

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

1. Does the definition of the term "Exclusive Economic Zone" encompass the joint US EEZ and the Canadian EEZ and, if so, how does this affect the BWM requirements for vessels transiting from Canada to the US across the EEZ, but within 200 nm of land?  
(Updated April 5, 2013)

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 described 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 33 CFR 151.2025, *Definitions*, the U.S. Coast Guard defines a seagoing vessel as a vessel in commercial service that operates beyond the boundary line established by 46 CFR Part 7. However, the Great Lakes are internal waters and have no boundary line under 46 CFR. Rather, the seaward boundary of the Great Lakes is defined in Coast Guard regulations implementing the International Load Line Convention, Art 5(2)(a) and the Act to Prevent Pollution from Ships (APPS) as generally a rhumb line drawn from Cap des Rosiers to West Point, Anticosti Island, the meridian of longitude 63 degrees west. See regulations in 33 CFR Part 151.

In summary, based on the applicable seaward boundary for the Great Lakes, commercial vessels over 1600 GRT that operate between the Anticosti Island boundary and the EEZ prior to entering the Great Lakes are "seagoing vessels" and therefore must meet the requirements of 33 CFR 151.2025. For vessels operating solely within the Great Lakes and the Canadian EEZ, and that are less than or equal to 1,600 gross register tons or less than or equal to 3,000 gross tons ITC, the ballast water management requirements in 33 CFR 151.2025 do not apply since 33 CFR 151.2015 (b)(1) provides an exemption for these vessels.

## 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 Uniform 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.

#### 2.1 What does the term “exclusively” in 33 CFR 151.2015(b)(2) and 33 CFR 151.2015(c)(3) mean for vessels that operate or take on and discharge ballast water “exclusively” in one Captain of the Port (COTP) Zone? (New question, April 5, 2013)

The term “exclusively” in 33 CFR 151.2015(b)(2) refers to the area in which the vessel operates. If the vessel’s operations are confined to one COTP zone, then the vessel is exempt from the recordkeeping, reporting, and ballast water management requirements. In this case, “exclusively” means the vessel does not operate outside the one specific COTP zone. If the vessel happens to transit to another COTP zone, then the reporting and recordkeeping requirements would apply for any subsequent arrivals. Once a vessel has had water from more than one COTP zone in its ballast water system, the vessel is no longer considered to have operated exclusively in one COTP zone. BWM requirements would apply if the vessel discharged ballast water that had been taken up in one COTP zone into a COTP zone different from the one in which the water had been taken up. As long as a vessel is operating in one COTP zone, and the vessel’s ballast water system has not been exposed to water from another COTP zone, the vessel is considered to be operating exclusively in that zone. If a vessel leaves the zone, and takes on ballast water in another zone, then the vessel is no longer considered to be operating exclusively in the first zone, until it has thoroughly cleaned the ballast water system.

In 33 CFR 151.2015(c)(3), the term “exclusively” refers to the uptake and discharge location of ballast water. If a vessel takes up and discharges ballast water exclusively in one COTP zone (even though the vessel may operate outside of that one COTP zone where ballast water is taken up and discharged), the vessel is exempt from the BWM requirements, but would need to meet the reporting and recordkeeping requirements. If a vessel should happen to

take up ballast water outside of the COTP zone in which it otherwise always takes up and discharges ballast water, then the vessel would have to meet the BWM requirements until the vessel's ballast water system had been thoroughly cleaned.

