) For ships <u>that fall under the following i) or ii)</u>, a survey is to be carried out to verify compliance with 4.2.2, 5.12.1, 6.7.3-1(1), 6.9.1-1, 7.3.2-1, 8.4, 9.3.1, 9.4.7, 9.4.8, 9.6.1, 9.8.1, 9.8.2, 9.8.4, 11.3.1-1, 11.6.1-2, 12.5.1, 12.5.2, 15.4.1-3, Part GF of the Rules for the Survey and	Renumbered 9.4.7 and 9.4.8 as 9.4.8 and 9.4.9, respectively, due to the insertion of 9.4.2.

Amended-Original Requirements Comparison Table (Amendments of IGF Code (Resolution MSC.567(109)))

Amended	Original	Remarks
the Rules for the Survey and Construction of Steel Ships and GF11.7.1, Part GF of the Guidance for the Survey and Construction of Steel Ships. <u>(e) For ships which convert to using natural gas on or after 1 January 2028, a survey is to be carried out to verify compliance with 7.3.1-4, 9.4.2, 11.3.1-2(1), 11.3.1-3, 12.5.2(3), 12.5.2(4), 12.5.3(3), 13.3.5 and 13.3.8, Part GF of the Rules.</u> (4) (Omitted) (5) (Omitted)	Construction of Steel Ships and GF11.7.1, Part GF of the Guidance for the Survey and Construction of Steel Ships before using low-flashpoint fuels or undertaking to use different low-flashpoint fuels than specified: <u>i) Ships which convert to using low-flashpoint fuels on or after 1 January 2026; or</u> <u>ii) Ships which, on or after 1 January 2026, undertake to use low-flashpoint fuels different from those which they were originally approved to use before 1 January 2026.</u> (Newly added) (4) (Omitted) (5) (Omitted)	

Amended-Original Requirements Comparison Table (Amendments of IGF Code (Resolution MSC.567(109)))

Amended	Original	Remarks
GUIDANCE FOR THE SURVEY AND CONSTRUCTION OF PASSENGER SHIPS Part 2 CLASS SURVEY Chapter 1 GENERAL 1.1 Surveys 1.1.3 Intervals of Class Maintenance Surveys 1 For the application of the requirements of 1.1.3-3, Part 2 of the Rules, in addition to the requirements specified in B1.1.3-3 (except for (22)), Part B of the Guidance for the Survey and Construction of Steel Ships, occasional surveys are to be in accordance with those specified in (1) to (9) below: ((1) to (5) are omitted.) (6) Ships Using Low-flashpoint Fuels (a) For ships <u>which convert to using low-flashpoint fuels on or after 1 January 2017 or undertake to use low-flashpoint fuels different from those which they were originally approved to use before 1 January 2017</u>, a survey is to be carried out to verify compliance with 1.1.6, Part 1 of the Rules.	GUIDANCE FOR THE SURVEY AND CONSTRUCTION OF PASSENGER SHIPS Part 2 CLASS SURVEY Chapter 1 GENERAL 1.1 Surveys 1.1.3 Intervals of Class Maintenance Surveys 1 For the application of the requirements of 1.1.3-3, Part 2 of the Rules, in addition to the requirements specified in B1.1.3-3 (except for (22)), Part B of the Guidance for the Survey and Construction of Steel Ships, occasional surveys are to be in accordance with those specified in (1) to (9) below: ((1) to (5) are omitted.) (6) Ships Using Low-flashpoint Fuels (a) For ships <u>that fall under the following i) or ii)</u>, a survey is to be carried out to verify compliance with 1.1.6, Part 1 of the Rules <u>before using low-flashpoint fuels or undertaking to use different low-flashpoint fuels than specified</u>: i) <u>Ships which convert to using low-flashpoint fuels on or after 1 January 2017; or</u> ii) <u>Ships which, on or after 1 January 2017, undertake to use low-flashpoint fuels different from those which they were originally approved to use before 1 January</u>	

Amended-Original Requirements Comparison Table (Amendments of IGF Code (Resolution MSC.567(109)))

