

**Standards for Living Organisms in Ships' Ballast Water Discharged in U.S. Waters (33 CFR Part 151 and 46 CFR Part 162) March 23, 2012.**

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**DEFINITIONS**

1. Does the definition of "Exclusive Economic Zone" encompass the joint US EEZ and the Canadian EEZ and, if so, how does this affect BWM requirements for vessels transiting from Canada to the US across the EEZ, but within 200 nm of land? (Revised August 17, 2012)

Yes, in the Preamble of the March 23, 2012 publication of the Final Rule, the omission of the reference to the Canadian equivalent was a technical error, as the Coast Guard did not intend to change the applicable definition of EEZ in the final rule. In the Discussion of Comments and Changes/Summary of Changes from the NPRM/Applicability section (section V.A.3), the Coast Guard revised our response to comments about non-seagoing vessel applicability by removing the words "U.S. Exclusive Economic Zone (EEZ)" and replacing them with "U.S. Exclusive Economic Zone and Canadian equivalent (EEZ; see 16 U.S.C. 4702)". This correction was needed to align with the existing definition of EEZ in 33 CFR 151.1504 and to be consistent with the definition of EEZ as provided for in the Nonindigenous Aquatic Nuisance Prevention and Control Act of 1990.

Vessels that do not operate outside the EEZ as describe above must operate exclusively within one Captain of the Port (COTP) zone in order to be exempt from meeting the ballast water discharge standard. If the vessel departs one COTP zone when it departs U.S. jurisdictional boundaries it is not operating exclusively within one COTP zone.

Additionally, under this regulation the U.S. Coast Guard defines a seagoing vessel as a commercial vessel that operates beyond the boundary line established by 46 CFR part 7. For vessels operating solely within the Great Lakes, and the Canadian EEZ as described above, the ballast water management requirements in 33 CFR 151.2025 do not apply as these vessels are understood to be non-seagoing vessels under this regulation.

**APPLICABILITY**

2. What vessels will be regulated under this final rule?

This final rule applies to two groups of vessels discharging ballast water into waters of the U.S. The first group is comprised of those vessels currently required to conduct exchange. The second group, which previously was not required to conduct exchange, is comprised of seagoing vessels that do not operate beyond the U.S. EEZ, that take on and discharge ballast water in more than one Captain of the Port (COTP) Zone, and are greater than 1,600 gross register tons (GRT) (3,000 gross tons (GT) International Tonnage Convention (ITC)).

As directed by Congress in NISA, certain vessels will continue to be exempt from requirements to install and operate Coast Guard approved ballast water management systems:

- Crude oil tankers engaged in coastwise trade

- Any vessel of the U.S. Armed Forces (as defined in the Federal Water Pollution Control Act) that is subject to the Uniformed National Discharge Standards for Vessels of the Armed Forces
- Any warship, naval auxiliary, or other vessel owned or operated by a foreign state and used, for the time being, only on government and non-commercial service.

**BALLAST WATER MANAGEMENT REQUIREMENTS**

3. Will vessels currently required to conduct ballast water exchange be required to install ballast water management systems (BWMS)? If so, which vessels, and when?

Yes, the final rule applies to those vessels currently required to conduct ballast water exchange; see FAQ #2 above. Vessels may continue to conduct ballast water exchange until the Implementation Schedule date specified in 33 CFR 151.2035(b) becomes applicable to their construction dates. Ballast water exchange is only a temporary option until the first drydocking after the applicable 2014 or 2016 date, after which a vessel is required to meet the discharge standard.

4. It is entirely infeasible for unmanned deck barges that are towed more than 200 nm offshore to either conduct exchange or install treatment systems due to the fact that they are unmanned. While the preamble language makes it seem as though it was not the Coast Guard's intent to require treatment systems to be installed on these vessels (thus forcing them out of service), will the Coast Guard specify in its guidance that these vessels are not covered by the requirement to install treatment systems?

