

# Domestic Commercial Vessel (DCV)

## ADVISORY NOTE



DCV-A-015

**Date:** 30 January 2015

**Topic:** Fire protection systems and fixed and portable appliance inspection and servicing on Domestic Commercial Vessels - roles and responsibilities.

**Issue:** An investigation into a recent fire on a ferry with 39 passengers off Williamstown near Melbourne indicated that further guidance may assist vessel owners, masters and crew as to the responsibilities for fire safety generally and more specifically for the inspection and servicing of fixed installations and portable fire extinguishers on board Domestic Commercial Vessels (DCV's). As a result of this investigation, AMSA has committed to promulgating information widely to increase awareness of the requirements and the reasoning behind them. AMSA will promulgate the report of the incident once a final copy from the investigators becomes available.

**Advice:** This advisory notice reminds vessel operators of the requirements for procedures for fire system and appliance inspection and servicing. It also provides guidance as to when DCV crew members may undertake the inspection of fixed and portable fire extinguishers. All owners of DCV's are obliged to implement and maintain a safety management system that ensures that the vessel and the operations of the vessel are, so far as reasonably practicable, safe. All masters of all DCVs are obliged to implement and comply with the safety management system (SMS) for the vessel and the operations of the vessel.

Fire safety on vessels is not guaranteed by third party periodic inspections of systems if other aspects of fire safety and prevention are not adequately maintained. As part of their safety management system owners need to ensure there are methodical and thorough checks on machinery and systems by competent people, including checks of essential safety items such as fire flaps, regular fire drills and good vessel maintenance (keeping areas clean, looking after hazardous materials properly etc.).

The servicing and maintenance requirements for fire protection systems and appliances for DCVs are in the *National Standard for Commercial Vessels - Part C, Section 4 – Fire Safety* (NSCV C4). The required outcomes of Chapter 13 of NSCV C4 are that:

- The effectiveness of all firefighting equipment must be maintained over the life of the vessel;
- The reliability of items of fire equipment must not reduce over time; and
- Persons or organisations engaged in the servicing of fire equipment must establish and implement appropriate management processes to control the quality of servicing outcomes and allow these outcomes to be verified.

These outcomes may be satisfied if fire equipment is serviced in accordance with *Australian Standard 1851-2012 Routine Service of fire protection systems and equipment* (AS1851).

AS1851 provides a systematic and uniform base for the implementation and administration of inspection, test, preventative maintenance and survey programs applicable to fire protection systems and equipment. The objective of AS1851 is to maximize the reliability of fire protection systems and equipment such that the systems and equipment meet the requirements of the relevant design, installation and commissioning standards and are likely to continue to do so until the next scheduled activity.

AS1851 is used to determine these requirements for most commercial applications throughout



Australia including industrial, primary industries, government and commercial uses and is well understood and accepted nationally. Requirements for DCV's, including servicing frequency for vessels, therefore align with similar regulatory requirements nationally.

Where fixed fire protection systems and portable extinguishers are fitted that require six (6) and twelve (12) monthly inspections, AS1851 requires that these inspections are to be carried out by a qualified fire service technician in order for them to be performed correctly. The certificates issued by a technician as well as the methodical, vessel specific checks by operators can ensure that the requirements are met.

Monthly inspections of fixed firefighting systems as defined in AS1851, may be carried out by suitably experienced or qualified members of a DCV's crew. When determining who is competent to do so, the operator must satisfy themselves that the crew members undertaking the inspection have sufficient knowledge and understanding of the system to carry out the tasks specified in the standard and must ensure that the crew log the inspections in the manner laid down in AS1851 and the *National Standard for Commercial Vessels - Part E - Operations* (sections 10 and 11 of Schedule 1).

Owners, masters and crew have general safety duties to ensure that the vessel operation is so far as is reasonably practical, safe which includes ensuring the validity, safe operation and maintenance of marine safety equipment. These duties extend to fire prevention and dealing with a fire on a vessel.

Owners have general safety duties to provide instruction, training or supervision to people on board the vessel as is necessary to ensure their safety. As part of the risk assessment process for this system, equipment inspection and servicing schedules may specify what level of daily, monthly and other checks are required to ensure the operation remains safe. One feature of the recent incident was that everyone assumed checks were being carried out by others- when it came time to extinguish the entirely preventable blaze, fire flaps were seized and could not seal the space adequately; the mechanism for activating the fixed system into the space failed and crew were not sufficiently aware of procedures to contain the fire quickly. Additionally, no attempt was made by the crew to use portable appliances as a first response measure.

Expert checks and a well implemented SMS will reduce the likelihood of a fire occurring on a vessel and where one does start, ensure it can be extinguished without disabling the vessel or endangering the master, crew or passengers.

AMSA is committed to aligning regulatory requirements with national best practice and to taking lessons from incidents and applying them to improve safety for Australia's domestic commercial vessel fleet.

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