Example scenarios:

1. Vessel operates only in one COTP zone (does not cross into other COTP zones) and has never had water from another COTP zone in its ballast water system – exemption under 33 CFR 151.2015(b)(2) applies.
  2. Vessel operates as in (1) above, but then transits to another COTP zone – exemption under 33 CFR 151.2015(b)(2) no longer applies. Vessel must meet reporting and recordkeeping requirements and, if ballast water is discharged, must meet BWM requirements. Vessel can re-establish “exclusive” status in the new COTP zone by limiting operation to the new COTP zone, and by thoroughly cleaning the ballast water system.
  3. Vessel operates between two or more COTP zones, but only takes up and discharges ballast water in one specific COTP zone – exemption under 33 CFR 151.2015(c)(3) applies. The vessel must submit BWM reports for all arrivals, but does not need to meet the BWM requirements prior to discharge.
  4. Vessel operates as in (3) above, but then needs to discharge ballast water in a different COTP zone than where it was taken up - exemption under 33 CFR 151.2015(c)(3) no longer applies. The vessel must submit BWM reports for all arrivals, AND must meet the BWM requirements prior to discharge for all subsequent discharges. Vessel can re-establish “exclusive” status by thoroughly cleaning the ballast water system and then taking up and discharging water only in one specific COTP zone.
  5. Vessel operates among COTP zones, including taking up and discharging ballast water in more than one specific COTP zone, but then limits its operation to one COTP zone – to establish “exclusivity” under either 33 CFR 151.2015(b)(2) or 33 CFR 151.2015(c)(3), vessel must first clean the ballast water system thoroughly.
- 2.2 33 CFR 151.2025(a) provides five ballast water management methods that vessel operators may employ for managing ballast water in the waters of the US. How does the requirement to conduct ballast water management apply once a vessel has conducted initial discharge within a COTP Zone for the two following scenarios?
- (a). The vessel has not yet reached its implementation date for meeting the ballast water discharge standard.
  - (b). The vessel is required to meet the ballast water discharge standard (or use one of the other accepted ballast water management methods in 33 CFR 151.2025, except for ballast water exchange). (New question, April 5, 2013)

Answer for (a): The third ballast water management method in 151.2025(a)(3) says a vessel may “Perform complete ballast water exchange in an area 200 nautical miles from any shore prior to discharging ballast water, unless the vessel is required to employ an approved

BWMS per the schedule found in 151.2035(b)...” The term “exchange” as defined in 33 CFR 151.2005(b) means flow-through or empty/refill exchange, and is different from uptake or discharge during normal ballasting operations.

Prior to being required to meet the ballast water discharge standard, a vessel using ballast water exchange as its management method arriving to a US port or place after operating outside the EEZ and intending to discharge ballast water taken on from (or mixed with) waters outside the COTP zone of arrival is required to have conducted ballast water exchange. This exchange is required to occur in an area 200 nautical miles from any shore. The vessel may refrain from conducting the exchange only if the vessel was not able to conduct the exchange safely or in the time available. If the vessel must then take on and discharge ballast water within that arrival port to manage draught, trim and stability while engaged in port/cargo operations, under the Coast Guard rule, the vessel may do so without having to conduct exchange between uptake and discharge.

Answer for (b): If the vessel must take on ballast water in a U.S. port, then transit to another U.S. port or place without transiting outside of 200 nm for a period of time sufficient to conduct exchange safely in the time available, the ballast water taken up in the first port may be discharged in the second port (please note that some states may have state-specific requirements for such ships to conduct ballast water exchange within 200 nm).

However, in either case, a vessel equipped with ballast water tanks that operates in waters of the U.S. must conduct nonindigenous species reduction practices required by 151.2050. If the vessel operates in more than one COTP zone, it must also comply with the reporting and recordkeeping requirements of 151.2060 and 151.2070. If a vessel intends to take on and discharge ballast water exclusively in one COTP zone, it should follow the guidance in Answer #2.1.

Once a vessel subject to the ballast water management requirements in 151.2025 reaches its compliance date in accordance with 151.2035 and intends to operate in waters of the U.S., exchange will no longer be an acceptable ballast water management method. It must use one of the other ballast water management methods in 151.2025 for all ballast water discharged in the U.S., unless the vessel is covered under the exemptions in sections 33 CFR 151.2015(b)(2) and 33 CFR 151.2015(c)(3).