The applicability requirements of the final rule do not include unmanned deck barges towed more than 200 miles offshore that contain permanent ballast or are otherwise not designed to conduct exchange or are not safe to board while underway. As a reminder, 33 CFR 151.2015 (c)(1) exempts “seagoing vessels that operate in more than one COTP zone, do not operate outside of the EEZ, and are less than or equal to 1,600 gross register tons or less than or equal to 3,000 gross ton (International Convention on Tonnage Measurement of Ships, 1969.” If an unmanned deck barge does meet the applicability requirements of the final rule, but no suitable BWMS is type-approved or available in time to meet the applicable dates in the Implementation Schedule (33 CFR 151.2035(b)), the owner may apply for an extension in accordance with 33 CFR 151.2036.

5. Instead of carrying an invoice for dock water/municipal water taken on in ballast tanks, is it acceptable for vessels to make an entry in the ship's log detailing the time, date, location, etc. of municipal water loaded?

Under the final rule, only water from a U.S. public water system is acceptable to meet the requirements. 33 CFR 151.2025 (a)(2) requires a receipt, invoice or other documentation from the PWS indicating that water came from that system. Other documentation could include a letter from the PWS, a formal stamp or notation in the vessel's logbook from the PWS or some other formal means of documentation from the PWS.

6. 33 CFR 151.2036 – “Extension of compliance date” states that requests for extensions must be submitted no later than 12 months before the scheduled compliance date listed in 33 CFR 151.2035(b). Does this mean the “keel-laying” date, the delivery date of the vessel, the first scheduled dry-docking date, or the date when the vessel will begin operating in U.S. waters?

The compliance date for new build vessels is the delivery date of the vessel. The compliance date for existing vessels is based on the vessel’s first scheduled dry-docking date after the date specified in table 33 CFR 151.2035 (b).

New build and existing vessels are classified by the construction date. The definition of “Constructed” (33 CFR 151.2005(b)) explains how to determine the “construction date” of the vessel:

- (1) The keel of a vessel is laid;
  - (2) Construction identifiable with the specific vessel begins;
  - (3) Assembly of the vessel has commenced and comprises at least 50 tons or 1 percent of the estimated mass of all structural material, whichever is less; or
  - (4) The vessel undergoes a major conversion.
7. Will the Coast Guard need to approve Ballast Water Management Plans?

No, but Ballast Water Management Plans must continue to be maintained and will include details of BWMS installed on vessel. The Coast Guard will recognize that BW Management Plans approved by an IACS member will be considered as acceptable as long as the detailed reporting requirements and procedures for ports and place in the United States where the vessel may visit are provided. 33 CFR 151.2050 (g)(6)

#### **ALTERNATE MANAGEMENT SYSTEM (AMS)**

8. Is an AMS determination the same as type-approval?

No, an AMS determination is intended as an interim measure to allow foreign type-approved BWMS to be used on a vessel for up to 5-years after the vessel is required to comply with the BWDS, which will allow the BWMS vendor or manufacturer sufficient time to obtain U.S. type approval.

9. When can BWMS vendors submit an application for AMS determination to the Coast Guard?

AMS determination requests can be submitted to the Coast Guard now. To facilitate the submission of these requests, the Coast Guard policy “Obtaining An Alternate Management System Determination For a Foreign Type-Approved Ballast Water Management System” dated 15 June 2012, should be consulted for application guidance. The policy letter can be found at: <http://www.uscg.mil/hq/cg5/cg522/cg5224/bwm.asp>.

10. Regarding AMS determination requests and type-approval applications, will the Coast Guard establish a queue based on chronology of submission, regardless of the quality of the application?

No, AMS determination requests and type approval applications that do not provide the required information or that lack sufficient data will not be acted upon by the Coast Guard. The Coast Guard will notify applicants regarding the suitability of their applications within 30 days of receipt.

11. For an AMS determination, to what extent does testing already completed for foreign type approval need to be consistent with the EPA Environmental Technology Verification (ETV) Program protocols for testing BWMS?

To be eligible for AMS determination, a BWMS must have been previously type approved by a foreign Administration in accordance with the International Convention for the Control and Management of Ships' Ballast Water and Sediments 92004), including the relevant guidelines adopted by the IMO. Consistency with the ETV protocols is not a requirement for AMS determination.

12. Under 151.2026(a)(5), a type approval application as described in 46 CFR 162.060-12 must be submitted in association with an application for AMS determination. Does this mean the application must meet the requirements of 46 CFR 162.060-14 – “Information requirements for the BWMS application”?

