



AUTORIDAD DEL CANAL DE PANAMÁ
EXECUTIVE VICE PRESIDENCY FOR OPERATIONS

3654-A (OPXI)
V. 4-2-2015

ADVISORY TO SHIPPING No. A-28-2018

August 14, 2018

TO : All Shipping Agents, Owners, and Operators

SUBJECT: Revision of the Requirements for Hot Work Performed On Board Vessels

The Panama Canal Authority (ACP) has revised its requirements for allowing hot work to be performed on board vessels while in waters under its jurisdiction. Among the modifications is the prerequisite that the Marine Chemist issuing the certificate be part of an organization compliant with DGNTI-COPANIT ISO 17020, which is the technical standard that outlines the criteria to be adhered to by organizations that perform inspections in the Republic of Panama.

Another modification is the inclusion of a section with definitions of key terms used throughout the document. The role and responsibilities of the Marine Chemist and the Competent Person are outlined herein.

The prohibitions are now consolidated under one section of the document. Therefore, the following prohibitions are now part of the list:

- performing work beyond the approved scope,
- moving the vessel to perform work at a site other than the inspection site, and
- commencing hot work without a Marine Chemist Certificate or the ACP site approval.

This list has been expanded to include the prohibition for hot work to be performed on board flammable cryogenic liquid carriers, unless it is required under specific circumstances (i.e. for Canal operations or due to an incident while under Panama Canal pilotage).

A provision has been introduced to allow for Exemption Certificates for hot work to be performed on a given structure or part of a vessel when certain conditions are met. Exemption Certificates may be valid for up to 30 days, during which time a Marine Chemist Certificate for the routine jobs listed in the areas designated as safe for hot work, will not be required.

Finally, the attached document also explains important aspects of this process, such as the duration of the Marine Chemist Certificate, the role of the Competent Person in maintaining the validity of the certificate, and the ACP's prerogative to audit both parties to ensure proper maintenance of conditions for performing hot work.

The revision to the requirements is attached, and supersedes Section 19 of Notice to Shipping N-01-2018, Vessel Requirements.

Inquiries on these requirements must be forwarded to the following address:
cargoinfo@pancanal.com

ORIGINAL SIGNED

Esteban G. Sáenz
Executive Vice President
for Operations

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Hot Work Performed On Board Vessels

- a. **Applicability:** These requirements apply to hot work on board the following vessels while in Panama Canal waters, which includes anchorages and marine terminals: tankers, and vessels other than tankers that have carried liquefied gas, or flammable liquid, or combustible liquid in bulk as fuel or cargo, or that have carried cargoes that can produce hazardous atmospheres.
- b. **Definitions:** The following definitions apply:
- (1) **Hot Work:** any type of work that involves open flames, generates sparks, or rises the temperature of the intervened materials. Some examples are welding, grinding, drilling, and cutting.
 - (2) **Marine Chemist:** A chemist with the professional and practical qualifications to determine if hot work can be safely performed on board ships. The Marine Chemist shall be from an organization compliant with DGNTI-COPANIT ISO 17020; hence, independent of the vessel, of the party performing the hot work, and of the Panama Canal.
 - (3) **Competent Person:** An employee of a shipyard or ship repair company with knowledge and training similar to a Marine Chemist with respect to hot work on board ships. The Competent Person is responsible for verifying that the conditions set forth on the Marine Chemist Certificate are maintained, and for contacting the Marine Chemist should these conditions change at any time prior to or during the work.
 - (4) **Marine Chemist Certificate:** A document issued by a Marine Chemist that describes the areas verified, the tests performed, and the standard safety designations for the hot work to be performed.
 - (5) **Exemption Certificate:** A certificate issued by a Marine Chemist indicating the areas on board a ship where routine hot work can be performed without the need of a Marine Chemist Certificate. The exemption certificate is issued after an inspection by the Marine Chemist in order to confirm that areas included in the certificate are not confined spaces, void spaces, or do not pose a risk of accumulating flammable or toxic gases prior to or during hot work.
 - (6) **Confined Space:** A space with no natural ventilation and with restricted entry and exit, but large enough for a person to enter in order to perform work. This space is not designed to be continuously occupied and may exhibit one or more of the following characteristics: a dangerous atmosphere, a material or design (sloping floor) that can entrap a person, or any other recognized danger that may hinder health or safety.
 - (7) **Tanker:** A ship built or modified for the transport of liquids or liquefied gases in bulk. The products transported on these vessels are regulated under MARPOL Annex I, the IBC Code, or the IGC Code.
 - (8) **Flammable Liquid:** A liquid with a closed-cup flashpoint at or below 60 °C.
 - (9) **Combustible Liquid:** A liquid with a closed-cup flashpoint above 60 °C.