- 2.3 If the ambient water in Question 2.2(a) does not need to be exchanged/treated, can the vessel continue to load and discharge ballast water in the same location without conducting any management activities (exchange or treatment) indefinitely? That is, if the ship goes into standby status in that port or place for a year, can vessel crew continue to load and discharge ambient water as necessary to allow access to the vessel’s ballast tanks for surveys, repairs, etc.? (New question, April 5, 2013)

Prior to the vessel’s compliance date under 151.2035, if the vessel is taking on and discharging ballast water exclusively in one COTP zone, it does not have to meet the exchange requirement if its operations do not take it outside of 200 nm for a period of time

sufficient to conduct exchange safely. The vessel must follow the nonindigenous species reduction practices of 151.2050.

After the vessel's BWDS compliance date, it will have to demonstrate compliance with the BWDS using one of the BWM methods in 151.2025, or to the satisfaction of the COTP in accordance with 151.2040. Then it may take on and discharge ballast water exclusively in that COTP zone and apply the exemption of 151.2015(c)(3).

## **BALLAST WATER MANAGEMENT REQUIREMENTS**

### **3. Will vessels currently required to conduct ballast water exchange be required to install ballast water management systems (BWMS)? (Updated April 5, 2013)**

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 scheduled drydocking after the applicable 2014 or 2016 date, after which a vessel is required to meet the discharge standard.

#### **3.1 Prior to its implementation date for BWTS installation, can a coastal vessel which never goes outside the EEZ still conduct exchange within the EEZ (as was the case with the old rule)? (New question, April 5, 2013)**

Yes, the Coast Guard allows such a vessel to conduct exchange within the EEZ if it "cannot practicably meet the requirements of 151.2025(a)...either because its voyage does not take it into waters 200 nautical miles or greater from any shore for a sufficient length of time or because the master of the vessel has identified safety or stability concerns." It will not allow such a discharge "if the vessel is required to have a Coast Guard-approved ballast water management system (BWMS)" (33 CFR 151.2040(a)).

#### **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? (Updated April 5, 2013)**

The applicability requirements of the final rule include unmanned deck barges towed more than 200 miles offshore. However, the safety exemption of 33 CFR 151.2040(a) may apply if the master of the vessel has identified safety or stability concerns. 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 in 33 CFR 151.2035(b), the owner may apply for an extension in accordance with 33 CFR 151.2036.

4.1 Are vessels that use only water from a U.S. public water system for ballast water subject to reporting and recordkeeping requirements? (New question, April 5, 2013)

First, one of the acceptable ballast water management (BWM) methods allowed under 33 CFR 151.2025(a)(2) is to “use only water from a U.S public water system (PWS)...as ballast water...” Second, the new Ballast Water Management regulations define “ballast water” to include water from a PWS. Therefore, vessels employing this BWM method are subject to applicable requirements of 33 CFR 151 subparts C and D, including the reporting and recordkeeping requirements.

The Final Rule supersedes previous guidance for Ballast Water Management regulations in Navigation and Vessel Inspection Circular 07-04, Change-1 (NVIC 07-04, CH-1), which excluded vessels using water from commercial or municipal sources from the requirements of 33 CFR 151 subparts C and D. (As the NVIC states in paragraph 6, “While the guidance contained in this document may assist the industry, the public, the Coast Guard, and other federal and state regulators in applying statutory and regulatory requirements, this guidance is not a substitute for applicable legal requirements, nor is it in itself a rule.”)

The Coast Guard will update this NVIC to reflect the 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 Coast Guard’s Environmental Standards Division web page: <http://www.uscg.mil/hq/cg5/cg522/cg5224/bwm.asp>

Second, the Final Rule includes options for “equivalent reporting methods” for vessels other than those entering the Great Lakes or Hudson River after operating outside the U.S. Exclusive Economic Zone or the Canadian equivalent. The Coast Guard may approve a written request for alternative methods if they are at least as effective as those required in 151.2060, and compliance with 151.2060 is economically or physically impractical. The Environmental Standards Division will approve or disapprove a request within 30 days of receipt. More information on equivalent reporting is available on the above web page.