No, the application to be submitted in conjunction with a request for AMS determination must be consistent with the information specified in 46 CFR 162.060-12(a): the data and information developed for the foreign type approval along with a concise but thorough explanation of how the data and information meets or exceeds the requirements of 46 CFR 162.060 regarding design, material, manufacture and ability to meet the BWDS requirements.

13. To what extent will changes to a BWMS which has been type approved by a foreign administration be permitted when applying for AMS determination? Will the conditions at 162.060-16 “changes to an approved BWMS” apply?

Changes to type approved systems are not allowed without the concurrence of the approving authority. A BWMS that does not correspond to the particulars of the certificate would not be an approved system, and would not be eligible for AMS determination. Manufacturers considering changes to BWMS prior to AMS determination must clear all such changes with the original approving authority prior to submission of an application for AMS determination.

**14. What will be the bases for denial of a request for AMS determination?**

To be eligible for AMS determination the BWMS manufacture must follow the requirements of 33 CFR 151.2026. Included in the requirements for AMS approval, the BWMS must have been type approved by a foreign Administration in accordance with the IMO ballast water management convention and its relevant implementing guidelines. Type approval dossiers that do not conform to the procedures and criteria in the G8 and G9 guidelines adopted by the IMO will be at risk for denial of AMS status. Further information is available in CG-OES Policy Letter No. 12-01, available at: <http://www.uscg.mil/hq/cg5/cg522/cg5224/bwm.asp>.

**BALLAST WATER DISCHARGE STANDARD****15. What is the final rule's ballast water discharge standard?**

The Coast Guard's final rule establishes the phase-one ballast water discharge standard, which is the same as that adopted by the International Maritime Organization in 2004:

(a) Vessels employing a Coast Guard-approved ballast water management system (BWMS) must meet the following BWDS by the date listed in 33 CFR151.2035(b):

(1) For organisms greater than or equal to 50 micrometers in minimum dimension: discharge must include fewer than 10 organisms per cubic meter of ballast water.

(2) For organisms less than 50 micrometers and greater than or equal to 10 micrometers: discharge must include fewer than 10 organisms per milliliter (mL) of ballast water.

(3) Indicator microorganisms must not exceed:

(i) For Toxicogenic *Vibrio cholerae* (serotypes O1 and O139): a concentration of less than 1 colony forming unit (cfu) per 100 mL.

(ii) For *Escherichia coli*: a concentration of fewer than 250 cfu per 100 mL.

(iii) For intestinal enterococci: a concentration of fewer than 100 cfu per 100 mL.

**IMPLEMENTATION SCHEDULE****16. What is the implementation schedule for approved ballast water management methods?  
**(Revised August 7, 2012)****

The rule includes an implementation schedule that gives vessel owners and operators enough time to install necessary equipment without causing significant disruptions to maritime commerce. The Coast Guard and IMO determined that vessel construction dates and ballast water capacity were the appropriate ways to implement the changes. The Coast Guard chose Dec. 1, 2013, to align the Final Rule with the next EPA Vessel General Permit.

Implementation Schedule for Approved Ballast Water Management Methods			
Vessel's ballast water capacity (in cubic meters)		Date constructed	Vessel's compliance date
New vessels	All	On or after Dec. 1, 2013	On Delivery
Existing vessels	Less than 1,500	Before Dec. 1, 2013	First scheduled drydocking* after Jan. 1, 2016
	1,500-5,000	Before Dec. 1, 2013	First scheduled drydocking* after Jan. 1, 2014
	Greater than 5,000	Before Dec. 1, 2013	First scheduled drydocking* after Jan. 1, 2016

*\* Drydocking means hauling out of a vessel or placing a vessel in a drydock or slipway for an examination of all accessible parts of the vessel's underwater body and all through-hull fittings.*

**ADDITIONAL REQUIREMENTS -- REMOVAL OF FOULING ORGANISMS AND BALLAST WATER MANAGEMENT PLAN**

17. What is the enforcement date for the requirement to incorporate fouling maintenance and sediment removal procedures into existing ballast water management plans? Is it the 21st of June (90 days after publication on March 23, 2012) or does it coincide with the dates in 151.2035 "Implementation schedule for approved ballast water management methods"?

