



Marine Notice 20/2010

Hot Work and Safety

The purpose of this Marine Notice is to remind masters and operators of the need to have an effective hot work procedure in place.

The risks associated with hot work have been highlighted by two recent incidents where the lack of effective controls resulted in the death of one seafarer and serious injuries to another.

The term “hot work” is used to describe operations where heat and/or spark(s) may be produced and is not limited to welding and gas cutting operations and includes operations such as grinding and abrasive cutting. Hot work presents two specific hazards:

- open flames or flying sparks that are able to ignite any flammable gases and vapours (that are produced by liquids and solids); and
- the hot work itself may produce toxic fumes and gases.

Hot work should only be performed under strict controls and these should be incorporated in the hot work procedure adopted within the ship’s Safety Management System. Controls may include the completion of a hot work permit and associated risk assessment processes. This should consider measures such as:

- hot work being undertaken only by people who have had relevant training and who are deemed competent and for undertaking hot work;
- the identification and, where necessary, the removal of flammable or explosive, vapours, liquids and materials in the vicinity of the work, and in related adjacent spaces. This includes

flammable vapours and liquids that may be in pipe work or containers (such as drums);

- isolation or protection of plant equipment in the area that may be affected by hot work and give risk to additional risks;
- testing the atmosphere in the vicinity of hotwork or related adjacent spaces for the presence of gases, flammable gases and vapours;
- provision of a fire watch and fire fighting equipment in the vicinity of the work and in related adjacent spaces
- the use of appropriate clothing and Personal Protective Equipment;
- the use of suitable tools, equipment and materials to be used for the work; and
- the establishment of emergency procedures to be used in the event of a fire

When a vessel is in port there may also be a requirement to inform the port authority where and when the hot work is being carried out.

AMSA encourages masters and operators of ships to verify that they have an effective hot work procedure in place and ensure that it is complied with. Failure to do so increases risks to safety of the crew and the environment.

The need to have an effective hot work system is contained within the objectives of the ISM Code to:

- i. provide a safe working environment; and
- ii. establish safeguards against all identified risks.

The Code of Safe Working Practice for Australian Seafarers - Section 13 sets out "best practice" for hot work procedures on ships. This code is available at: www.amsa.gov.au/Shipping_Safety/Codes_Manuals_and_Reports/Code_of_Safe_Working_Practice_for_seafarers/index.asp

Where it is established that a ship does not comply with this requirement through the lack of procedures, or lack of familiarity of procedures, AMSA may take action under port State control or flag State control procedures.

Graham Peachey
Chief Executive Officer
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Australian Maritime Safety Authority
GPO Box 2181
CANBERRA ACT 2601

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