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? (Updated April 5, 2013)

No, an AMS determination is intended as an interim measure to allow foreign type-approved BWMS, installed prior to the availability of Coast Guard type approved BWMS and before the vessel’s compliance date as specified in table 33 CFR 151.2035 (b) to be used on a vessel for up to 5-years after the vessel would otherwise be required to comply with the BWDS. The Coast Guard believes this interim measure will allow the BWMS vendor or manufacturer sufficient time to obtain U.S. type approval without penalizing vessel owners for having been early installers.

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? (Updated April 5, 2013)

No, the Coast Guard will not act upon AMS determination requests and type approval applications that do not provide the required information or that lack sufficient data. 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 (2004), 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? (Updated 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.

- 18.1 Can sediment be disposed of within the EEZ and, if so, at what minimum distance?  
(New question, April 5, 2013)

Sediment should be disposed of as far from shore as practicable, but must be outside 12 nautical miles (nm), and in accordance with Coast Guard's "Guidance on verification of Fouling Maintenance and Sediment Removal Procedures", 5 Nov 2012.

This guidance is consistent with Ballast Water Management regulations in Navigation and Vessel Inspection Circular 07-04, Change-1 (NVIC 07-04, CH1), Encl. 2, which is still in effect. (However, the Final Rule supersedes any conflicts with the NVIC; see Answer #4.1.)

The National Invasive Species Act limit of jurisdiction is 12 nm because "waters of the United States means waters subject to the jurisdiction of the United States as defined in 33 CFR § 2.38, including the navigable waters of the United States. For 33 CFR part 151, subparts C and D, the navigable waters include the territorial sea as extended to 12 nautical miles from the baseline, pursuant to Presidential Proclamation No. 5928 of December 27, 1988." (33 CFR 151.1504)

The Clean Water Act limit of jurisdiction is narrower, because it uses "waters of the United States as defined in 40 (CFR) § 122.2 (extending to the outer reach of the 3 mile territorial sea as defined in section 502(8) of the CWA.) This includes all navigable waters of the Great Lakes subject to the jurisdiction of the United States." EPA's 2008 Vessel General Permit states "No discharge of sediments from cleaning of ballast tanks is authorized in waters subject to this permit" (Section 2.2.3.3).

The International Convention for the Control and Management of Ships' Ballast Water and Sediments (Convention) will also regulate disposal of sediments within the EEZ. After it enters into force, vessels subject to the Convention will need to comply with Regulation B-5, Sediment Management for Ships, in waters outside 12 nm.

18.2 May a vessel avoid installation of a BWMS by its implementation date if it will not discharge ballast water within 200 nm of the US? (New question, April 5, 2013)

Yes, one of the Final Rule's ballast water management methods is "Do not discharge ballast water into waters of the United States." 33 CFR 151.2025(a)(4) The National Invasive Species Act limit of jurisdiction is 12 nm because "waters of the United States means waters subject to the jurisdiction of the United States as defined in 33 CFR § 2.38, including the navigable waters of the United States. For 33 CFR part 151, subparts C and D, the navigable waters include the territorial sea as extended to 12 nautical miles from the baseline, pursuant to Presidential Proclamation No. 5928 of December 27, 1988." 33 CFR 151.1504

Once the Ballast Water Management (BWM) Convention enters into force, a vessel subject to its requirements shall conduct ballast water management in accordance with the compliance dates in Regulation B-3. Existing vessels would be able to perform ballast water exchange in accordance with Regulation D-1 until reaching their compliance dates. Afterwards, vessels would be prohibited from discharging water anywhere that does not meet the D-2 performance standard.

18.3 How will US flag vessels be able to demonstrate ballast water management compliance to Port State authorities in non US ports? (New question, April 5, 2013)

Until the BWM Convention enters into force, U.S.-flag vessels have to comply with the national laws and regulations of other Port States.

Once the BWM Convention enters into force, U.S.-flag vessels in a foreign port will have to comply with the Port State's national laws and regulations implementing the Convention and port state control actions. U.S.-flag vessels must have an approved BWM Plan that meets the requirements of 33 CFR 151.2050(g), and the Plan will document this ballast water management method.