The effective date for incorporation of material, including that regarding fouling and sediment management, was June 21, 2012. See FAQ 18 below for further information on fouling and sediment management procedures. Additionally, the Coast Guard released policy guidance that discusses implementation of the Ballast Water Discharge Standard. This policy guidance can be found on the CG-OES -3 website at: <http://www.uscg.mil/hq/cg5/cg522/cg5224/bwm.asp>.

18. 33 CFR 151.2050 (g)(3) requires that the ballast water management plan be updated to include fouling and sediment management procedures. If vessels already have these procedures as part of their normal operating procedures in sufficient detail to meet the requirements of this section, can the BWM plan simply reference these already existing documents, or do they have to physically include these documents in the BWM plan even though they are already part of existing operating procedure documents?

Referencing other operational documents in the BWM plan is sufficient. All such referenced documents must be onboard and available for examination by the Coast Guard.

**ENFORCEMENT AND COMPLIANCE****19. How do Coast Guard and EPA coordinate compliance for vessel discharges?**

The Coast Guard and EPA signed a Memorandum of Understanding (MOU) on 14 Feb 2011 to better coordinate efforts to prevent illegal discharges of pollutants from more than 61,000 commercial ships based in the U.S. and more than 9,000 foreign ships operating in waters of the U.S. The MOU is a framework for improving EPA and USCG cooperation on data tracking, training, monitoring, verifying compliance, and industry outreach. Of note, the MOU specifies the USCG will not enforce the state BW provisions certified under Sec. 401 of the CWA. Additional information is at:

<http://www.uscgnews.com/go/doc/786/1014719/U-S-Coast-Guard-and-EPA-Step-Up-Efforts-to-Protect-U-S-Waters->.

**20. What should industry expect when the regulations take effect June 21? Will CG inspectors be enforcing the new FR requirements?**

The Coast Guard released policy guidance on June 21, 2012, that discusses implementation of the Ballast Water Discharge Standard. This policy guidance can be found on the CG-OES-3 website at: <http://www.uscg.mil/hq/cg5/cg522/cg5224/bwm.asp>.

Many of the existing ballast water management requirements, including reporting and recordkeeping, are being carried forward from current regulations into the new rules. The Implementation Schedule for Approved Ballast Water Management Methods will be phased-in beginning December 1, 2013, and Coast Guard enforcement activity will be phased-in accordingly.

Industry should expect Coast Guard inspectors to question master and relevant crew regarding their understanding of the new requirements and their personal responsibilities under the ship's BW management plan. Coast Guard will continue to inspect vessel compliance with reporting, recordkeeping and ballast water management requirements.

**GENERAL****21. Will the Coast Guard replace or update NVIC 07-04, Change 1, which provides guidance on the 2004 Coast Guard ballast water regulations? Will the relevant items from that NVIC be retained?**

The Coast Guard will update NVIC 07-04, Change 1 to reflect the new final rule. However, initial guidance will be disseminated through Policy Letters and Inspection Notes as the requirements contained in the final rule are phased in. All Policy Letters and Inspection Notes related to ballast water management will be posted on the CG-OES-3 website: <http://www.uscg.mil/hq/cg5/cg522/cg5224/bwm.asp>.

22. Is there additional guidance for vessels that operate exclusively in or near waters of U.S. territories such as U.S. Virgin Islands or Guam?

No, these ballast water management regulations are the same for vessels operating around U.S. territories.

23. Will Coast Guard BWM requirements become part of the Foreign Tank Vessel Exam Book (FTVEB) used by Coast Guard inspectors during port State control exams?

Yes, the requirements in the final rule will be reflected in the FTVEB, as well as other exam books as appropriate.

24. How will the Coast Guard enforce the implementation dates contained in the regulation (Dec 2013 and Jan 2014) for requiring installation of a Coast Guard ballast water management system (BWMS) when the Coast Guard does not anticipate having typed approved systems until 2015? (Revised August 17, 2012)

Vessel owners have several ways in which to comply with the implementation dates contained in the ballast water discharge standard final rule in the absence of Coast Guard type-approved BWMS. The regulation allows a vessel owner with a foreign type-approved BWMS to use that system to comply with the ballast water management regulations provided that system has been accepted by the Coast Guard as an alternate management system (AMS). The Coast Guard can issue AMS acceptance to a BWMS when the vendor of that system requests in writing to the Coast Guard for AMS acceptance in accordance with 33 CFR 151.2026. The AMS must be installed on the vessel prior to the date of the vessel's implementation date as described in 151.2035(b), and may employ the AMS for no longer than 5 years from the vessel's implementation date.

