

| CIRCULAR LETTER                                | No. 315-06-1665c   | dated 23.11.2021  |  |  |  |  |
|--|--|---|--|--|--|--|
| Re:  |  |   |  |  |  |  |
| amendments to the Ru<br>Bulk, 2021, ND No. 2-0 |  | struction of Ships Carrying Liquefied Gases in                        |  |  |  |  |
| Item(s) of supervision:                        |  |   |  |  |  |  |
| electrical equipment                           |  |   |  |  |  |  |
| Entry-into-force date:<br>01.01.2022           |  |   |  |  |  |  |
| Cancels / amends / ado                         | ds Circular Letter No  | dated-  |  |  |  |  |
| Number of pages:                               | 1 + 3  |   |  |  |  |  |
| Appendices:                                    |  |   |  |  |  |  |
| Appendix 1: information                        | n on amendments introduced by the  | Circular Letter   |  |  |  |  |
| Appendix 2: text of ame                        | endments to Part VII "Electrical Equi  | pment"  |  |  |  |  |
| Director General                               | Konstantin G. F  | Palnikov  |  |  |  |  |
| Text of CL:                                    |  |   |  |  |  |  |
|  | the Rules for the Classification and 0<br>ed as specified in the Appendices to   | Construction of Ships Carrying Liquefied Gases<br>the Circular Letter |  |  |  |  |
| It is necessary to do the                      | e following:   |   |  |  |  |  |
| -  | of the Circular Letter to the notice<br>persons in the area of the RS Branch   | e of the RS surveyors, as well as interested offices' activity.       |  |  |  |  |
| construction or con                            | . Apply the provisions of the Circular Letter during review of technical supervision on ships contracted for construction or conversion on or after 01.01.2022 in the absence of a contract, on ships, the keels of which are laid or which are at a similar stage of construction on or after 01.01.2022. |   |  |  |  |  |
| List of the amended an                         | d/or introduced paras/chapters/sect  | ions:   |  |  |  |  |

Part VII: paras 2.2.1.2, 2.2.1.3, 2.2.2.1, 3.2 and 4.1

 Person in charge:
 Artem V. Fedorkov
 315
 +7 (812) 605-05-17

"Thesis" System No. 21-237097

| Information on amendments introduced by the Circular Letter   |  |
|---|--|
| (for inclusion in the Revision History to the RS Publication) |  |
|   |  |

| Nos. | Amended<br>paras/chapters/<br>sections | Information on amendments   | Number and date<br>of the Circular<br>Letter | Entry-into-force<br>date |
|------|--|---|--|--------------------------|
| 1    | Part VII, para 2.2.1.2                 | Requirements for electrical<br>equipment in zone "0" have<br>been specified considering<br>IEC 60092-502  | 315-06-1665c<br>of 23.11.2021                | 01.01.2022               |
| 2    | Part VII, para 2.2.1.3                 | New para with requirements<br>for electrical circuits<br>passing into zone "0"<br>spaces has been<br>introduced considering<br>IEC 60092-502            | 315-06-1665c<br>of 23.11.2021                | 01.01.2022               |
| 3    | Part VII, para 2.2.2.1                 | Requirements for<br>submersible electrically-<br>driven pumps installation<br>have been specified<br>considering experience of<br>technical supervision | 315-06-1665c<br>of 23.11.2021                | 01.01.2022               |
| 4    | Part VII, para 3.2                     | Requirements have been<br>brought into compliance<br>with the requirements of<br>Part VI "Systems and<br>Piping"  | 315-06-1665c<br>of 23.11.2021                | 01.01.2022               |
| 5    | Part VII, para 4.1                     | Requirements have been<br>brought into compliance<br>with the requirements of<br>Part VI "Systems and<br>Piping"  | 315-06-1665c<br>of 23.11.2021                | 01.01.2022               |

### RULES FOR THE CLASSIFICATION AND CONSTRUCTION OF SHIPS CARRYING LIQUEFIED GASES IN BULK, 2021,

### ND No. 2-020101-140-E

### PART VII. ELECTRICAL EQUIPMENT

### **2 ELECTRICAL INSTALLATION**

#### 1 **Para 2.2.1.2** is replaced by the following text:

**"2.2.1.2** The following electrical equipment may be considered for spaces of zone "0" in compliance with IEC 60092-502:1999:

certified intrinsically-safe apparatus of category (*ia*);

simple electrical apparatus and components (e.g., switches, junction boxes, resistors and simple semiconductor devices), included in intrinsically-safe circuits of category (*ia*) and complying with the requirements of IEC 60079-14:2013;

other electrical equipment specifically designed and certified by the appropriate authority for use in zone "0";

submersible cargo pumps with electric drives specified in 2.2.2.1.".

2 New para **2.2.1.3** is introduced reading as follows:

**"2.2.1.3** Where circuits pass into zone "0" areas and spaces, protection systems shall be arranged so that manual intervention is necessary for reconnection of power supply circuits after disconnection caused by short circuit, overload or short circuit to casing.".

3 **Para 2.2.2.1** is replaced by the following text:

**"2.2.2.1** Submerged cargo pump motors and their supply cables may be fitted in cargo containment systems. Submerged pumps shall be fitted with at least two independent arrangements to automatically shut down the motors in the event of liquid level falling below the allowable value. Operation of the specified protection arrangements may be alarmed due to the following monitored parameters:

low pump delivery/discharge pressure;

low motor load current;

low liquefied gas level.

This shutdown shall to be alarmed at the cargo control station. Cargo pump motors shall be provided with arrangements to isolate them from their electrical supply (including feeders) to be actuated in advance for the period of gas-freeing operations.".

#### 3 EARTHING

4 **Para 3.2** is replaced by the following text:

**"3.2** Cargo tanks and piping shall be earthed in compliance with 3.10.4, Part VI "Systems and Piping".".

## 4 SOURCES OF ELECTRICAL POWER

# 5 **Para 4.1** is replaced by the following text:

**"4.1** Generators' driving engines which utilize gas fuel shall comply with 11.15, Part VI "Systems and Piping".".