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c. **Prohibitions:** The following actions are prohibited:

- (1) Submittal of a Marine Chemist Certificate from an organization not certified to DGNTI-COPANIT ISO 17020.
- (2) Commencing hot work without receiving a worksite authorization from the ACP.
- (3) Hot work beyond the scope described on the Marine Chemist Certificate.
- (4) Hot work on a vessel that has been moved after the inspection, even if its trajectory brings it back to the original site of the inspection.
- (5) Hot work on board flammable cryogenic liquid carriers, unless it is required under specific circumstances (i.e. for Canal operations or due to an incident while under Panama Canal pilotage).

d. In order to ensure safe conditions, before any hot work is performed in fuel tanks, cargo tanks, void spaces, hydraulic pipes, fuel pipes, accommodations, or any other hollow structure on board ships in Canal waters that could result in a fire or an explosion due to the accumulation of flammable gases or vapors, a written request for authorization of the site where the ship is located, accompanied by a Marine Chemist Certificate approving the intended hot work, shall be forwarded by email to the Canal Port Captain Office, Balboa at opts-cp1@pancanal.com, or Cristobal at optn-cp1@pancanal.com, as well as to cargoinfo@pancanal.com.

e. Notwithstanding the above, the requester may apply for an Exemption Certificate for following specific instances:

- (1) Shiplide Spaces // deck of workboats // flat barge:
 - i) It maintains an oxygen supply between 19.5% and 22.0% by volume.
 - ii) It is not subject to the presence or accumulation of flammable, combustible, or toxic liquids, vapors, or gases.
 - iii) It is not adjacent to spaces or tanks that do require a Marine Chemist's Certificate.
- (2) Shiplide Structures:
 - i) The structure is not subject to the accumulation of flammable, combustible, or toxic liquids, vapors, or gases.
 - ii) It is not adjacent to spaces or tanks that do require a Marine Chemist's Certificate.
- (3) Off-the-Vessel Structures (chains, anchors, etc.):
 - i) The structure is not subject to the accumulation of flammable, combustible, or toxic liquids, vapors, or gases.

This Exemption Certificate shall be issued by a Marine Chemist and forwarded to the email addresses listed above in paragraph d, and will be valid for 30 days or until the work has been completed, whichever is less.

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- f. For the ACP to consider requests for authorization of the worksite, the Marine Chemist Certificate shall be legible and shall include minimally the following:
- (1) A unique numeric or alphanumeric identifier for the Certificate.
 - (2) Name, SIN and/or IMO numbers of the vessel.
 - (3) Type of vessel.
 - (4) Vessel's owner, agent, or responsible party.
 - (5) Requester's name, telephone number, and email address.
 - (6) Vessel's actual location. The vessel must not be moved after the inspection.
 - (7) A description or sketch of the scope of work to be performed.
 - (8) Results of tests performed to determine the atmosphere within the relevant void space, hollow structure, confined space, and/or adjacent space. As a minimum, measurements of oxygen, combustible, and toxic gases shall be reported for each space.
 - (9) Date and time inspection was completed.
 - (10) Frequency of required re-inspections by a Competent Person.
 - (11) Conditions under which the Marine Chemist shall be consulted or recalled.
 - (12) Any additional requirements, limitations or restrictions, such as fire watch, ventilation, or lock out & tag out, if any.
 - (13) The applicable NFPA 306 Standard Safety Designation(s).
 - (14) The Marine Chemist's name, signature, and license number.
 - (15) Signature for receipt of the Marine Chemist Certificate by the requester or authorized representative, signifying the understanding of the conditions, and the limitations and requirements for maintaining conditions under which it is issued.
- g. The ACP will reject requests if the Marine Chemist Certificate does not comply with the above.
- h. The Marine Chemist Certificate may remain valid until the completion of the work to be performed or until any of the original conditions changes, whichever occurs first.
- i. The Competent Person must re-inspect worksite conditions and report to the Marine Chemist at a frequency established by the Marine Chemist. The ACP will randomly request proof of this reporting to either or both parties. If parties fail to provide evidence of compliance with this requirement, the ACP will void the authorization and the hot work will be stopped until the deficiencies are corrected to the satisfaction of the ACP.
- j. The Marine Chemist Certificate approving the hot work, as well as the authorization of worksite issued by the ACP, shall be securely posted in a conspicuous location aboard the vessel prior to the work commencing.
- k. The authorization of the worksite shall not be construed as an endorsement by the ACP of the Marine Chemist Certificate.

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I. Failure to comply with these requirements may result in one or more of the following:

- (1) Invalidation of approved worksites
- (2) Non-approval of worksites
- (3) Sanctions
- (4) Fines