Vessel owners may also choose another method to meet the ballast water discharge standard such as using water from a U.S. public water system for ballast, discharging ballast water to a facility onshore, or do not discharge any ballast water while in U.S. waters. These methods are provided for in 33 CFR 151.2025.

Vessel owners can also request an extension to the implementation schedule in 33 CFR 151.2035(b) if there is no Coast Guard type approved ballast water management system available. The availability of an AMS does not prohibit a vessel owner from receiving an extension. 33 CFR 151.2036 provides the process for requesting these extensions when it can be documented that despite all efforts to meet the ballast water discharge standard requirements, compliance is not possible. Extension requests must be submitted to the Coast Guard no later than 12 months before the scheduled implementation date.

25. Has the Coast Guard issued any policy or guidance to assist industry in complying with the new regulations?

Yes, the Coast Guard has issued policy to assist ballast water management system vendors in submitting Alternate Management System determination requests. In addition, the Coast Guard has also issued compliance and enforcement policy. Both documents can be found on the Internet at <http://www.uscg.mil/hq/cg5/cg522/cg5224/bwm.asp>.

### **SHIPBOARD TECHNOLOGY EVALUATION PROGRAM (STEP)**

26. How will the Shipboard Technology Evaluation Program (STEP) change to reflect the Ballast Water Discharge Standard Final Rule?

The STEP for experimental BWMS will continue as currently described in NVIC 01-04 (<http://www.uscg.mil/hq/cg5/cg522/cg5224/step.asp>). STEP acceptance will also be conferred to vessels engaged in shipboard testing of BWMS in waters of the U.S. for the purposes of type approval, under the oversight of an accepted Independent Laboratory in accordance with 46 CFR 162.060, to allow such vessels to discharge treated ballast water.

27. The regulations require STEP participation for any vessels used for type-approval testing in U.S. waters, so will a STEP-Type Approval version be adopted, recognizing that once BWMS manufacturers receive US Type Approval, they will drop out of the program?

Yes, see above.

28. For vessels enrolled in STEP, is there an option to transition to AMS?

STEP and AMS are not related. If a vessel in STEP has a BWMS that is accepted as an AMS, that vessel's owner may decide to withdraw from STEP and meet its BWM requirements under the AMS provision in 33 CFR 151.1510 or 151.2025. If the vessel owner decides to make this change, then the original grandfathering under STEP would no longer apply to that vessel, and instead the maximum 5-year grandfather period for AMS will apply.

29. In the event a BWMS is installed on a vessel for purposes of type approval testing, and the ship is enrolled into STEP, will the option for grandfathering in the case of BWMS which do not pass TA be allowed, and if so, for how long (i.e., 5 year? 10 year? Life of the vessel/system?)?

Grandfathering for a BWMS installed on ships for type approval testing but which are not type-approved will be considered on a case by case basis. Any such arrangements will depend on whether the vessel owner and BWMS vendor decide to apply to for acceptance to STEP for purposes of further testing the unapproved BWMS while making design adjustments in response to the performance of the system during type approval testing.

30. Will there be new policy guidance specific to STEP, such as a new NVIC?

Yes, the Coast Guard is currently developing an update to the STEP NVIC that will describe the procedures for enrolling a BWMS that is undergoing shipboard testing for type approval.

31. Given that different entities will enroll in STEP for different reasons (i.e., experimental evaluation of R&D prototype, testing for type approval) will the Coast Guard prioritize applicants based on their purpose for applying to STEP (given the limited funding associated with STEP)?

STEP applications for R&D and STEP applications for type approval testing will be handled separately. R&D-related applications will continue as currently implemented, with review by the USCG Environmental Standards Division. Type approval applications will be done under the auspices of the Independent Laboratory selected by the BWMS vendor.

## **BWMS APPROVAL PROCEDURES**

32. When will the Coast Guard begin accepting applications for type approval?

On July 3, 2012, the Coast Guard issued a Letter of Acceptance to the first independent laboratory approved for evaluation, inspection, and testing of ballast water management systems (BWMSs) for compliance with Coast Guard standards and regulations. NSF International, located in Ann Arbor, Michigan was accepted as an Independent Laboratory, as defined in 46 CFR 159.001-3, for the evaluation, inspection, and testing of ballast water management systems. As such, the Coast Guard will now accept applications for type approvals submitted in accordance with 46 CFR 162.060-10.

