



**PUNONGHIMPILAN TANOD BAYBAYIN NG PILIPINAS**  
**(Headquarters Philippine Coast Guard)**  
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1018 Manila

16 April 2014

HPCG/CG-8

**MEMORANDUM CIRCULAR**  
**NUMBER .....01-14**

**NAVIGATIONAL CLEARANCE FOR ROAD BRIDGES AND OTHER**  
**STRUCTURES OVER NAVIGABLE INLAND WATERS**

**I. AUTHORITY:**

- A. Republic Act 9993 (The Philippine Coast Guard Law of 2009)
- B. Rule 3 (e) 1.f of the Implementing Rules and Regulations of R.A 9993

**II. REFERENCES**

- A. IALA Recommendation O-113 (The Markings of Fixed Bridges and Other Structures Over Navigable Waters – Edition II)
- B. IALA Maritime Buoyage System (MBS)

**III. PURPOSE:**

This Circular prescribes the policies on the construction, establishment, alteration or modification of road bridges and other structures over navigable waters of the Philippines to promote safety of life and property in the course of navigation.

**IV. SCOPE:**

This Circular shall apply to all road bridges and other structures over navigable waters such as bays, rivers and lakes subject to the jurisdiction of the Philippines.

**V. DEFINITION OF TERMS:**

For the purpose of this Circular, the following words and phrases are defined:

- A. **Bridge** - a structure constructed over the navigable inland waters of the Philippines including causeway, footbridges, railways, approaches, fenders, recreational structures and other appurtenances thereat.

- B. **IALA** – International Association of Lighthouses Authorities. A non-profit, non-governmental international technical association which aims to harmonize aids to navigation worldwide to ensure that the movements of vessels are safe and harmless to the marine environment.
- C. **IALA Buoyage System Region B** – is also called red to starboard, because red buoys are on the starboard of the channel and green buoys are on the port when entering a harbor (revised when departing).
- D. **Height of Vessel (HV)** - is the data taken from all the vessels using the waterway where the road bridge is to be constructed. It is the highest measurement measuring the distance from the lowest draft up to the main mast of vessel.
- E. **Navigational Span** – the horizontal distance measured between two (2) vertical posts or road bridges and other structure over navigable inland waters.
- F. **Navigable Waters** - all waterways, including rivers, lakes and basins which are used by fishermen in going to their fishing grounds, waters along the routes normally used by vessels in going from port to port and other bodies of water as determined by the PCG subject to the jurisdiction of the Philippines.
- G. **Vertical Clearance** - the vertical distance measured from the bottom of the bridge to the highest water level

#### V. GENERAL PROVISIONS

- A. The construction, establishment, alteration or modification of all road bridges and other structures over navigable waters such as bays, rivers and lakes has to be referred to the PCG for issuance of appropriate clearance confirming that the structure would not be hazardous to navigation in order to ensure safe passage of all vessels and watercraft.
- B. The location, site preparation and completion of the construction, establishment, alteration and modification of structures shall not destroy, affect or cause damage to any marine environment such as coral reefs, mangrove areas and the likes.
- C. Vertical clearance provided in the design construction for road bridges and other structures over navigable inland waters shall be computed as follows to allow safe passage of vessels or watercraft and other sea going vessel as approved by the concerned District Commander:

$$\text{Vertical clearance} = \text{HWL} + \text{HV} + \text{K}$$

Wherein: HWL – is the highest water level recorded within the AOR

HV – height of vessel

K – is a constant 1 meter allowance

- D. The installation and maintenance of all applicable navigational lights and marking in the navigable approaches of a road bridge which is an inherent obligation of the contractor, have to be in conformity with the International Association of Lighthouse Authorities (IALA) Bouyage System of Region B concurred by the PCG District Commander. Hereunder are the basic requirements in marking the best point/s of passage:

1. Colours: Red to Starboard and Green to Port

## 2. Marking by Day:

- a. To starboard - a panel showing a solid green equilateral triangle point upwards
- b. To port - a panel showing a solid green square
- c. The 'best point(s) of passage' may be indicated by a circular panel with red and white vertical stripes.
- d. If there is more than one navigable channel under the bridge, the same system should be used for each channel.
- e. Bridge spans other than those marked by red and green lateral marks, such as spans to be used by small craft, may be indicated by special yellow marks in accordance with the IALA MBS.

