

Subject:

Protection of Cargo Pump-rooms Required for Existing Tankers Under Amendments to SOLAS 2000

ClassNK

Technical Information

No. TEC-0462

Date 25 June 2002

To whom it may concern

Amendments to SOLAS 74 Chapter II-2 / Reg.4.5.10 "Protection of cargo pump-rooms" will enter into force on 1 July 2002. This regulation is established on the basis of IACS Unified Rule F39 which mainly describes measures to prevent explosion accidents in cargo pump-room. This regulation applies to tankers carrying flammable products. Some of these regulations apply to existing ships, compliance should be achieved by the date of the first scheduled dry docking after 1 July 2002, but not later than 1 July 2005.

An outline of the amendments is given below:

A. Temperature sensor and alarm for pumps

For preventing fire and explosion caused by over heating of the pumps fitted in cargo pump rooms temperature sensor and alarms for pumps are required.

B. Monitoring system for hydrocarbon gases

For preventing fire and explosion of in pump-rooms through leakage of product gases, concentration monitoring devices and alarms for hydrocarbon gases are required.

C. Bilge level monitoring devices

For early detection of leakage of the product, bilge level monitoring devices in cargo pump-rooms are required.

D. Interlock of lighting and ventilation (applying to new ship only)

For maintaining a safe working-environment in cargo pump-rooms, interlocking of lighting and ventilation is required.

Concerning provisions A to C, these provisions with partial reduction of the contents apply to existing ship.

(To be continued)

NOTES:

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Regarding all existing ships to which the amendment applies, this society will examine all drawings before onboard survey in order to verify that the equipment and instruments meet the requirements. For such ships, please prepare for submission of drawings etc in accordance with Attachment 2 “Chart of procedure”. According to the results of the plan examination, an onboard survey will be undertaken to confirm the installations concerned.

Concerning the application and the requirements of this amendment and submission of drawings for approval etc, please refer to Attachment 1. For any questions about the above and for submission of drawings for approval, please contact:

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Attachments 1: Application and details of requirements for existing ships
 2: Chart of procedure
 3: Application of plan review
 4: Application for lifting note

Attachment 1 to
ClassNK Technical Information No. TEC-0462

Application and details of requirements for existing ships

(1) Application

This regulations applies to both existing ships covered by 74SOLAS and tankers (including chemical carrier) carrying products having a flashpoint not exceeding 60°C.

New ships: ships commencing their construction on or after the date of entry into force (1 July 2002)
Existing ship: any ship which is not a new ship

(2) Subject cargo pump-rooms

Pump-rooms intended solely for ballast transfer need not comply with these requirements. They are applicable only to the pump-rooms where pumps for cargo, such as cargo pumps, stripping pumps, pumps for slop tanks, pumps for COW or similar pumps are provided.

(3) Due date for existing ships

Compliance should be achieved by the date of the first scheduled dry-docking after 1 July 2002, but not later than 1 July 2005.

(4) Requirements for existing ship

A. Temperature sensing devices for pumps

Cargo pumps, stripping pumps, pumps for slop tanks, pumps for COW and ballast pumps installed in cargo pump-rooms should be fitted with temperature sensing devices for bulkhead shaft glands, bearings and pump casings. (except for the pumps which are not driven by shafts passing through pump-room bulkhead)

Audible and visual high temperature alarm should be installed in the cargo control room or the pump control station.

B. Continuous monitoring of the concentration of flammable gases

A system for continuous monitoring of the concentration of flammable gases should be installed. Sampling points or detector heads shall be located in suitable positions in order that potentially dangerous leakages are readily detected.

When the flammable gas concentration reaches 10% of the lower flammable limit, a continuous audible and visual alarm signal should be effected in the pump-room and cargo control room. (However, existing monitoring systems already fitted having a pre-set level not greater than 30% of the lower flammable limit may be accepted.)

(to be continued)

C. Bilge level monitoring devices

Cargo pump-rooms should be provided with bilge level monitoring devices together with appropriately located alarms. (Bilge high level alarms that are provided at appropriate positions under stuffing boxes are acceptable.)

(5) Submission of drawings

Concerning plan examination, we require drawings of all items included in the above (4). The following drawings are needed in general. Please submit three copies of each of the drawings:

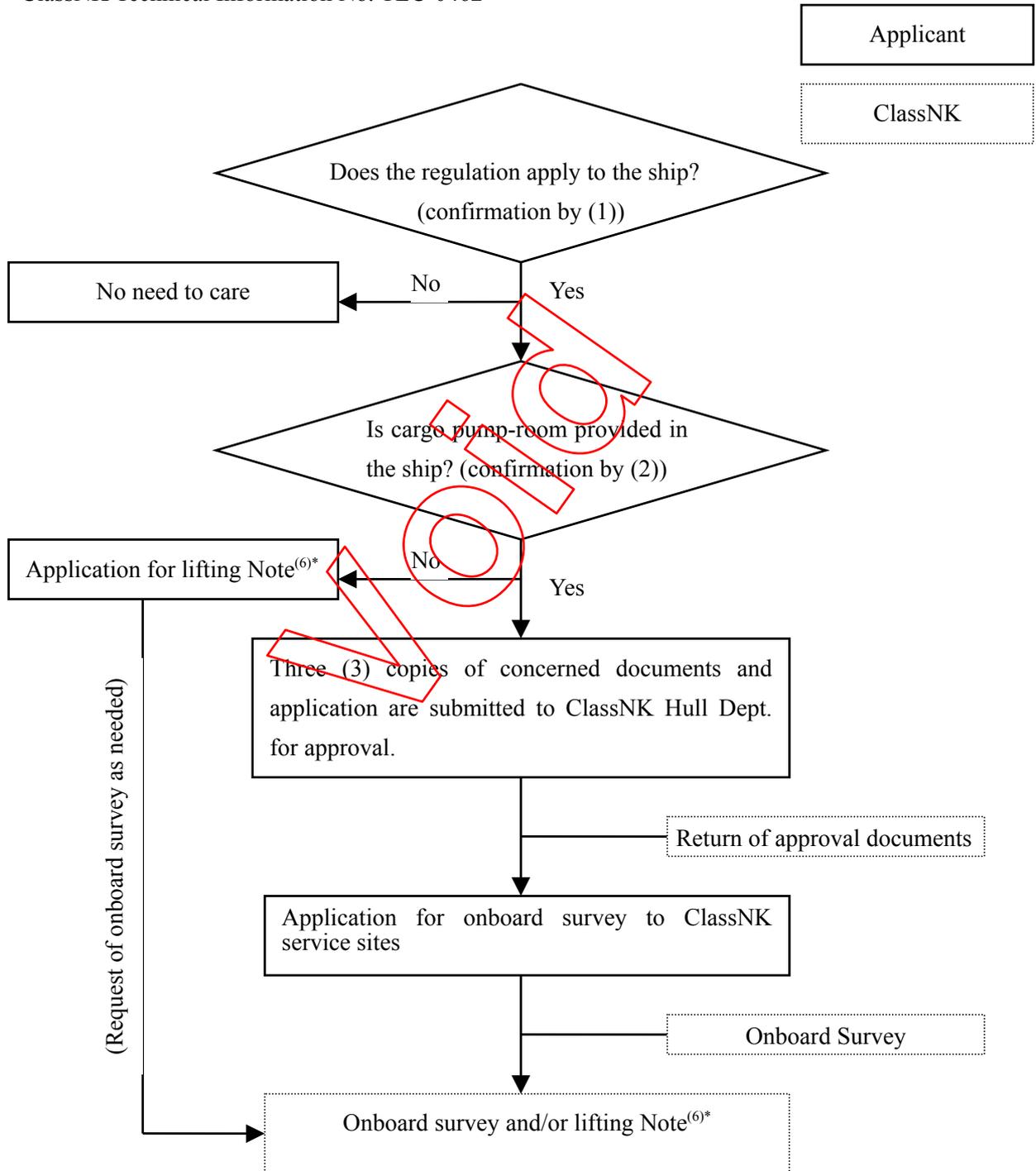
- Diagram of gas detection system in the pump-room
- Plan of gas detection devices (including wiring diagram)
- Arrangement of temperature sensors and alarms of relevant pumps
- Bilge monitoring device

(6) Others

Concerning this amendment, the “SURVEY STATUS” of all the ships refer to in (1) will be set out as a “NOTE” regardless of whether there are cargo pump-rooms shown as in (2), or not. If the ship is not fitted with cargo pump-room shown (2) (e.g. The ship has independent cargo pumping systems on weather deck), please let us know and we will lift the NOTE after checking the arrangement.

NOTE) Protection of the cargo pump-rooms complying with CII-2/Reg 4.5.10 of SOLAS 74 as amended should be completed by the first scheduled drydocking after 1 July 2002, but not later than 1 July 2005.

Attachment 2 to
ClassNK Technical Information No. TEC-0462



Attachment 3 to
ClassNK Technical Information No. TEC-0462

Application for plan review

Date:

Nippon Kaiji Kyokai

Applicant:
(address)

Contact person:
(with signature)
(Tel)

(Fax)

We hereby request plan review on for "Protection of cargo pump-rooms" for compliance with SOLAS 74 Amendment to be effective on 1 July 2002 for the below mentioned existing tanker;

Name of ship/Class No.	
Gross Tonnage	
Flag state	
Date of keel laid	
Type of ship	
Drawings submitted	

Attachment 4 to
ClassNK Technical Information No. TEC-0462

Application for lifting note

Date:

Nippon Kaiji Kyokai

Applicant:
(address)

Contact person:
(with signature)
(Tel)

(Fax)

Ship name : _____
Class number : _____

We hereby request to lift the “NOTE” about “Protection of cargo pump-rooms” for compliance with SOLAS 74 Amendment, as the ship is not provided cargo pump-rooms which is covered by this requirement.

The ship provides Deepwell Pump*/Submerged Pump* and do not provide cargo pump-rooms.	<input type="checkbox"/>
Following pumps are not provided in Ballast pump-rooms.	
Stripping pumps	<input type="checkbox"/>
Pumps for Slop tank	<input type="checkbox"/>
COW pumps	<input type="checkbox"/>
Pumps for cargo or its residue transfer	<input type="checkbox"/>

* Delete as appropriate