33. Assuming a complete and acceptable application, how long will the Coast Guard take to complete a review and issue a type approval certificate?

The Coast Guard anticipates a type approval application review will take approximately 30 to 60 days. The Coast Guard's review and response time is entirely dependent on the nature of the submittal, the details provided, and the results of all required testing. At any time, a submitter may inquire as to the review status to ensure all the information the Coast Guard requires has been submitted and is under review. The Coast Guard intends to review all applications in a timely manner.

34. If a BWMS is already accepted as an AMS, will this streamline the type approval process from an administrative standpoint?

No, not in terms of the procedures for testing, evaluation, and review. However, applicants for AMS determination are required to submit an application for type approval in accordance with 46 CFR 162-060-12 (see also FAQ #12). While reviewing the application for AMS determination, the Coast Guard will also review the foreign type approval dossier to see if

there are any significant issues that would complicate or prevent type approval by the Coast Guard, and will communicate any concerns to the AMS applicant.

### **USE AND ACCEPTANCE OF EXISTING TEST DATA**

35. To what extent does testing already completed for foreign type approval need to be consistent with the EPA Environmental Technology Verification (ETV) Program protocols for testing BWMS?

Under 46 CFR 162.060-12, existing data and information generated during testing for type approval by a foreign administration can be used as part of an application for U.S. type approval if that data meets the requirements of 162.060 in respect to design, material, manufacture, and ability to meet the BWDS. For land-based testing data, this would entail consistency with the ETV protocols. Applicants considering the use of existing test data should carefully examine the ETV protocols and the protocols under which their BWMS were previously tested, and identify where there are significant differences.

36. If a BWMS has received type approval from a foreign administration, but the vendor determines that additional testing will be required prior to application for type approval by the Coast Guard, may the BWMS vendor conduct additional testing (which would not be done in support of a foreign administration type approval)? If so, will testing in accordance with the ETV protocol be required.

Applications for type approval using existing data must be developed in association with an IL (a test organization/company accepted as an Independent Laboratory in accordance with 46 CFR 159.010). If additional testing is needed to meet US requirements, then all such testing must be conducted by an IL, and all such testing must meet the requirements of 46 CFR 162-060, which includes the ETV land-based testing protocols.

37. Many BWMS manufacturers have conducted testing outside the scope of foreign administration type approval testing for their own research purposes. Usually, this testing is conducted at a ballast water test facility by a third party (but not a Coast Guard accepted Independent Laboratory). Will the CG establish parameters for acceptance of this testing which would be beyond the scope of 162.060-12 "Use and acceptance of existing test data"?

No, applicants may use data developed for foreign type approval if such data are determined to meet the USCG requirements in 46 CFR 162.060. Data not developed during foreign type approval or by a Coast Guard accepted IL may not be used as part of a type approval application.

**INDEPENDENT LABORATORY (IL) – REQUIREMENTS AND RESPONSIBILITIES**

**38. Can the Coast Guard provide a list of accepted Independent Laboratories (IL)?**

Yes. A list of Coast Guard accepted ILs can be found on the Coast Guard Maritime Information Exchange at <http://cgmix.uscg.mil>.

**39. It is unclear from the language at 162.060-12 “Use and acceptance of existing test data” as to which entity will determine if the data provided are acceptable - the Coast Guard or the IL? The policy should provide guidance as to who will make the determination and how the determination will be made. Will there be a scoring matrix? Will there be certain immediate disqualifiers such as lack of a QAPP; lack of test facility independence; etc.?**

The regulations require a manufacturer who’s BWMS has completed approval testing for a foreign administration to submit existing data and information, along with an explanation of how the submission meets or exceeds the requirements of this subpart. The Coast Guard will make the final determination whether the existing test data is acceptable.