Amended	Original	Remarks
(b) For ships <u>which convert to using natural gas on or after 1 July 2019</u>, a survey is to be carried out to verify compliance with GF11.3.1-1, GF11.3.1-2, GF12.5.2-2 and GF15.10.1, Part GF of the Guidance for the Survey and Construction of Steel Ships. (c) For ships <u>which convert to using natural gas on or after 1 January 2024</u>, surveys are to be carried out to verify compliance with 11.8.1, Part GF of the Rules for the Survey and Construction of Steel Ships and GF11.3.1-2, Part GF of the Guidance for the Survey and Construction of Steel Ships. (d) For ships <u>which convert to using natural gas on</u>	<u>2017.</u> (b) For ships <u>that fall under the following i) or ii)</u>, a survey is to be carried out to verify compliance with GF11.3.1-1, GF11.3.1-2, GF12.5.2-2 and GF15.10.1, Part GF of the Guidance for the Survey and Construction of Steel Ships <u>before using low-flashpoint fuels or undertaking to use different low-flashpoint fuels than specified:</u> i) <u>Ships which convert to using low-flashpoint fuels on or after 1 July 2019; or</u> ii) <u>Ships which, on or after 1 July 2019, undertake to use low-flashpoint fuels different from those which they were originally approved to use before 1 July 2019.</u> (c) For ships <u>that fall under the following i) or ii)</u>, surveys are to be carried out to verify compliance with 11.8.1, Part GF of the Rules for the Survey and Construction of Steel Ships and GF11.3.1-2, Part GF of the Guidance for the Survey and Construction of Steel Ships <u>before beginning to use low-flashpoint fuels for the first time or before undertaking to use low-flashpoint fuels different from those approved to use:</u> i) <u>Ships which convert to using low-flashpoint fuels on or after 1 January 2024; or</u> ii) <u>Ships which, on or after 1 January 2024, undertake to use low-flashpoint fuels different from those which they were originally approved to use before 1 January 2024.</u> (d) For ships <u>that fall under the following i) or ii)</u>, a	

Amended-Original Requirements Comparison Table (Amendments of IGF Code (Resolution MSC.567(109)))

Amended	Original	Remarks
<u>or after 1 January 2026</u>, a survey is to be carried out to verify compliance with 4.2.2, 5.12.1, 6.7.3-1(1), 6.9.1-1, 7.3.2-1, 8.4, 9.3.1, 9.4.8, 9.4.9, 9.6.1, 9.8.1, 9.8.2, 9.8.4, 11.3.1-1, 11.6.1-2, 12.5.1, 12.5.2, 15.4.1-3, Part GF of the Rules for the Survey and Construction of Steel Ships and GF11.7.1, Part GF of the Guidance for the Survey and Construction of Steel Ships. (e) <u>For ships which convert to using natural gas on or after 1 January 2028</u>, a survey is to be carried out to verify compliance with 7.3.1-4, 9.4.2, 11.3.1-2(1), 11.3.1-3, 12.5.2(3), 12.5.2(4), 12.5.3(3), 13.3.5 and 13.3.8, Part GF of the Rules. ((7) to (9) are omitted.)	survey is to be carried out to verify compliance with 4.2.2, 5.12.1, 6.7.3-1(1), 6.9.1-1, 7.3.2-1, 8.4, 9.3.1, 9.4.7, 9.4.8, 9.6.1, 9.8.1, 9.8.2, 9.8.4, 11.3.1-1, 11.6.1-2, 12.5.1, 12.5.2, 15.4.1-3, Part GF of the Rules for the Survey and Construction of Steel Ships and GF11.7.1, Part GF of the Guidance for the Survey and Construction of Steel Ships <u>before using low-flashpoint fuels or undertaking to use different low-flashpoint fuels than specified:</u> i) <u>Ships which convert to using low-flashpoint fuels on or after 1 January 2026; or</u> ii) <u>Ships which, on or after 1 January 2026, undertake to use low-flashpoint fuels different from those which they were originally approved to use before 1 January 2026.</u> (Newly added) ((7) to (9) are omitted.)	Renumbered 9.4.7 and 9.4.8 as 9.4.8 and 9.4.9, respectively, due to the insertion of 9.4.2.

Amended-Original Requirements Comparison Table (Amendments of IGF Code (Resolution MSC.567(109)))

Amended	Original	Remarks
GUIDANCE FOR THE SURVEY AND CONSTRUCTION OF INLAND WATERWAY SHIPS Part 2 CLASS SURVEYS Chapter 1 GENERAL 1.1 Surveys 1.1.2 Class Maintenance Surveys 1 Modifications and changes that are subject to Occasional Surveys referred to in 1.1.2-2(3), Part 2 of the Rules are as specified in (1) through (5) below: ((1) to (4) are omitted.) (5) Ships Using Low-flashpoint Fuels (a) For ships <u>which convert to using low-flashpoint fuels on or after 1 January 2017 or undertake to use low-flashpoint fuels different from those which they were originally approved to use before 1 January 2017</u>, a survey is to be carried out to verify compliance with the requirements of 1.1.8, Part 1 of the Rules.	GUIDANCE FOR THE SURVEY AND CONSTRUCTION OF INLAND WATERWAY SHIPS Part 2 CLASS SURVEYS Chapter 1 GENERAL 1.1 Surveys 1.1.2 Class Maintenance Surveys 1 Modifications and changes that are subject to Occasional Surveys referred to in 1.1.2-2(3), Part 2 of the Rules are as specified in (1) through (5) below: ((1) to (4) are omitted.) (5) Ships Using Low-flashpoint Fuels (a) For ships <u>that fall under the following i) or ii), a survey is to be carried out to verify compliance with the requirements of 1.1.8, Part 1 of the Rules before using low-flashpoint fuels or undertaking to use different low-flashpoint fuels than specified:</u> i) <u>Ships which convert to using low-flashpoint fuels on or after 1 January 2017; or</u> ii) <u>Ships which, on or after 1 January 2017, undertake to use low-flashpoint fuels different from those which they were originally approved to use before 1 January 2017.</u>	

