

TECHNICAL AND REGULATORY NEWS No. 19/2018 – Statutory

# IS THE BALLAST WATER TREATMENT SYSTEM INSTALLED ON YOUR VESSEL ALSO TYPE APPROVED BY THE USCG?

Relevant for ship owners and managers, suppliers and flag states.

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This question is relevant if a BWTS (ballast water treatment system), installed before the date of type approval by the USCG, complies with the USCG type approval. This statutory news discusses the specifications that a BWTS must have when installed on a vessel operating in US waters.

There are currently 65 types of BWTS models that are accepted as an AMS (Alternate Management System) by the USCG. An AMS is basically a temporary acknowledgement of a flag (IMO) type approval by the USCG. An installed BWTS (AMS) can be used in US waters (without a USCG type approval) for a limited period of time.

When a manufacturer of a BWTS applies for the system to be an AMS, they also commit to proceed with the type approval testing per the USCG requirements.

Currently, there are ten USCG type approved BWTS. By the end of 2018, there will probably be 17 type approved systems in total. DNV GL has been involved (appointed as Independent Laboratory by the USCG) in ten of those systems for the type approval testing.

As a general observation, our experience is that for most systems going through the USCG type approval testing, changes are made to the BWTS (or its operating procedures), compared to the model originally tested under the requirements of the BWM Convention. This does not mean that the BWTS was poorly tested and certified in the flag (IMO) context, but changes have been made to also comply with the USCG requirements.

Examples of such changes are:

- The dose for treatment (e.g. amount of active substance [TRO] or UV-intensity)
- Automatic flow regulation to handle turbid (low UV-transmittance) water
- Electric components to comply with environmental requirements (ship's working environment, e.g. vibrations)
- Software updates, for instance regarding control and monitoring, dosing philosophy or details for the treatment records
- Use of alternative components, where "equivalence" needs to be justified
- Revised OMSM (operation, maintenance and safety manual)



The question then becomes how this will affect a BWTS that was installed on a specific vessel before the USCG type approval of such a system was completed. To answer this, it is assumed that the vessel is operating in US waters and uses the BWTS (under the AMS).

Does the USCG type approval apply to this vessel's installation the same day the type approval is granted by the USCG? The general answer is: no.

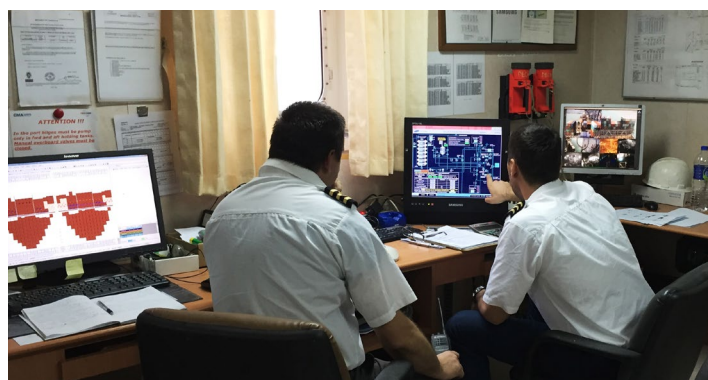
It is understood that a vessel has time until the AMS (vessel) expires for an installation (five years after the vessel's compliance date or extended compliance date). Before such a compliance date, the vessel shall be provided with a copy of the USCG type approval certificate and an updated nameplate on

the BWTS. The nameplate shall state the USCG type approval reference number and is subject to the USCG vessel inspection (see NVIC 01-18 from 1 March 2018 by the USCG).

Before the nameplate of the BWTS is changed, it is of paramount importance that the BWTS model installed is identical to the one that was type approved.

Here lies a great share of responsibility for the manufacturer of the BWTS to ensure that components, software, operating procedures and documentation are in accordance with the USCG type approval certificate.

In most cases, an upgrading kit is needed. It should be documented on board what has been done, during such upgrading, before the USCG type approval certificate and nameplate are awarded.



No installation/initial survey of the BWTS is required by the USCG and compliance, to DNV GL's understanding, will be verified in the USCG vessel inspection scheme.

There are today more than 5,000 BWTS installed before the USCG type approval, and many of them will eventually need the USCG type approval certificate for discharge in US waters.

### Recommendations

DNV GL recommends that all ship owners request a statement from the BWTS manufacturer to confirm that a BWTS, installed in the past on one of its vessels and now given a new nameplate referring to the USCG type approval, is "identical" to the model that was USCG type approved.

### References

- [AMS \(Alternate Management Systems\)](#)
- [USCG type approved systems](#)
- [USCG's NVIC 01-18](#)
- [USCG nameplate requirements \(46 CFR §162.060-22\)](#)

### CONTACT

For customers:  
DATE - Direct Access to Technical Experts via [My Services](#) on Veracity.  
Otherwise:  
Use our [office locator](#) to find the nearest DNV GL maritime office or contact [BWM@dnvgl.com](mailto:BWM@dnvgl.com)