**40. At 162.060-20(b)(5), there is a requirement that the BWMS must have a monitoring and control system that is capable of storing data for 6 months. However, at 162.060-20(b)(6), if the control and monitoring unit is replaced, actions must be taken to ensure data recorded prior to replacement is available for a period of 24 months? Is this an administrative error or is there an expectation that monitoring systems retain data for 24 months.**

The BWMS must have the capability to store data for 6 months. If the control and monitoring unit is replaced, the replacement must also store data for 6 months. The data from the replaced unit must be available (i.e., on board, available for inspection) for a period of 24 months after replacement. This data does not have to be stored in the control and monitoring unit, it could be a paper copy or an electronic file that can be accessed during an inspection and/or copied to suitable media (e.g., CD) and provided to the Coast Guard.

**41. The procedures for type approval in 46 CFR 162.060 incorporate by reference the U.S. EPA Environmental Technology Verification (ETV) program generic protocol for the verification of ballast water treatment technologies (v 5.1; September, 2010). Is strict compliance with the entire ETV process required (i.e., involvement of RO, acceptance of facilities iaw ETV, etc.)?**

The ETV Protocol must be followed, but it is not necessary that the testing be done under the auspices of the ETV Program. An ETV program verification report is not required, although if the IL conducting the tests is also an ETV test organization, an ETV verification report can constitute the test report for the relevant type approval tests.

42. Who will make the determination as to acceptability of information: An IL, CG or EPA-ETV? What criteria would likely be used? How much latitude will be allowed when determining consistency with ETV?

The Coast Guard will determine the completeness of the information contained in the type approval application submitted in accordance with 46 CFR 162.060-14 and make a determination on whether to accept the information or require more. If the Coast Guard determines that the information is incomplete, the Coast Guard will return the application with an explanation.

43. How much change is allowable in a type approved BWMS before additional testing and evaluation is required? For example, can the electronics be upgraded to reflect advances in technology without having to go through type approval testing again?

Any proposed change to an approved BWMS must be reviewed by the Coast Guard prior to making the change. Failure to secure Coast Guard review and acceptance of a change will void the type approval.

44. What does the Coast Guard mean by the term “novel” in 46 CFR 162.060-10, where it is stated: “The Coast Guard advises applicants that applications containing novel processes or active substances may encounter significantly longer reviews during these (NEPA, ESA and/or other environmental statutes) evaluations.”

The Coast Guard’s objectives include promoting the development of innovative BWM technologies that are practicable for shipboard use, rather than specifying which technologies should be developed into commercial products. However, some technologies may need to be evaluated in greater detail for the potential of their operations or discharges to impact the marine environment. Vendors must ensure that their BWMS meet all applicable Federal, state and local requirements. This may include registering a chemical and/or BWMS with the U.S. EPA as a biocide for the purpose of ballast water management before applying to the Coast Guard for type approval.

45. Will the Coast Guard issue certificates and type approval numbers for each unit of a type approved system that is manufactured?

The Coast Guard will issue a specific certificate and type approval number for each BWMS model. The type approval procedures are found in 46 CFR 162.060-10.

46. Will Coast Guard specify limits and conditions on the type approval certification, and if so, how will these limits and conditions be determined by the Coast Guard?

Applicable limits and conditions for BWMS type approval will be specified on the type approval certificate. Limits and conditions are determined on a case-by-case basis during the approval process per §162.060-10(g). As an example, the Coast Guard expects to issue limits and conditions relative to salinity ranges, system volume/capacities and whether or not a system is suitable for installation within a hazardous location.

47. 46 CFR 162.060-28(d) requires that during shipboard tests of BWMS, the systems must be installed and operated in the vessel in a location and configuration consistent with its intended use on operating vessels. Does this mean every configuration of modular BWMS (i. e., systems comprised of multiple treatment modules such as UV, Filter, chemical doser, etc) must be tested separately?

Location and configuration of a BWMS for shipboard testing for type approval should be as consistent as possible to the configuration of its intended final use.

48. Can a containerized BWMS be used for type approval testing if the operational parameters (flow, pressure, power, crew support, etc) are those normally experienced?

Containerized BWMS may be used for type approval during shipboard testing. However, the containerized arrangement should be as consistent as possible to the configuration of its intended final use.

49. Does equipment to be installed in pump room need to be classed as zone 0 under the new rules?

BWMS equipment should be installed in a nonhazardous or the least hazardous location, as far as practicable. If the BWMS equipment is installed within a hazardous location, the equipment must meet the corresponding requirements for the intended location.