Amended-Original Requirements Comparison Table (Amendments of IGF Code (Resolution MSC.567(109)))

Amended	Original	Remarks
(b) For ships <u>which convert to using natural gas on or after 1 July 2019</u>, a survey is to be carried out to verify compliance with the requirements of GF11.3.1-1, GF11.3.1-2, GF12.5.2-2 and GF15.10.1, Part GF of the Guidance for the Survey and Construction of Steel Ships. (c) For ships <u>which convert to using natural gas on or after 1 January 2024</u>, a survey is to be carried out to verify compliance with the requirements of 11.8.1, Part GF of the Rules for the Survey and Construction of Steel Ships and GF11.3.1-2, Part GF of the Guidance for the Survey and Construction of Steel Ships. (d) For ships <u>which convert to using natural gas on or after 1 January 2026</u>, a survey is to be carried	(b) For ships <u>that fall under the following i) or ii)</u>, a survey is to be carried out to verify compliance with the requirements of GF11.3.1-1, GF11.3.1-2, GF12.5.2-2 and GF15.10.1, Part GF of the Guidance for the Survey and Construction of Steel Ships <u>before using low-flashpoint fuels or undertaking to use different low-flashpoint fuels than specified:</u> i) <u>Ships which convert to using low-flashpoint fuels on or after 1 July 2019; or</u> ii) <u>Ships which, on or after 1 July 2019, undertake to use low-flashpoint fuels different from those which they were originally approved to use before 1 July 2019.</u> (c) For ships <u>that fall under the following i) or ii)</u>, a survey is to be carried out to verify compliance with the requirements of 11.8.1, Part GF of the Rules for the Survey and Construction of Steel Ships and GF11.3.1-2, Part GF of the Guidance for the Survey and Construction of Steel Ships <u>before using low-flashpoint fuels or undertaking to use different low-flashpoint fuels than specified:</u> i) <u>Ships which convert to using low-flashpoint fuels on or after 1 January 2024; or</u> ii) <u>Ships which, on or after 1 January 2024, undertake to use low-flashpoint fuels different from those which they were originally approved to use before 1 January 2024.</u> (d) For ships <u>that fall under the following i) or ii)</u>, a survey is to be carried out to verify compliance	

Amended-Original Requirements Comparison Table (Amendments of IGF Code (Resolution MSC.567(109)))

Amended	Original	Remarks
out to verify compliance with 4.2.2, 5.12.1, 6.7.3-1(1), 6.9.1-1, 7.3.2-1, 8.4, 9.3.1, 9.4.8, 9.4.9, 9.6.1, 9.8.1, 9.8.2, 9.8.4, 11.3.1-1, 11.6.1-2, 12.5.1, 12.5.2, 15.4.1-3, Part GF of the Rules for the Survey and Construction of Steel Ships and GF11.7.1, Part GF of the Guidance for the Survey and Construction of Steel Ships. <u>(e) For ships which convert to using natural gas on or after 1 January 2028, a survey is to be carried out to verify compliance with 7.3.1-4, 9.4.2, 11.3.1-2(1), 11.3.1-3, 12.5.2(3), 12.5.2(4), 12.5.3(3), 13.3.5 and 13.3.8, Part GF of the Rules.</u> (6) (Omitted)	with 4.2.2, 5.12.1, 6.7.3-1(1), 6.9.1-1, 7.3.2-1, 8.4, 9.3.1, 9.4.7, 9.4.8, 9.6.1, 9.8.1, 9.8.2, 9.8.4, 11.3.1-1, 11.6.1-2, 12.5.1, 12.5.2, 15.4.1-3, Part GF of the Rules for the Survey and Construction of Steel Ships and GF11.7.1, Part GF of the Guidance for the Survey and Construction of Steel Ships <u>before using low-flashpoint fuels or undertaking to use different low-flashpoint fuels than specified:</u> i) <u>Ships which convert to using low-flashpoint fuels on or after 1 January 2026; or</u> ii) <u>Ships which, on or after 1 January 2026, undertake to use low-flashpoint fuels different from those which they were originally approved to use before 1 January 2026.</u> (Newly added) (6) (Omitted)	Renumbered 9.4.7 and 9.4.8 as 9.4.8 and 9.4.9, respectively, due to the insertion of 9.4.2.
EFFECTIVE DATE AND APPLICATION		
1. The effective date of the amendments is 1 January 2028.		