The Coast Guard may discuss with class societies whether to issue Statements of Voluntary Compliance (SOVC) or Statements of Compliance (SOC) as appropriate for U.S.-flag vessels. We expect Port States will honor the approved BWM Plan and SOVC or SOC, or the equivalent documents for vessels of non-party states. However, U.S.-flag vessels will also have to comply with any additional requirements under the Convention's provision that allows the Port State to require more stringent measures, consistent with international law (Article 2.3).

18.4 Did the drafters of the BWM Convention envision "no discharge" as a viable compliance alternative for vessels engaged on international voyages? (New question, April 5, 2013)

The United States has not ratified the BWM Convention so this question is best addressed by IMO. However, from the Coast Guard's perspective, it would appear that a vessel that does not discharge ballast water on international voyages would not violate either the Regulation D-1 exchange standard or the Regulation D-2 performance standard.

Pending the BWM Convention's entry into force, vessels should still comply with Resolution A.868(20), "Guidelines for the Control and Management of Ships' Ballast Water to Minimize the Transfer of Harmful Aquatic Organisms and Pathogens", adopted on 27 November 1997.

Any amendments to the BWM Convention to explicitly provide for retaining ballast water would have to be addressed once the Convention enters into force. The Convention does not apply to vessels not designed or constructed to carry ballast water (Article 3.2a), nor to permanent ballast water in sealed tanks not subject to discharge (Article 3.2f). Further, Regulation B-3.6 clearly states that the requirements of Regulation B-3 do not apply to ships that discharge ballast water to reception facilities. In addition, guidance developed by BLG 17 on BWM options for offshore and other vessels includes discharge to shore facilities – thus clearly anticipating that some vessels would not have installed BWMS.

## **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? (Updated April 5, 2013)

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, installed before the vessel's compliance date in Table 151.2035(b), 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 none of the above options are practicably 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 regulation? (Updated April 5, 2013)

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. Existing and future Coast Guard ballast water management policy 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? (Updated April 5, 2013)

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. Vessel owners engaged in testing BWMS for purposes of type approval must contact the Coast Guard and arrange for enrollment of such ships in STEP before discharging water treated by BWMS undergoing type approval testing in U.S. waters. Once a BWMS has been type approved, the vessel on which it was tested will not have on-going reporting and monitoring requirements, but will use the system as a type approved system, and the vessel will be dropped from STEP. If the BWMS is not granted type approval due to failure to meet the performance criteria, the vessel may transition to the STEP for experimental systems if the vessel owner and BWMS manufacturer will continue to test the system during shipboard operations.

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.

31.1 Does a vessel with an installed experimental BWMS (not type approved, or accepted as an alternate management system by the Coast Guard) need to be in the STEP program if any discharge or testing should take place in US waters? (New question, April 5, 2013)

Under 46 CFR 162.060-28, vessels with BWMS being tested for Coast Guard type approval under the auspices of an Independent Laboratory must be enrolled in the Coast Guard's Shipboard Technology Evaluation Program (STEP) before treated ballast water will be considered acceptable by the Coast Guard for discharge into U. S. waters. Inquiries regarding applying for acceptance to STEP for purposes of type approval testing should be addressed to the STEP Manager by e-mail at [environmental\\_standards@uscg.mil](mailto:environmental_standards@uscg.mil); or by mail: COMMANDANT (CG-OES-3), ATTN STEP MANAGER, US COAST GUARD, 2100 2ND ST SW STOP 7126, WASHINGTON DC 20593-7126



Vessels with BWMS being tested for type approval by a foreign administration must be enrolled in STEP before the Coast Guard will consider treated ballast water acceptable for discharge into waters of the U.S.

## **BWMS APPROVAL PROCEDURES**

### **32. When will the Coast Guard begin accepting applications for type approval? (Updated April 5, 2013)**

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 (IL), 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? (Updated April 5, 2013)**

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.