## 3. Marking by Night

- a. Red or green lights may be used to mark the navigable limits of the channel in accordance with the IALA MBS.
- b. If navigation is possible in the full passage span, the lights should be located on the bridge piers. If navigation is possible only in a part of the span, the lights should be located under the span, or on buoy and beacons in the water so placed as to indicate the limits of the navigable channel.
- c. The 'best point(s) of passage' may be indicated by a flashing white light or lights located under the span and exhibiting a safe water mark character.
- d. If there is more than one navigable channel under the bridge, the same system should be used for each channel.
- e. Bridge spans other than those marked by red and green lateral, such as spans to be used by small craft, may be indicated by special yellow lights in accordance with the IALA MBS.
- f. Retro-reflective material of appropriate colour may be used to enhance night time recognition of daymark panels.

4. 'No Entry' marks, as defined by the PCG, may be considered to inform mariners that passing under a span or one side of the span is forbidden.

E. The District Commander has the right to disapprove for the issuance of clearance of proposed project if found to have discrepancy with the abovementioned policies/guidelines. However, the contractor maybe allowed to revise the proposed plan and to re-apply for the issuance of clearance.

## VI. RESPONSIBILITIES OF CONTRACTOR

1. Shall submit the proposed plan to the PCG District Commander having jurisdiction over the area wherein the structure will be constructed for review and evaluation prior the issuance of PCG clearance.
2. Ensure that the location of the proposed establishment of bridge shall not destroy, affect or cause damage to the marine environment.

3. Ensure that all applicable navigational lights and markings in the navigable approaches of the road bridge will be installed and in conformity with the IALA Bouyage System of Region B.
4. Ensure that each navigational span over the navigable inland waters shall be lighted and/or marked accordingly so as to be visible from the approaching vessel.(Annex B)
5. Shall provide the schedule of works to the PCG in order to monitor the construction/rehabilitation of bridge.

## VII. FEES AND CHARGES

Clearance fee shall be 0.1 percent (0.1%) of the total contract price of the proposed project except for government projects.

## VIII. FINES AND PENALTIES

A violation of this memorandum circular is subject to the following penalties:

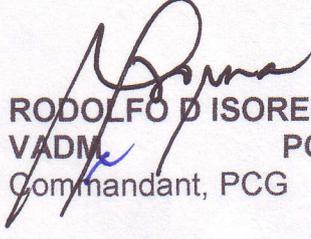
1. Vertical Clearance – the contractor shall shoulder all the expenses for the alteration and/or reconstruction of the structure and a fine of two percent (2%) of the original total contract price;
2. Navigational Span – the contractor shall shoulder all the expenses for the alteration and/or reconstruction of the structure and a fine of two percent (2%) of the original total contract price;
3. Marine Environment – the contractor shall pay for the rehabilitation of the damages incurred to be determined by the concerned PCG District Commander in coordination with the Department of Environment and Natural Resources;
4. Aids to Navigation
  - 4.1 Non-installation – the contractor shall be obliged to install appropriate aids to navigation and a fine one percent (1%) of the total contract price.
  - 4.2 Inappropriate aids to navigation – the contractor shall be obliged to remove immediately and replace temporarily the existing aids to navigation while waiting for the appropriate one in conformance with the IALA Buoyage System and a fine of two percent (2%) of the total contract price.

## IX. REPEALING CLAUSE

This Memorandum Circular repeals MC Number 05-97 dated 13 October 1997.

**X. EFFECTIVITY CLAUSE**

This Memorandum Circular shall take effect fifteen (15) days after completion of publication in the Official Gazette or in a newspaper of general circulation.

  
**RODOLFO D ISORENA**  
VADM PCG  
Commandant, PCG

**Approved by:**

  
**HON. JOSEPH EMILIO AGUINALDO ABAYA**  
Secretary, DOTC