#### **34.1 How will the Coast Guard view test runs, either land-based or shipboard, for which test conditions fall outside of vendor-stipulated operational limits (e.g., ranges of salinity, suspended solids, UV transmission, etc set by the vendor), or other parameters as appropriate for specific treatment processes? Specifically, will these be viewed as in-valid test runs, and not as failed tests? (New question, April 5, 2013)**

All manufacturer-stipulated operational limits must be clearly stated by the manufacturer before type approval testing is initiated, and the limits must be clearly incorporated into the Operation, Maintenance, and Safety Manual described under 46 CFR 162.060-38, and

addressed in the test plans required under 162.060-24. In such cases, test runs that include relevant conditions outside the range of the declared operational limits will be considered invalid test runs. These test runs, as well as all others, must be included in the test report, in accordance with the ETV protocols incorporated by reference in 46 CFR 162.060-26 and in accordance with 46 CFR 162.060-28(i). Relevant operational limits will be identified on the type approval certificate, and use of the BWMS outside of the declared limits will constitute a violation of the certificate.

34.2 How does system testing and certification accommodate "adjustable" operations - for instance intentional slowing of pumping rates to maintain a design UV dose when UV transmissivity is low, or conversely, decreasing power to the UV, and thus UV intensity, when transmissivity is high? (New question, April 5, 2013)

Under 46 CFR 162.060-24, test plans must include “an examination of all the manufacturer’s stated requirements and procedures for...operations that will be used by the BWMS...” If the BWMS is designed to operate over a range of controlled pump rates, UV intensities, or other parameters, these aspects must be clearly stated in the Operation, Maintenance and Safety Manual, and the effectiveness of the BWMS in achieving the ballast water discharge standard over the declared range of operating circumstances must be evaluated. Depending on the specific circumstances, it will be necessary for the manufacturer and the IL to develop an appropriate test plan that evaluates the adjustable operations in a manner that meets the requirements of 162.060.

#### 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? (Updated April 5, 2013)

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 requirements in 46 CFR 162.060, including the current Environmental Technology Verification (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? (Updated April 5, 2013)

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). The IL will evaluate the existing data and information against the Coast Guard's type approval requirements, and make a recommendation to the Coast Guard regarding sufficiency. 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 46 CFR 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.? (Updated April 5, 2013)

The regulations in 46 CFR 162.060-12 provide for the use of information and data developed during such a foreign approval in support of an application to the Coast Guard pursuant to 162.060-14. An application pursuant to 162.060-14 must be prepared in association with an IL. The IL will evaluate the information and data and make a recommendation to the Coast Guard regarding the sufficiency of information and data from tests and evaluations in meeting the requirements for type approval. The Coast Guard will make the final

determination whether the existing test data and information are acceptable. Coast Guard will evaluate the acceptability of test organizations that conducted the testing for foreign type approval with respect to independence. Manufacturers can discuss this aspect of a potential application prior to preparing the application by contacting the Coast Guard as directed in 162.060-40(b). If the test organization(s) that conducted the testing cannot meet the requirements of 162.060-40(a), the information and data from the testing will not be accepted for use in a type approval application to the Coast Guard.

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? (Updated April 5, 2013)

The IL will evaluate existing information from foreign type approval testing, and make a recommendation to the Coast Guard regarding its sufficiency in meeting the test and evaluation requirements. Coast Guard will make final determinations regarding the acceptability of the information contained in the type approval application submitted in accordance with 46 CFR 162.060-14. If the Coast Guard determines that the information is incomplete, the Coast Guard will return the application with an explanation. The ETV protocol and the Coast Guard's type approval requirements contain provision for alternatives. Applicants proposing alternative tests or requesting the Coast Guard to accept alternatives used in foreign type approval testing must submit requests in accordance with 46 CFR 162.060-10(b)(1).

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.” (Updated April 5, 2013)

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 not have been previously evaluated for acceptability in treating water to remove or kill organisms, and hence may need to be evaluated in greater detail for the potential of their operations or discharges to impact ships, crew, or 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.